

# A Little Story Of A Big Bang Redesign



Holy JS, Moscow, Russia  
December 11, 2017



Vitaly Friedman, ex-editor-in-chief  
and co-founder of SmashingMag



e.g. JavaScript

- CODING**
- CSS
- HTML
- JavaScript
- Techniques

- DESIGN**
- Web Design
- Responsive
- Typography
- Inspiration

- MOBILE**
- iPhone & iPad
- Android
- Design Patterns

- GRAPHICS**
- Photoshop
- Fireworks
- Wallpapers

BREAKING OUT OF THE BOX

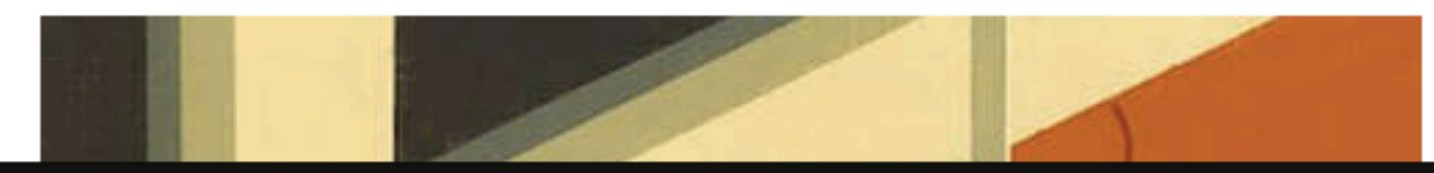
# Colorful Inspiration For Gray Days: Illustration And Photography At Their Best

By [Veerle Pieters](#)

February 3rd, 2017 [Illustrations, Inspiration](#)

0 Comments [Edit](#)

If it's still snowy where you live, then you're probably tired of the cold weather by now. Winter may be in full swing but that shouldn't stop us from hunting for inspiration. While the gray days always seem to find a way to make us more and more **anxious for springtime to finally arrive**, it's also a time we can use to reflect on our work and perhaps better decide what it is that we hope to improve or change in the next months.



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Smashing Book 5: "Real-Life Responsive Web Design", our playbook to master all the tricky facets and hurdles of **responsive web design**. Gorgeous hardcover with 584 pages. The eBook is included. Free worldwide shipping. [Get your book now!](#)



Today, too many websites are still inaccessible. In our new book *Inclusive*

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Design & development
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Find work & employees
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Webinars & early-birds
-  **Topics**

## Don't Miss These Articles on Smashing



**Rachel Andrew** wrote — 11 MONTHS AGO

### The New Layout Standard For The Web: CSS Grid, Flexbox And Box Alignment

22 comments

# CSS <sup>227</sup> # Flexbox <sup>12</sup> # CSS Grid <sup>4</sup>



**Paul Boag** wrote — 2 MONTHS AGO

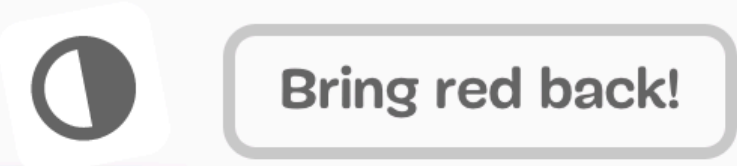
### How To Work Out What To Charge Clients: The Honest Version

46 comments

# Business <sup>248</sup> # Clients <sup>75</sup>



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**1**  
Design

**2**  
Front-End

**3**  
Back-End

**4**  
To-Dos

1

Design

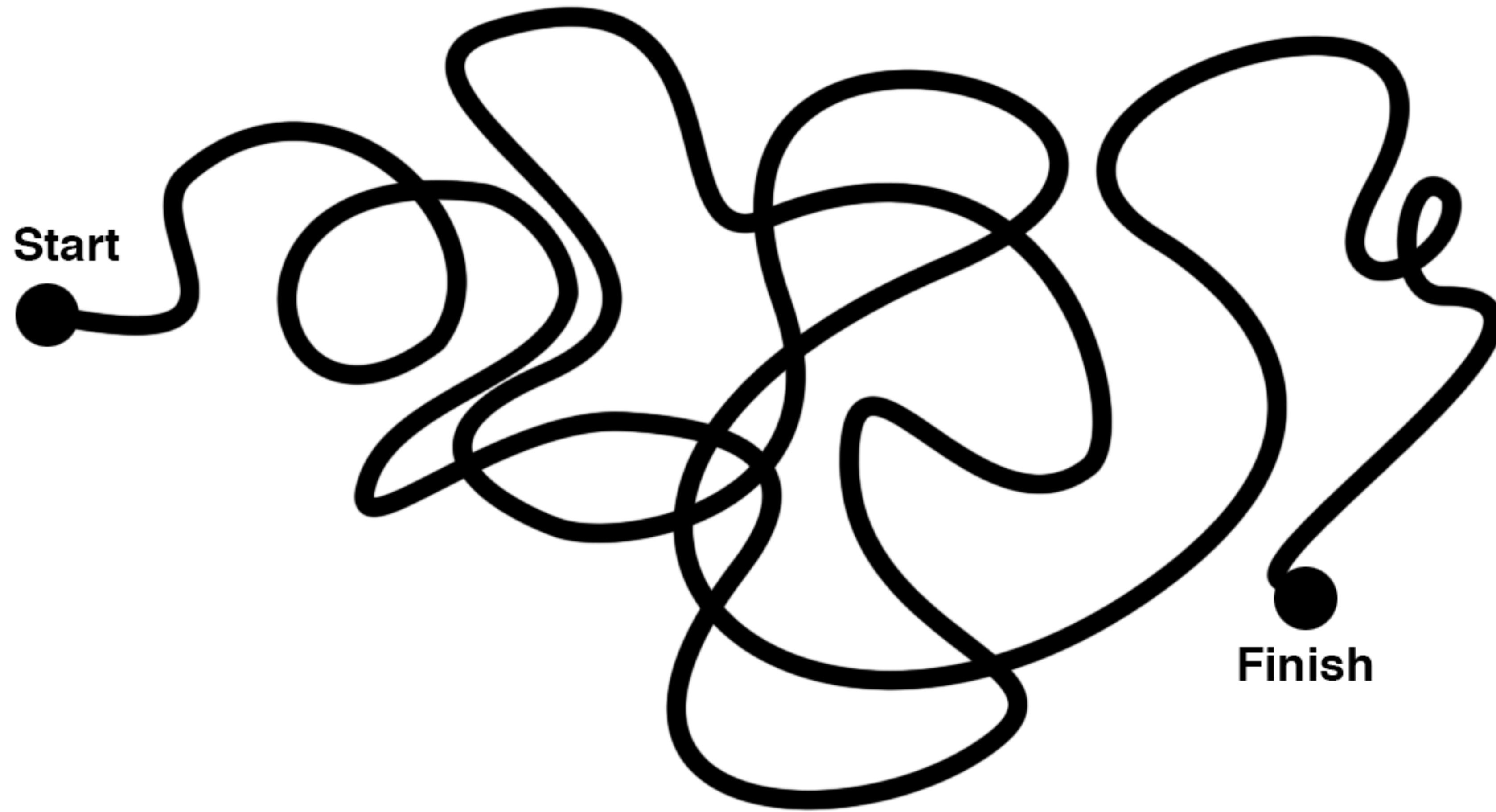
**Visual Design.**

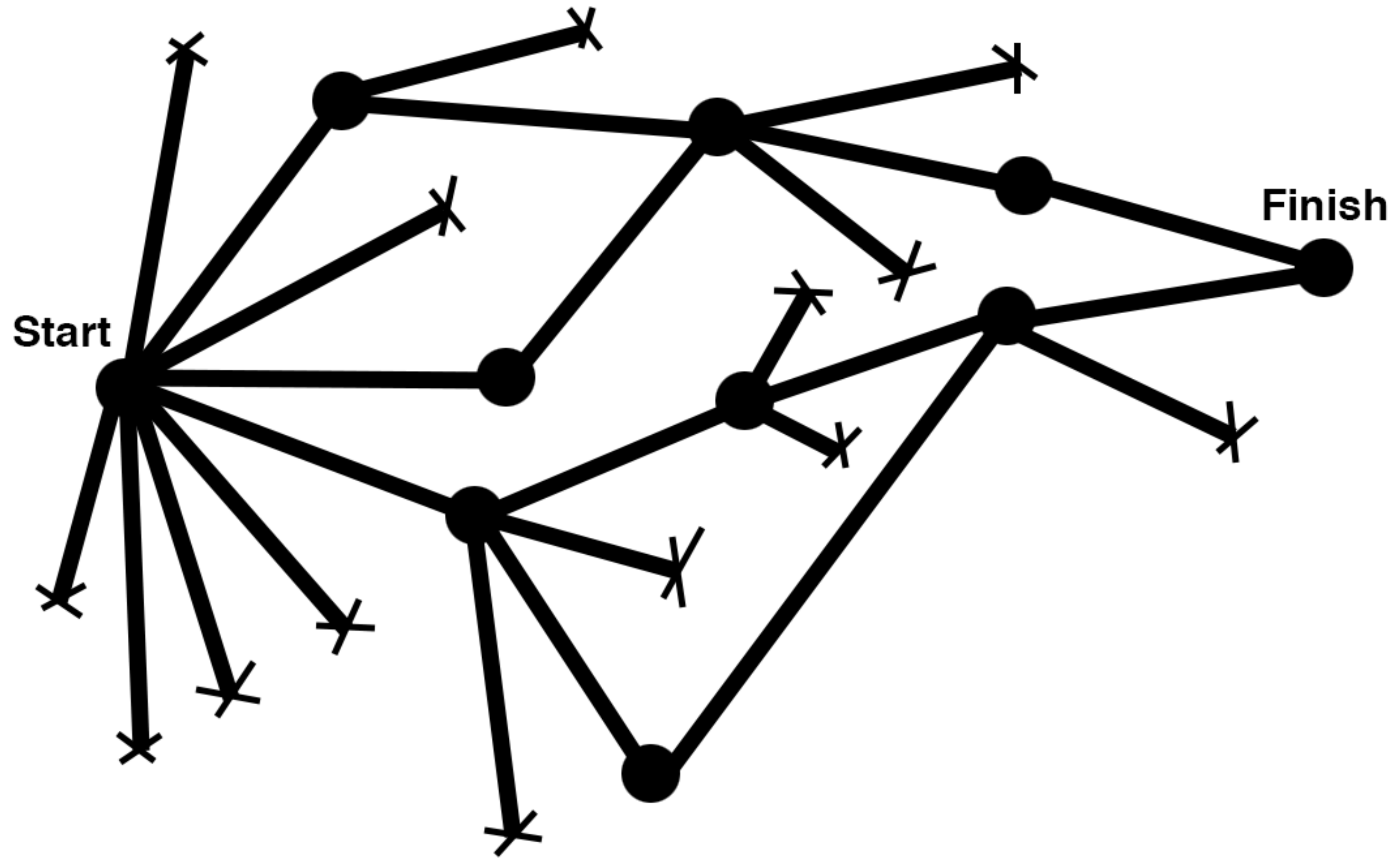


**Personality.**

“ The **design process** is weird and complicated because it involves people and systems, which often are weird and complicated.

— *à la Mark Boulton*







**@jongold** @jongold · 2 Feb 2016

which one of the two possible websites are you currently designing? [pic.twitter.com/ZD0uRGTqqm](https://pic.twitter.com/ZD0uRGTqqm)

194

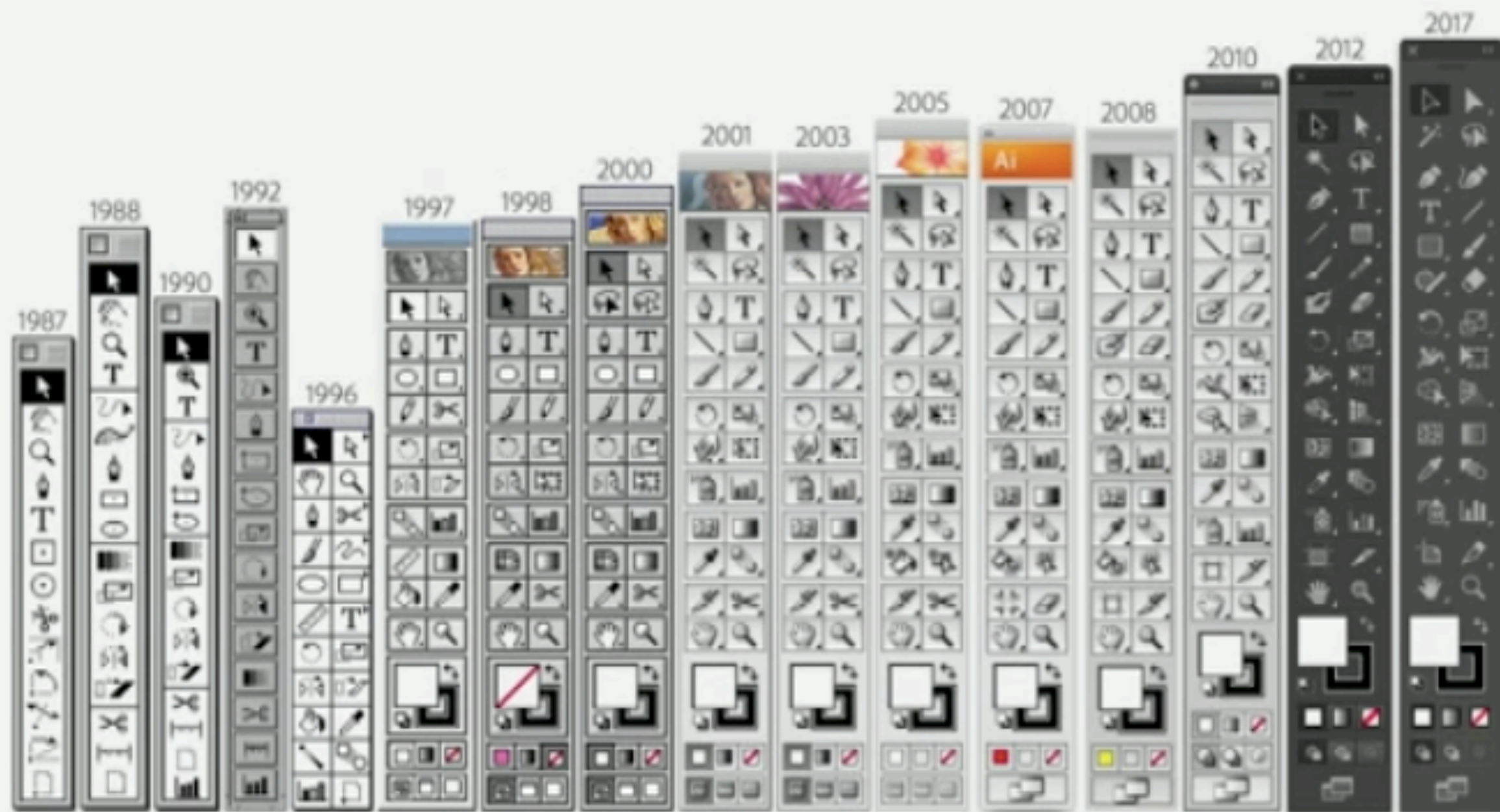
3.9K

5.9K

DESKTOP DESIGN

VS

MOBILE DESIGN



## TWITTER IOS APP



2010



2011



2013



2014



2015



2016



2017



## FACEBOOK IOS APP



2017



2017



2017



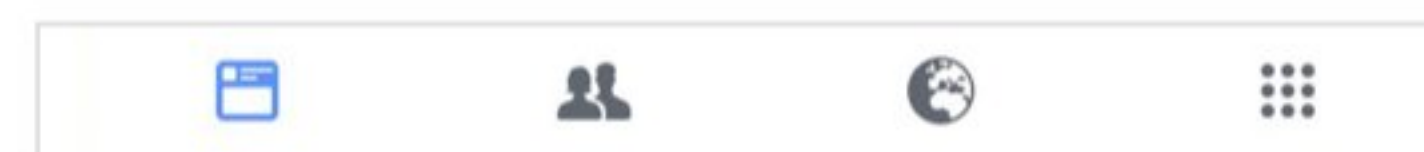
2017



2017



2017



2017



2017



2017



2017



2017



2017

# Facebook's Bottom Nav

Facebook is either [A/B testing the hell out of their app](#) navigation or learning from people's behaviors and creating personalized navigation for them. To learn more, please [mobile](#) share your Facebook mobile navigation here.

Screenshot of your Facebook App Navigation	Date Taken	Unique Nav No.	Notes: do you use any of these options more than others?
	Oct 12	1	"TV stuff and marketplace, neither of which I'm remotely interested in."
	Oct 12	1	iOS 11
	Oct 12	1	I used to have the rocket and the events icon, never touched rocket, but did use events. I don't think I've ever clicked on the 2nd icon (because I have no idea where it will take me to be honest). I think I checked out the marketplace once. (iPhone 6S+, iOS11, fb v144.0)
	Oct 12	1	I only use notifications. Don't know what the others are.
	Oct 12	1	almost never use FB
	Oct 12	1	iOS 11. Only use newsfeed, notifications, and hamburger menu. Never the other two. Didn't even notice the addition of the TV thing. Doesn't appear gray on my phone (7+).
	Oct 12	1	Android 7.0, LG G6. Don't know that I've ever purposely looked at the market section or video section.

	Oct 12	4	The only one I disagree is marketplace, never used it. I never saved any article ever, so it makes sense not being there.
	Oct 12	4	Saved a lot of content for later, but never saw that read-it-later icon. iOS 11, iPhone 6s
	Oct 12	4	I never used the Marketplace, but do I save many articles. I had Events a few weeks ago, but it disappeared. (Nexus 5X, Android 6.0)
	Oct 12	4	I don't use Facebook much after they removed chronological timeline. I use the timeline one and the notifications one. I rarely use the burger. I never click the two people or the house.
	Oct 12	4	rarely use. If so, I review notifications and news feed only
	Oct 12	4	iOS 11. In a couple of local buy/sell groups and save the odd post. Not a heavy user.
	Oct 12	4	iOS 11.0.3 iPhone 7 Plus I'm using the facebook app rarely, once in a week or so. I visit facebook.com with safari mostly
	Oct 12	4	iOS 11.1 Public Beta.
	Oct 12	4	iOS 11.0.2 on iPhone 6+. FB 144.0. Sweden. Not a heavy FB user, especially on phone, because of broken screen and touch

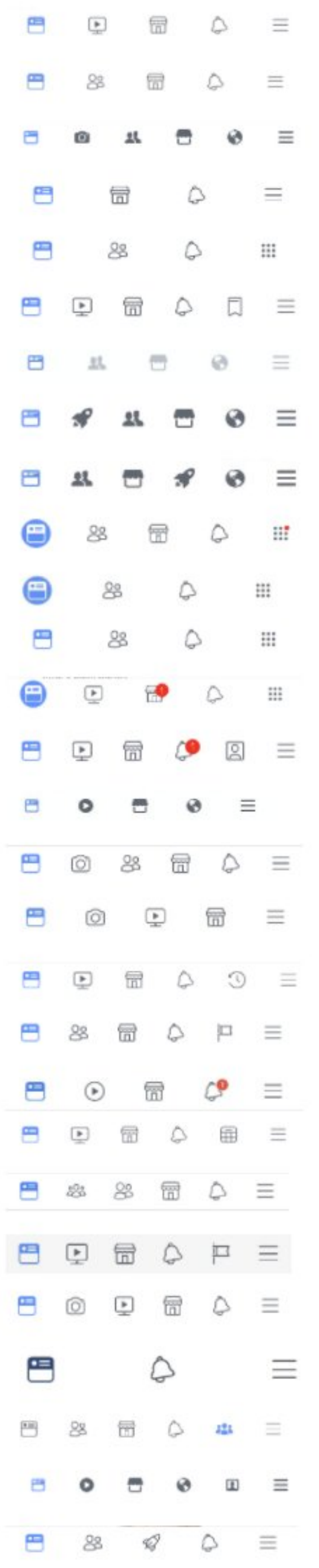
	Oct 12	10	iOS 11. I don't use Facebook.
	Oct 12	11	be jealous, I have a rocket on mine I (ios 11, iPhone se, France) And I don't use Facebook neither.
	Oct 12	12	I do check which friends I have from time to time. Seem to be on a weird AB test where the hamburger is a bunch of squares
	Oct 13	13	frequently review notifications iOS 11 FB 144.0 HK
	Oct 12	14	iOS 11.1 in EU. I don't really use Facebook, Messenger though, too.
	Oct 12	15	iOS 11.0.2, repeatedly badging the marketplace
	Oct 12	16	Never check FB YouTube, never check FB Craig's List, often have to reference my personal profile, if they were personalizing. Events would have a primary placement. iOS 11.0.2

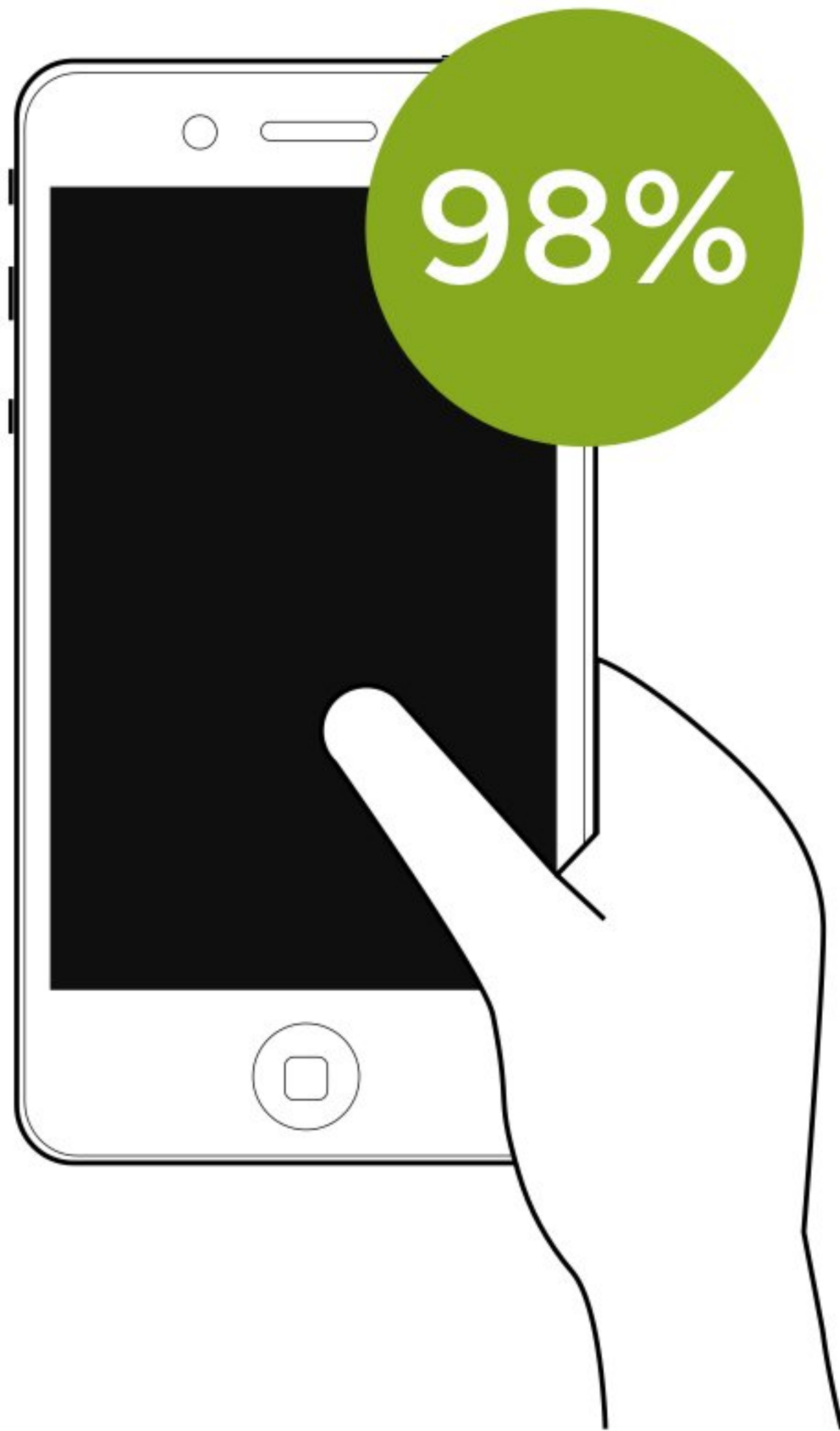
	Oct 12	1	iOS 11.0.2 I've used most of these at some point in time or another. Didn't realize they were variable.
	Oct 12	1	Android 7 USA. I ignore the TV and marketplace icons - only ever click them by accident and get annoyed.
	Oct 12	1	Android 8 Use the Feed and Notifications. If I'm looking for an event or to change the sort of the feed, I use the hamburger
	Oct 12	1	iOS 11.0.3 have been watching lots of soccer videos this week because of Russia 2018 qualifiers
	Oct 12	1	iOS 11.1 Beta 2 on iPhone 7 Plus. I used Marketplace once, and have never used the Video tab. I had the Rocket tab for a bit once a few months ago. I'm not a heavy Facebook user. I don't have many notifications enabled.
	Oct 12	2	"I save a lot of stuff for later. So I have a 'saved for later' icon."
	Oct 12	3	"On iOS 11."
	Oct 12	3	Android 7, Galaxy S8. Notifications is what I mostly use (the bell). NEVER the contact list
	Oct 12	4	

			disease making usage painful. I do use the marketplace
	Oct 12	5	I have never used the Camera button. I know this is apparently an "old" design, but the app is definitely up-to-date.
	Oct 12	5	I only use first and fourth items. Reaching my own pictures would be something I would prefer to have in one click interaction. I've never accessed the house button neither the menu. Probably the users button neither as I accept users via notifications. (Just in case I'm using an iPhone 7, iOS 11.0.2)
	Oct 12	6	Have sold a few items in marketplace recently
	Oct 12	6	Samsung S8 Saw the market place for the first time ever earlier today. Use the alerts tab quite often.
	Oct 12	7	
	Oct 12	8	I never use marketplace but I do save a lot of articles I read/start reading and want to reference later.
	Oct 12	8	I never use Marketplace but do regularly save things.
	Oct 12	9	iOS 10. I only use the feed and notifications

			FB-v144.0
	Oct 12	17	Change from notifications to newsfeed
	Oct 12	18	Have never clicked the camera icon or marketplace until now. Sometimes checks notifications.
	Oct 12	19	iOS 11.1b2 Only ever use the newsfeed and notifications and occasionally make a mistake and swipe ending up in the camera view.
	Oct 12	20	I don't use anything other than notifications iOS 11.0.3 FB 144.0
	Oct 12	20	iOS 11.0.2 on iPhone 7.
	Oct 12	21	The fifth icon (flag) shows my 7 languages iOS 11.0.6 FB 144.0
	Oct 12	22	Icon video variant Android 6.0 FB 145.0.0.37.86
	Oct 12	23	iOS 11.1b1 I've installed the Events app before so maybe that's why I now have a dedicated tab for it? Tried listing something before on Marketplace with no success. Never used video tab, but I guess I watch a lot of video in my feed?







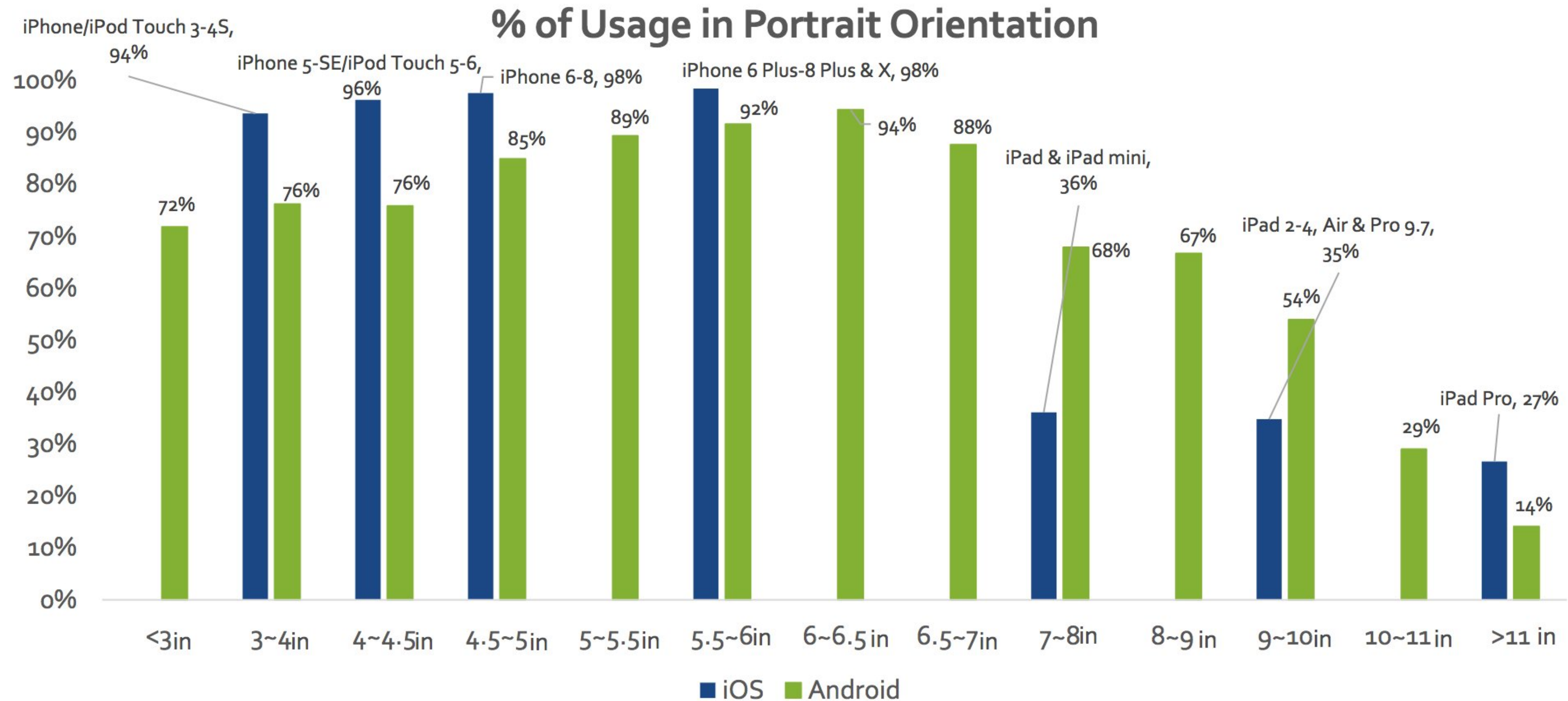
98% of web pages viewed on 5.5" to 6" iPhones are seen in portrait mode



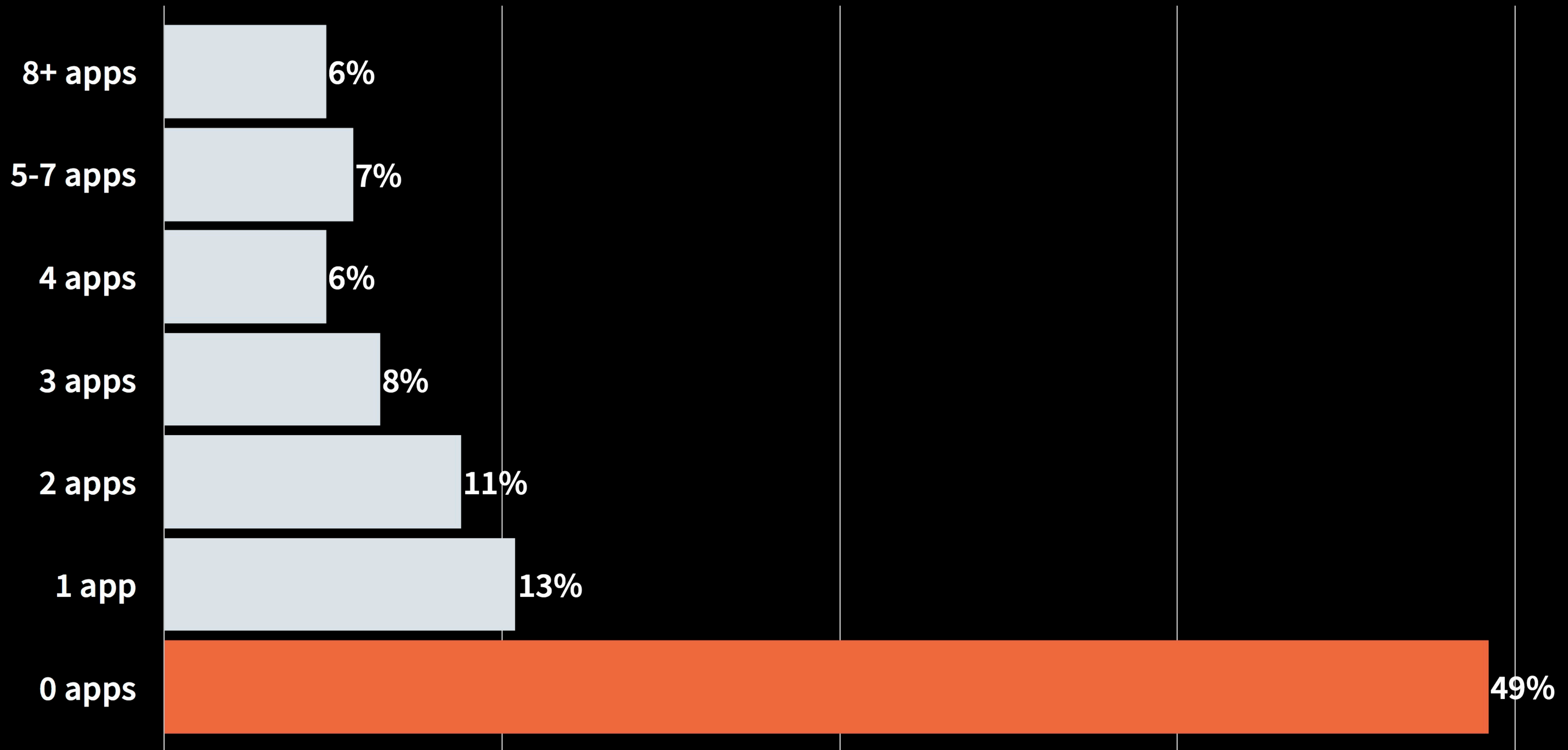
so issues caused by the iPhone X "notch" when viewing web pages in landscape mode won't come up often

## Portrait Orientation Usage by OS

- Among smartphones (from 3 to 6.5 diagonal inches), Android users increase their portrait orientation as the size of the device increases, peaking at 94% at 6.5”.
- However, most iPhone users – regardless of model - are more consistently in portrait orientation over 94% of the time.
- Among “mini” tablets (7-9”), Android users are significantly more prone to portrait orientation (~67%) vs. iPad users (36%).
- Among full size tablets (greater than 9”), portrait orientation drops significantly as screen dimension grows, with iPad Pro users only in portrait orientation 27% of the time.



# U.S. smartphone users' number of apps downloads per month



Source: Comscore 2016 U.S. Mobile App Report, <http://bit.ly/2d27iPI>

2


out of 1000  
mobile users  
tap share buttons

<https://www.moovweb.com/anyone-use-social-sharing-buttons-mobile/>

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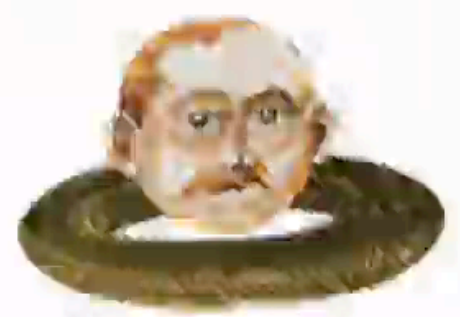
# 90%

of permissions prompts  
are **dismissed** or **ignored**



“ If we want to stand out — to outperform our competitors — we need to delight customers with a *remarkable* design and a unique, charming personality. Be slow and mindful. With an *unprecedented* attention to detail...

— à la Mogens Møller





“ ..We should underpromise, overdeliver.  
Capture attention and guide it skillfully.  
On the web today, it all boils down to one  
single thing: outstanding *storytelling*  
through great *art direction*.

— à la Mogens Møller



Arthur Rackham, "Goldilocks and the three bears"





6:37

PICKUP LOCATION  
Noida-Greater Noida Expy, Raipur...

7 MIN SET PICKUP LOCATION

uberGO    uberX    uberXL

ETA 7 MINS    **3.8x**    MAX SIZE 4 PEOPLE

MIN FARE ₹228

GET FARE ESTIMATE

Demand is off the charts! Fares have increased to get more Ubers on the road.

**5.0x**  
THE NORMAL FARE

₹750 MINIMUM FARE

₹7.50 / MIN    ₹65 / KM

6:37

PICKUP LOCATION  
Noida-Greater Noida Expy, Raipur...

7 MIN SET PICKUP LOCATION

uberGO    uberX    uberXL

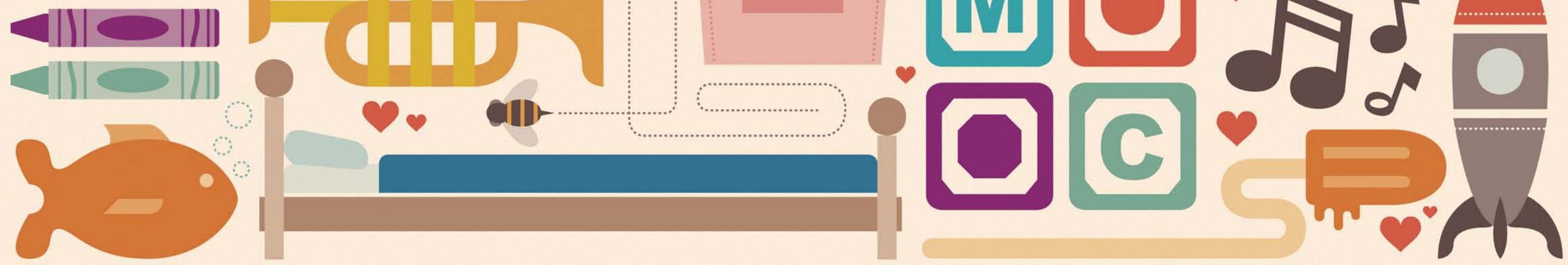
ETA 7 MINS    **3.2x**    MAX SIZE 4 PEOPLE

MIN FARE ₹256

GET FARE ESTIMATE

MailChimp

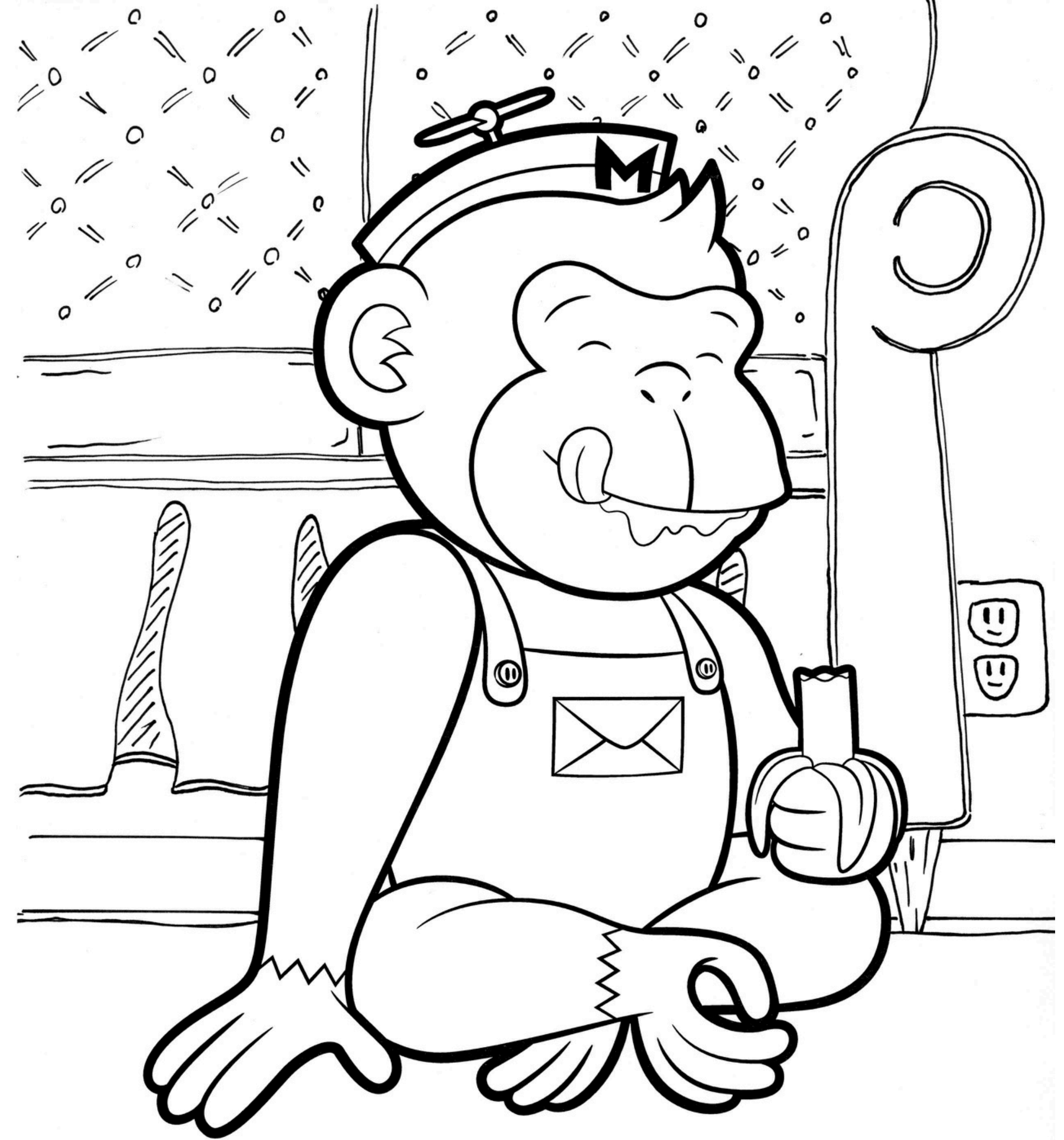




# ALL CHILDREN



Hi, I'm Freddie. It's fun to be me!  
Is it fun to be you?



I love eating bananas for breakfast.



I love riding the bus to school.  
Color the bus yellow.

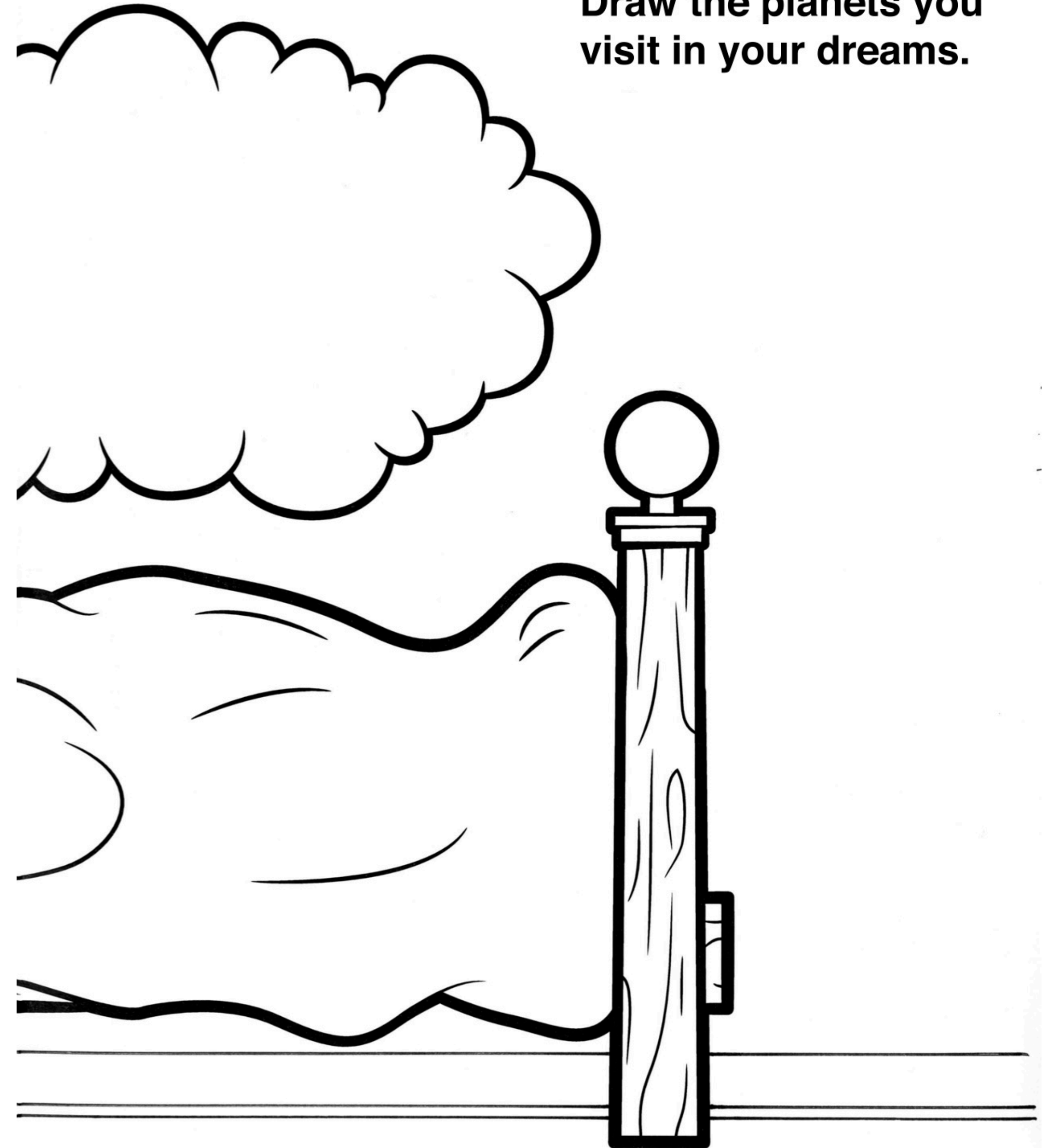


I love cooking with my family.

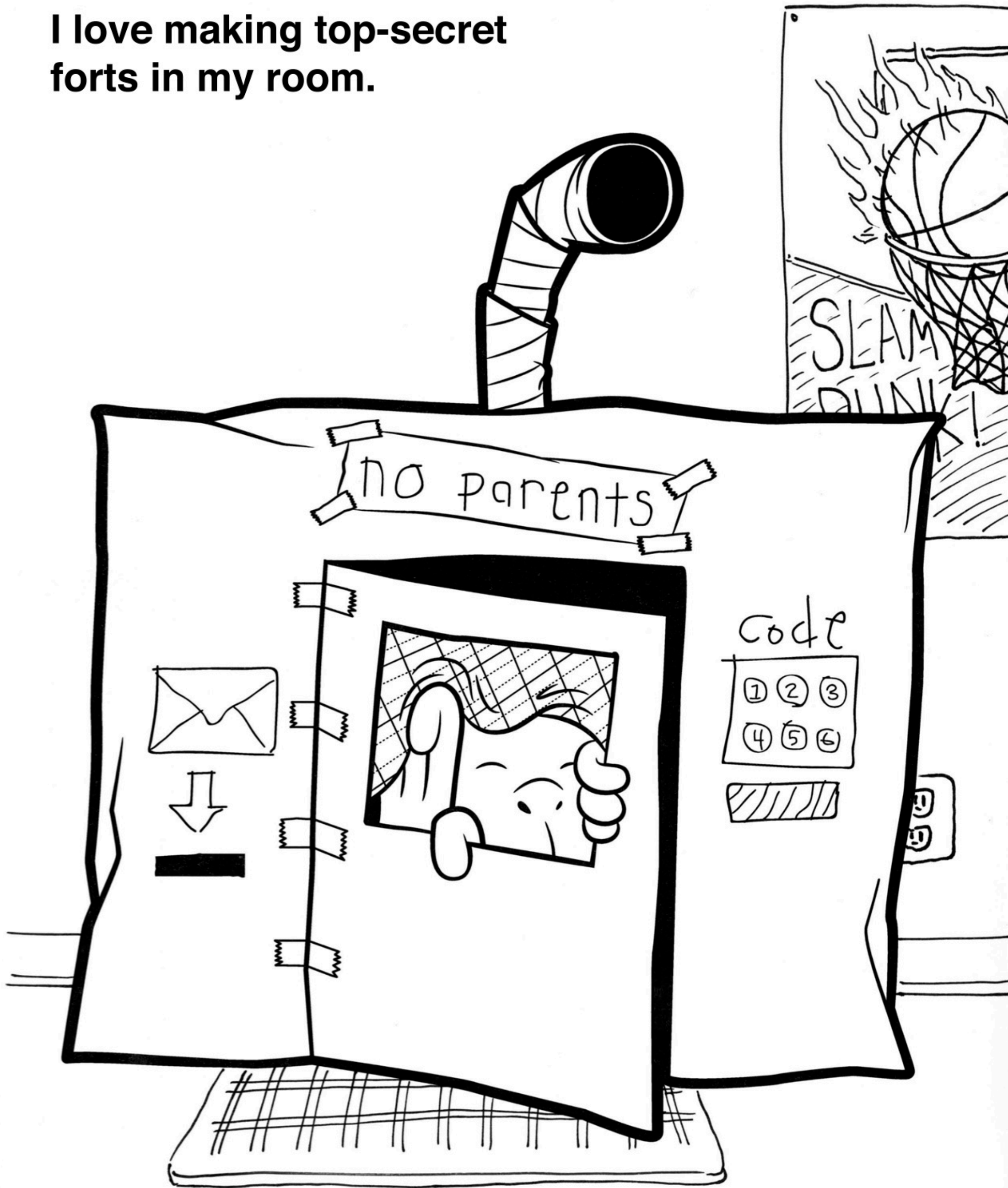
I love dreaming about  
rocket ships.



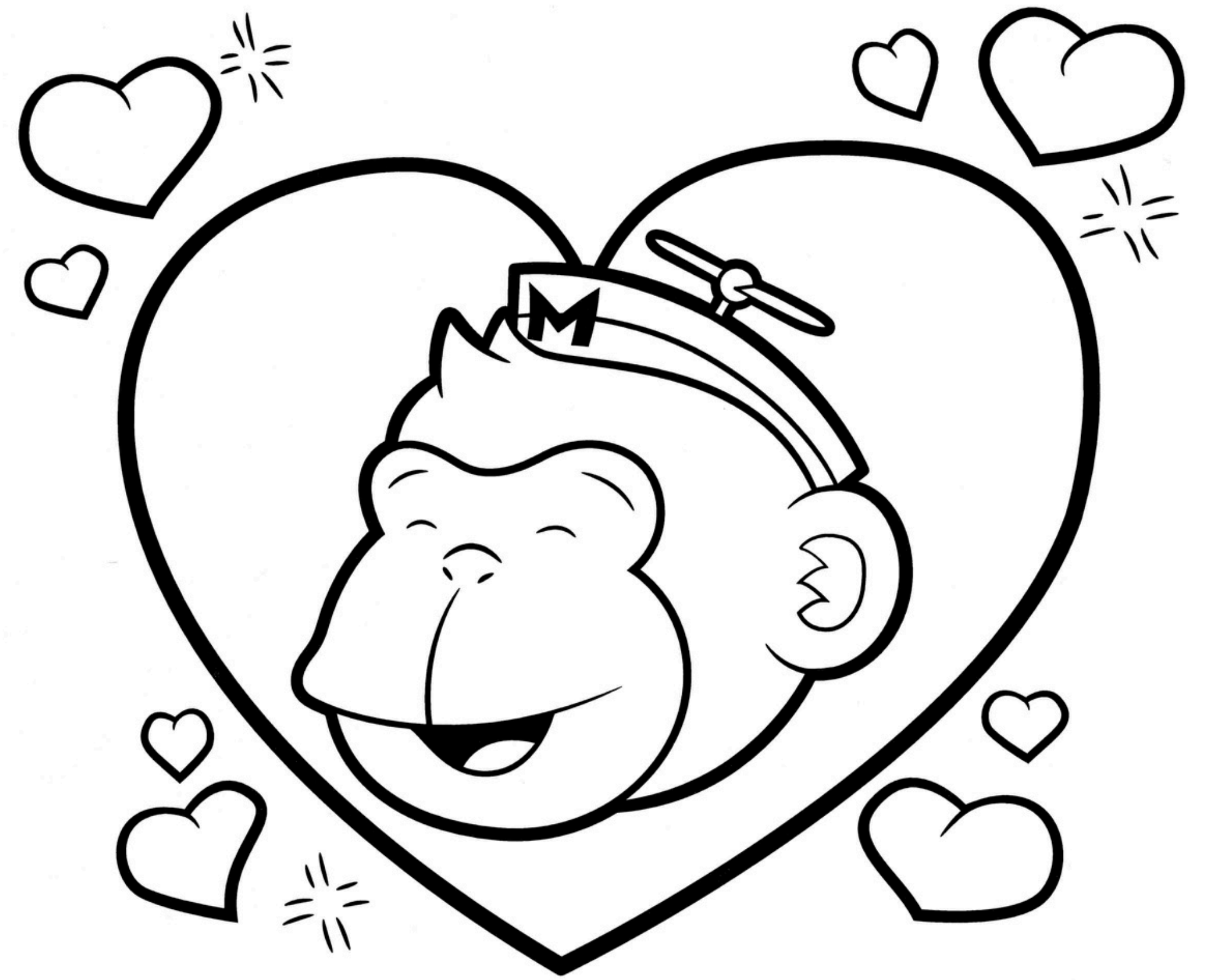
Draw the planets you  
visit in your dreams.



I love making top-secret  
forts in my room.



I love being me!  
Do you love being you?



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THE MARKET BECAUSE WE  
COMMITTED

CAN DO WEEK

MONSTER ART  
ATTACK







# ENTRÉES

ALL ITEMS MADE-TO-ORDER. Toppings include jalapeños, onions, lettuce, tomatoes & sour cream. All items include cheese, unless otherwise requested. Any entrée served with side of chips, add 240 calories.

## BURRITOS & BOWLS

**Burrito:** Flour or wheat tortilla, rice, refried or black beans, choice of filling & toppings (330 - 940 cal)

**Bowl:** Rice, refried or black beans, toppings & guac. Served in a bowl with choice of filling (110 - 650 cal)

**Megajuana with double meat & cheese, add 1.50**

**Chicken** (chipotle or blackened)

**Beef**

**Steak**

**Refried or Black Bean**

(BOWLS ONLY)

**Veggie**

includes pico de gallo (BURRITOS ONLY)



## CHIMICHANGAS

Lightly fried flour or wheat tortilla, choice of filling & toppings (440 - 1,080 cal)



### MAKE IT A MEAL

Add rice, beans & a drink (300 - 460 cal)

### MAKE IT POWERLITE®

Substitute low-fat cheese & fat-free sour cream on any menu item for FREE.

**ADD ONE TACO TO ANY ENTREE FOR \$3**

Excludes Flat Outrageous

MAKE IT WET!

Smother it with queso or chipotle sauce

(10 - 180 cal)

## DOS TACOS

Hard corn, soft flour or wheat tortilla, choice of filling & toppings (120 - 940 cal)

**Chicken** (chipotle or blackened)

**Beef**

**Steak**

MAKE IT WET!

MAKE IT WET!

# The World of Tijuana Flats

Facebook

@SP\_Squared September 17th :)  
Follow us!

HOME FLATHEADS MENU LOCATIONS ABOUT PRESS JUST IN QUESO CONTACT HOT FOODS

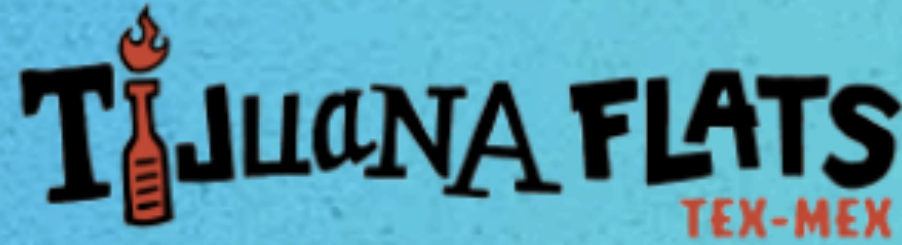
FRESH  
MEAT  
MEX

TACO TUESDAZE  
**TWO  
TACOS**  
CHIPS & DRINK

**4.99**



Flatheads



[MENU](#)

[LOCATIONS](#)

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[CATERING](#)

[OUR STORY](#)

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# OUR STORY

## THE FREE WHEELIN' BRIAN WHEELER



How'd Tijuana Flats become Tijuana Flats? Funny story, really. Back in '95, this college kid, Brian Wheeler, walked into a bar. Actually, a bunch of bars. (And restaurants, too.) At first, it was just harmless fun. But over time, the good times got the best of him and just going out no longer cut it. So Brian decided to open his own restaurant despite having never worked in one before (brilliant, right?). Only problem was, Brian was broke. Luckily, his parents weren't. And after much begging and pleading, his dad loaned him \$20,000 & Brian opened the first Tijuana Flats in Winter Park, Florida.



# The Future According to Elon Musk

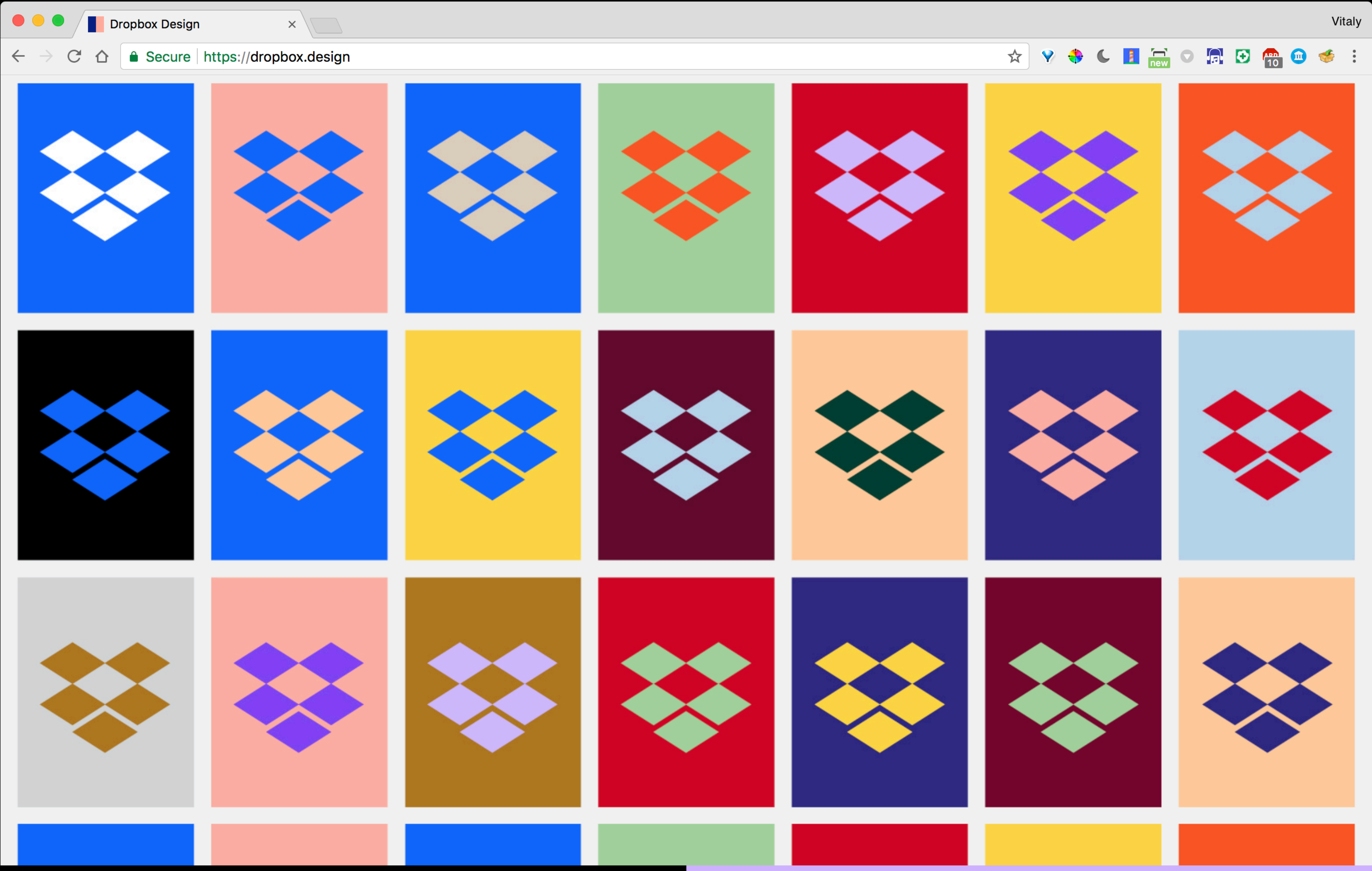
What's late? What's ahead of schedule? Tracking Musk's goals for Tesla, SpaceX, and everything else he dreams up.

By Tom Randall

Updated Aug 31, 2017



CLICK TO ENTER



INFO  
FACEBOOK  
TWITTER

PUM  
BIRDO  
RELÂMPAG  
TOUTS



PALES

COMPRAQUI

WORKS

100  
22+23  
OUT

EVENTO DE DESIGN PARA AQUELES  
QUE ESTÃO TENTANDO VIVER  
(OU QUASE) DE ARTE. CHEGA MAIS!  
RUA BAMBINA, 6, BOTAFOGO-RJ

PORTFOLIO  
ATADOR  
MRLMPG





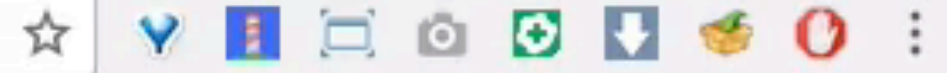


# Structure

Norwegian contemporary  
crafts and design

12–17 April 2016  
Ventura Lambrate, Milan





BOOK ROOM



MENU



# Volkshotel

ROOMS

EAT & DRINK

BLOG / AGENDA

LOCATION



sale continues online | 365 day returns guarantee | free standard shipping on orders over \$49

### NEW ACCOUNT

Title:

First name:

Last name:

Date of birth: \* Month  Day  Year

Mind your own business, I'll keep my date of birth to myself

Why are you asking me this?

Email:

Password:  (at least 6 characters long)

Confirm password:

Next

We will only use this information to send you special promotions and information which is available only to our mailing list. we will never

LIVE CHAT



SIGN IN TO MY ACCOUNT



sale continues o

# NEW ACCOUNT

Title:

First name:

Last name:

Date of birth:

Email:

- Dr
- Admiral
- Baron
- Baroness
- Brigadier
- Captain
- Colonel
- Colonel Sir
- Commander
- Commodore
- Countess
- Dame
- Earl
- Field Marshal Lord
- General
- Group Captain
- Lady
- Lieutenant
- Lieutenant Commander
- Lord
- Lt-Col
- Lt-Gen Sir
- Maj-Gen
- Major
- Msgr
- Prince
- Princess**
- Professor
- Rear Admiral
- Sir
- Squadron Leader
- The Baroness
- The Countess
- The Countess of
- The Duchess of



GIRLS

BOYS

BABY

CLEARANCE

WE LOVE <sup>NEW</sup>



365 day returns guarantee



Day

Year

, I'll keep my date of birth to myself

?

Boden

- Mrs
- Mr
- Miss
- Ms
- Dr
- Admiral
- Baron
- Baroness
- Brigadier
- Captain
- Colonel
- Colonel Sir
- Commander
- Commodore
- Countess
- Dame
- Earl
- Field Marshal Lord**
- General
- Group Captain
- Lady
- Lieutenant
- Lieutenant Commander
- Lord
- Lt-Col
- Lt-Gen Sir
- Maj-Gen
- Major
- Msgr
- Prince
- Princess
- Professor
- Rear Admiral
- Sir
- Squadron Leader
- The Baroness
- The Countess
- The Countess of
- The Duchess of
- The Duke of
- The Earl
- The Earl of
- The Hon
- The Hon Mrs
- The Marchioness of
- The Marquess of
- The Revd

WOMEN MEN KIDS CLEARANCE BLOG

Title:

First name:

Last name:

Date of birth:

Email:

Password:

Confirm password:

Day  Year

ss, I'll keep my date of birth to myself and I confirm that I am over 14 years old s?

(at least 6 characters long)

ation to send you special promotions and information which is available only to ird parties





hello@meow.com|



Password

[Forgot password?](#)

[Sign Up](#)

[Login](#)

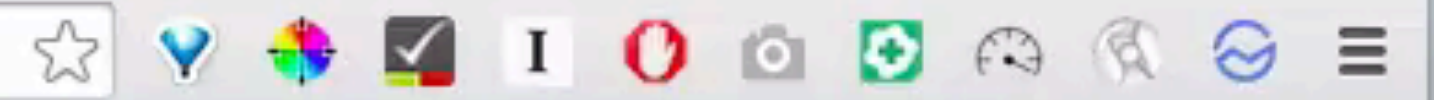
MENU

June 3  
2017  
Hong Kong  
Island

Webconf.asia is a one day conference featuring awesome talks with practical advice from international web experts.

WEBCONF.ASIA

Footer area with a white bar and red dots.



Rich  
Cahill



work  
· about  
contact



Interaction  
Designer

twitter  
tumblr  
blog

Final year





wrk - French Creative Web Stu x

Vitaly



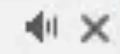
📄 waaark.com



**waaark.**  
creative web studio



Waiting for waaark.com...

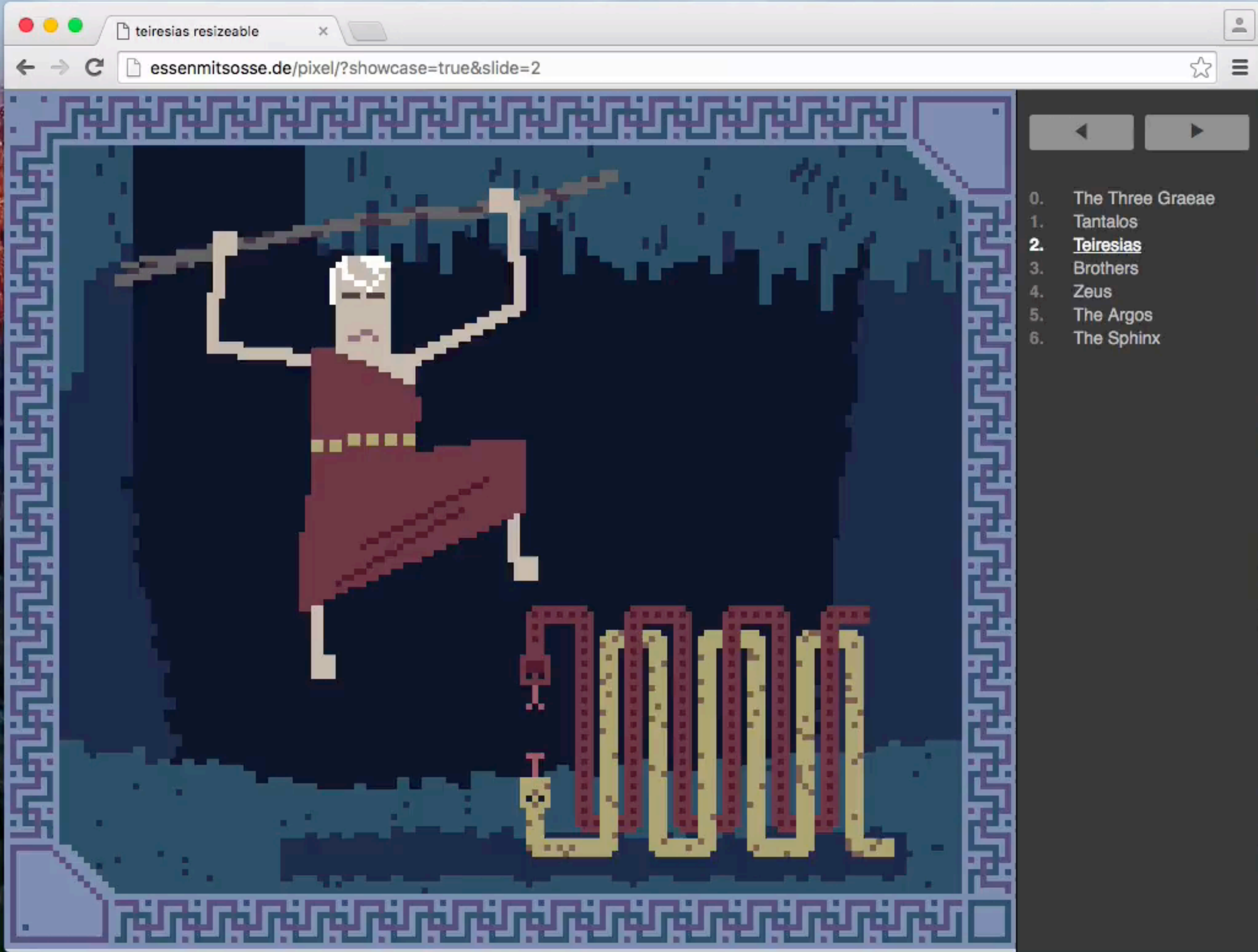


[ABOUT](#) [COLLABORATIONS](#) [MUSICALS](#) [MAKING OF A MUSICAL](#)



Scroll down





- 0. The Three Graeae
- 1. Tantalos
- 2. **Teiresias**
- 3. Brothers
- 4. Zeus
- 5. The Argos
- 6. The Sphinx

**Problem.**

# Ad-blockers.\*

\* Please absolutely use one if you can!

# Advertising.

**01** — 50% revenue decline yearly.

**02** — 66% users blocking ads.



# Membership



**We needed to create a tool for the magazine, a CMS for 2500 articles, a comments engine for 200,000 comments, an eCommerce platform for purchases, a subscription service, a job board, and a membership auth/login.**



**From scratch.**

# Team.

Exploration	—	Andrew Clarke
Design	—	Daniel Mall
Front-End	—	Sara Soueidan
Front-End	—	Ilya Pukhalski
IA, UX, Type	—	Marko Dugonjic
(Cat) Illustrator	—	Ricardo Gimenes

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<b>Front-End</b>	————	<b>Sara Soueidan</b>
<b>Front-End</b>	————	<b>Ilya Pukhalski</b>
<b>IA, Usability</b>	————	<b>Marko Dugonjic</b>
<b>(Cat) Illustrator</b>	————	<b>Ricardo Gimenes</b>
<b>Back-End</b>	————	<b>Mathias Billmann</b>
<b>Animation</b>	————	<b>Sarah Drasner</b>
<b>Accessibility</b>	————	<b>Heydon Pickering</b>
<b>Marketing</b>	————	<b>Joe Leech, Paul Boag</b>

Smashing Redesign — Smashir x Vitaly

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Topics

**Don't Miss These Articles on Smashing**

 **Vitaly Friedman wrote** — 2 MONTHS AGO

**A Little Surprise Is Waiting For You Here — Meet The Next Smashing Magazine**


101 comments

**Anastasia Shevchuk wrote** — 3 MONTHS AGO

**The Art Of Calligraphy: Getting Started And Lessons Learned** 8 comments

# Inspiration <sup>469</sup> # Typography <sup>121</sup> # Fonts <sup>95</sup>

# Smashing Magazine <sup>1</sup> # Redesign <sup>6</sup>



**Text First.**

## # Smashing Shop

Quality books for designers who care about their craft.

### ## Navigation

- [ Sign in / Register ] [ Shopping Cart ]
- [ Search ]
- [ Shop ] - [ Magazine ] - [ Books ] - [ Library ] - [ Events ]

### ## Your account

Hey John, thanks for your kind support. Just like that, you've got 130 eBooks on one swoop – that's pretty smashing, isn't it?

[You can download the whole Library](<https://signalvnoise.com/posts/3801-writing-first-design>) right away.

- [ Avatar image ] [ Customer's first name ]
- [ Edit Addresses ] [ Log out ]
- [ To the shopping cart → ] [ Boo-yah! Let's go shopping! ]

### ## Micro interactions experiments

- [ Search ]
- [ Shop ] - [ Magazine ] - [ Books ] - [ Library ] - [ Events ]

## **## Your account**

Hey John, thanks for your kind support. Just like that, you've got 130 eBooks on one swoop – that's pretty smashing, isn't it? [You can download the whole Library](<https://signalvnoise.com/posts/3801-writing-first-design>) right away.

- [ Avatar image ] [ Customer's first name ]
- [ Edit Addresses ] [ Log out ]
- [ To the shopping cart → ] [ Boo-yah! Let's go shopping! ]

## **## Micro interactions experiments**

Are you sure you want to delete that file?

[ Yes, I'm sure ] [ Never mind ]

Deleting this file will remove it permanently. Are you sure?

[ Yes, delete it ] [ No, cancel ]



## Shipping Address — You are entitled for FREE shipping!

First name

⚠ No Cat is an island.

Last name

⚠ Tiger is a common Cat's last name.

Country

⚠ Uh-oh! Where in the world are you located?

Postal code

⚠ Also known as ZIP code.

City

⚠ Probably the best place in the world if you live there!

Street address

⚠ No imaginary addresses, please!

App / Suite (optional)

**Smart Responsive Design Patterns, Or  
When Off-Canvas Isn't Good Enough**

**Smart Responsive Design Patterns, Or  
When Off-Canvas Isn't Good Enough**

**Smart Responsive Design Patterns, Or  
When Off-Canvas Isn't Good Enough**

**Smart Responsive Design Patterns, Or  
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When Off-Canvas Isn't Good Enough**

**Smart Responsive Design Patterns, Or  
When Off-Canvas Isn't Good Enough**

**Smart Responsive Design Patterns, Or  
When Off-Canvas Isn't Good Enough**

**This typeface.**

Elena

**That typeface.**

a

Mija

FatDUX





# FOO FIGHTERS (LEARN TO FLY)

Run and tell all of the clients  
This could take all night  
Think I need a Dev to help me get things right

Test page at a new resolution  
'Cause this one is awry  
We sat around scratching our heads, and wondering why.

Now I'm looking for a tip to save me  
Testing out the width and height,  
Looking for a break point to help me get it right.  
Now I'm looking for a Smashing Conference  
Looking 'cause I'm tired of trying  
Made my way to Freiburg, this is why.



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Now I'm looking for a Smashing Conference  
Looking 'cause I'm tired of trying  
Made my way to Freiburg, this is why.



# WELCOME

SAN FRANCISCO 🇺🇸











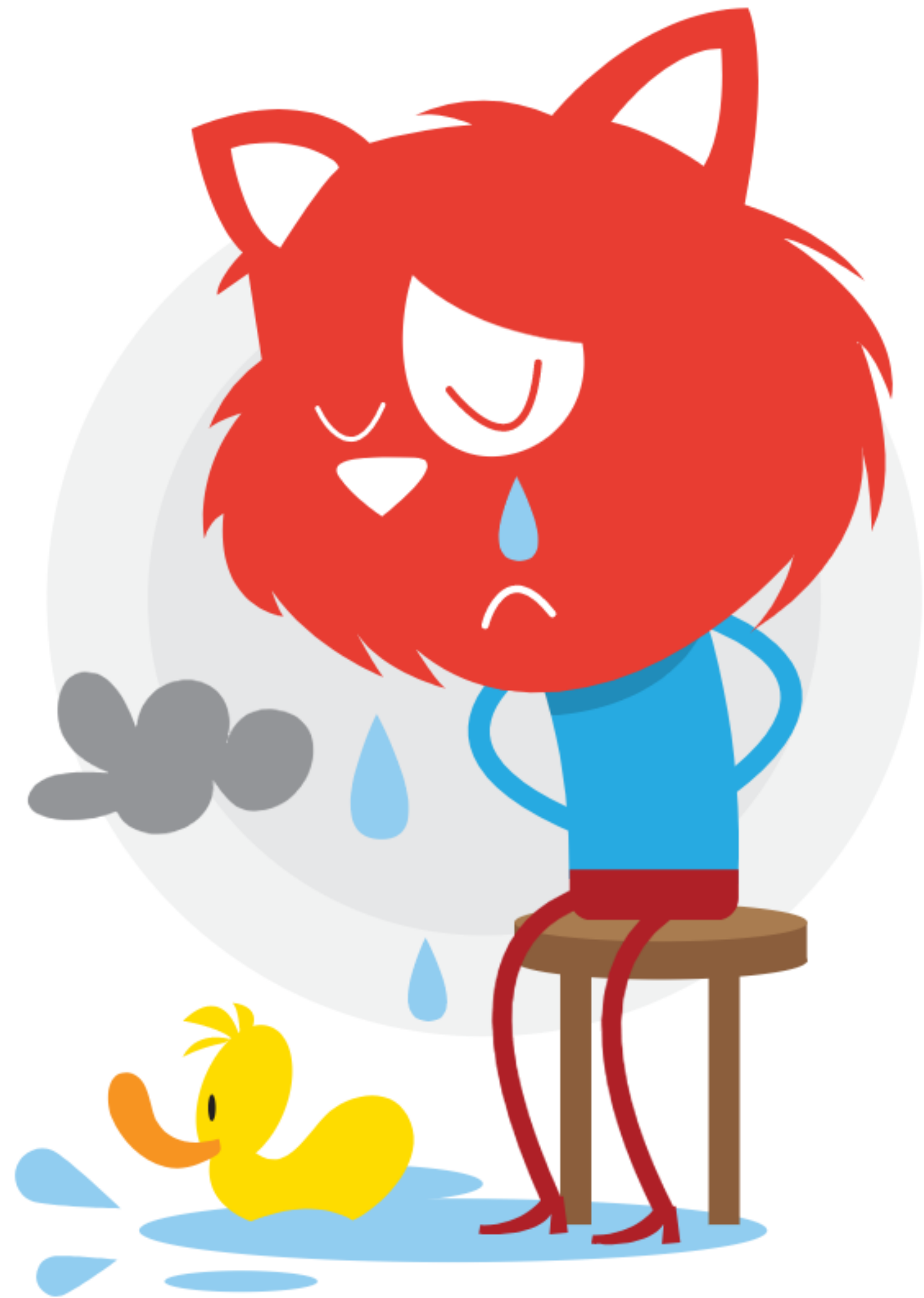






 **SMASHING**  
MAGAZINE





**Finding the  
right angle.**

Finding the  
right angle.\*

\* (Literally.)

# Real-life responsive web design

Smart “responsive” workflows, effective responsive design/UX patterns. Our brand new Smashing Book 5 is just what you need.



**S**mart “responsive” workflows, effective responsive design/UX patterns. Our brand new Smashing Book 5 is just what you need.

Smart “responsive” workflows, effective responsive design/UX patterns. Our brand new Smashing Book 5 is just what you need.

Smart “responsive” workflows, effective responsive design/UX patterns. Our brand new Smashing Book 5 is just what you need.

# Test



Smart “responsive” workflows, effective responsive design/UX patterns. Our brand new Smashing Book 5 is just what you need.

**S**mart “responsive” workflows, effective responsive design/UX patterns. Our brand new Smashing Book 5 is just what you need.

Smart “responsive” workflows, effective responsive design/UX patterns. Our brand new Smashing Book 5 is just what you need.

Smart “responsive” workflows, effective responsive design/UX patterns. Our brand new Smashing Book 5 is just what you need.

Smart “responsive” workflows, effective responsive design/UX patterns and powerful front-end techniques—if you need a good book on smart responsive design, our brand new Smashing Book 5 is just what you need. Neatly packed in a gorgeous hardcover, it covers time-saving, practical techniques for crafting fast, maintainable and scalable responsive websites.



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HEYDON PICKERING / DEC 21 2015

[CSS](#) / [JavaScript](#) / [Performance](#)

# Reimagining single-page applications with *progressive enhancement*

24 comments

12 mins to read

What's the difference between a *web page* and a *web application*?

Though we tend to identify documents with reading and applications with interaction, most **web-based applications** are of the blended variety.


Users can consume information and perform tasks in the same place. Regardless, the way we approach building web applications usually dispenses with some of the simple virtues of the readable web. Single-page applications tend to take the form of runtimes, JavaScript executables deployed like popup shops into vacant `<body>` elements.

Smashing Magazine conferenc x Vitaly

file:///Users/Markus\_Seyfferth/smashing-magazine-redesign/conference-index.html

LOCATION SCHEDULE SPEAKERS WORKSHOPS SPONSORS TICKETS

15-16 March 2016









 **Oxford**

Topics covering HTTP/2, Flexbox, Performance and SVG, with speakers including Aarron Walter, Sara Soueidan, Vasilis van Gemert and more.

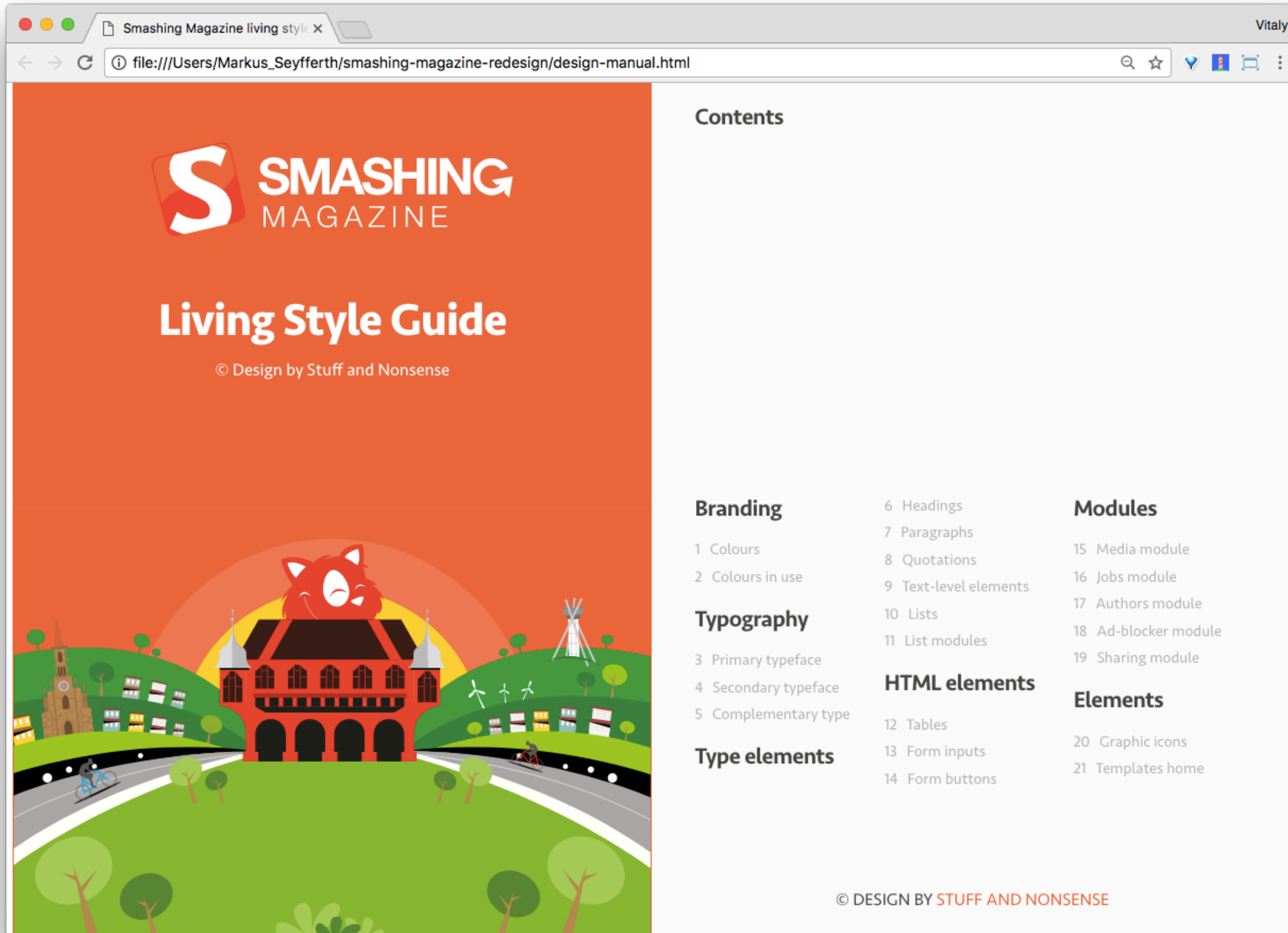
[Get tickets](#)

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Time	Speaker	Topic
08:00		Doors open
09:00		Welcome and introduction
09:20	<a href="#">AARRON WALTER</a>	Building great design teams
10:10	<a href="#">ALLA KHOLMATOVA</a>	Atoms, Modules and Other Fancy Particles
11:30	<a href="#">SARA SOUEIDAN</a>	SVG in Motion
12:20	<a href="#">PATRICK HAMANN</a>	HTTP/2: what, where, why, and when?
14:50	<a href="#">CHRIS SHIFLETT</a>	Understanding People
15:40	<a href="#">ANDY CLARKE</a>	Counting Stars: Creativity over predictability
17:00	<a href="#">VASILIS VAN GEMERT</a>	Look, no mediaqueries
17:50	<a href="#">HEYDON PICKERING</a>	Joining Up The Dots

							
JINA BOLTON	WES BOS	HANNAH DONOVAN	PATRICK HAMANN	UMAR HANSA	ALLA KHOLMATOVA	JON SETZEN	CHRIS SHIFLETT
Design systems	Workflow	Content	HTTP/2	DevTools	Design	Design	Psychology









Smashing Magazine living style x Vitaly

file:///Users/Markus\_Seyfferth/smashing-magazine-redesign/design-manual.html

BRANDING  
COLOURS

Colour values

 HEX: #E85C32 RGB: 232 / 92 / 50	 HEX: #40B7D7 RGB: 64 / 183 / 215
 HEX: #789CA7 RGB: 120 / 156 / 167	 HEX: #E43B2C RGB: 228 / 59 / 44

TYPOGRAPHY  
PRIMARY TYPEFACE (ELENA)

BRANDING  
COLOURS IN USE

**Primary colour**

#E85C32

Used for hypertext link colour and the backgrounds of primary calls-to-action including buttons.

**Secondary colour**

#40B7D7

Used for hover states on hypertext links and the backgrounds of primary calls-to-action including buttons.

**Accent colour**

#e43b2c

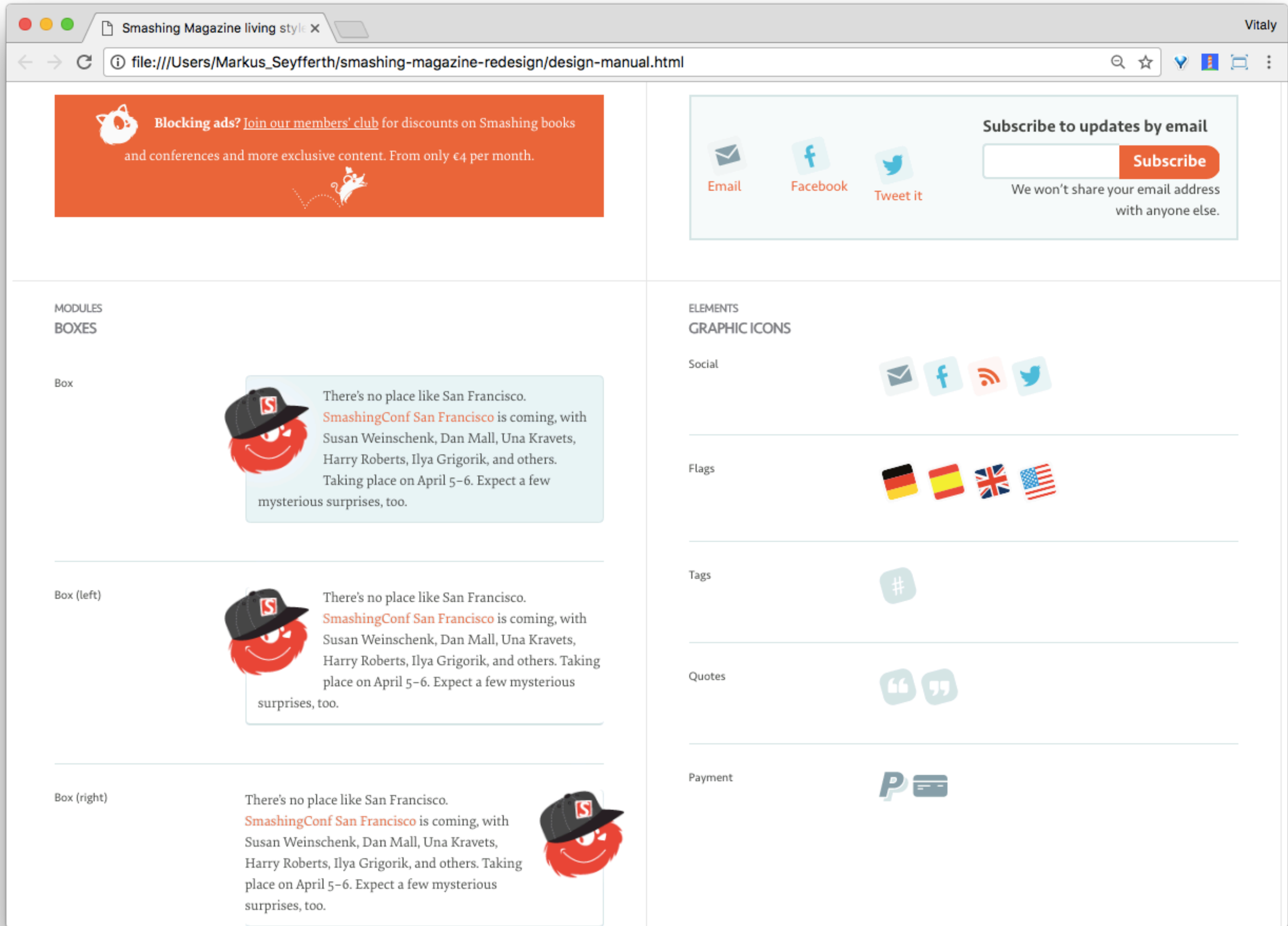
Used in the backgrounds of buttons, boxes, tables and other elements.


**Neutral colour**


#cfe1e6

Used on the borders of buttons, boxes and other elements.




TYPOGRAPHY  
SECONDARY TYPEFACE (SERAVEK)



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MODULES  
BOXES

Box



There's no place like San Francisco. **SmashingConf San Francisco** is coming, with Susan Weinschenk, Dan Mall, Una Kravets, Harry Roberts, Ilya Grigorik, and others. Taking place on April 5-6. Expect a few mysterious surprises, too.

Box (left)



There's no place like San Francisco. **SmashingConf San Francisco** is coming, with Susan Weinschenk, Dan Mall, Una Kravets, Harry Roberts, Ilya Grigorik, and others. Taking place on April 5-6. Expect a few mysterious surprises, too.

Box (right)

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ELEMENTS  
GRAPHIC ICONS

Social



Flags



Tags



Quotes



Payment



By Device

By Page

Guest

Host

List View



Web



iPhone



iPad



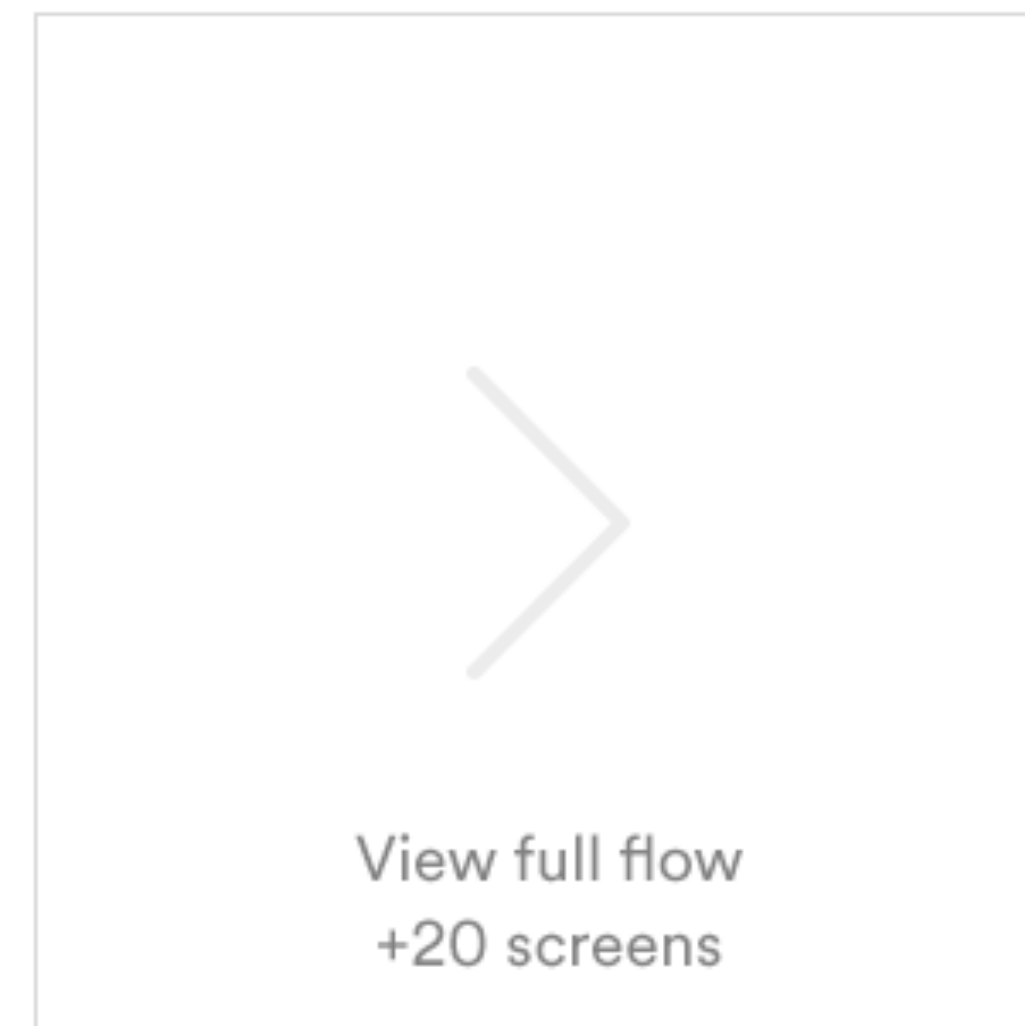
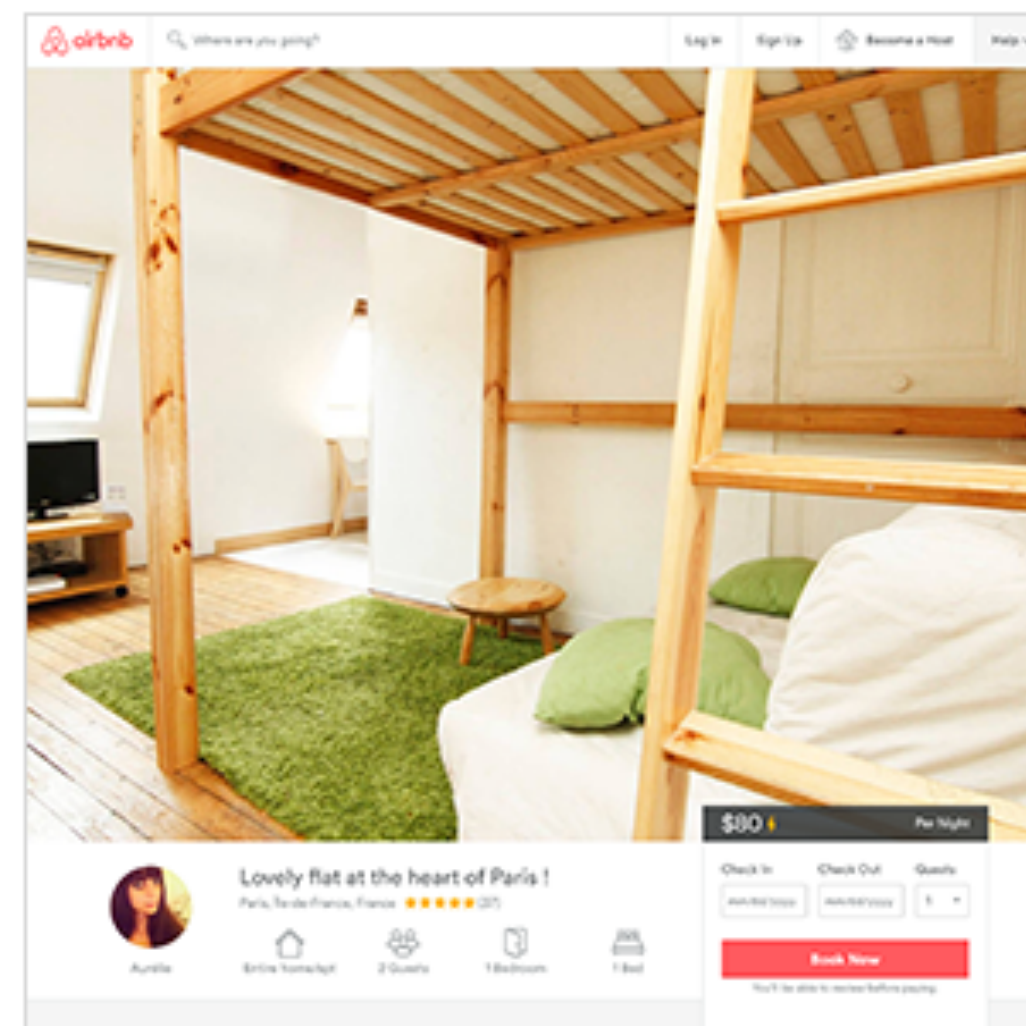
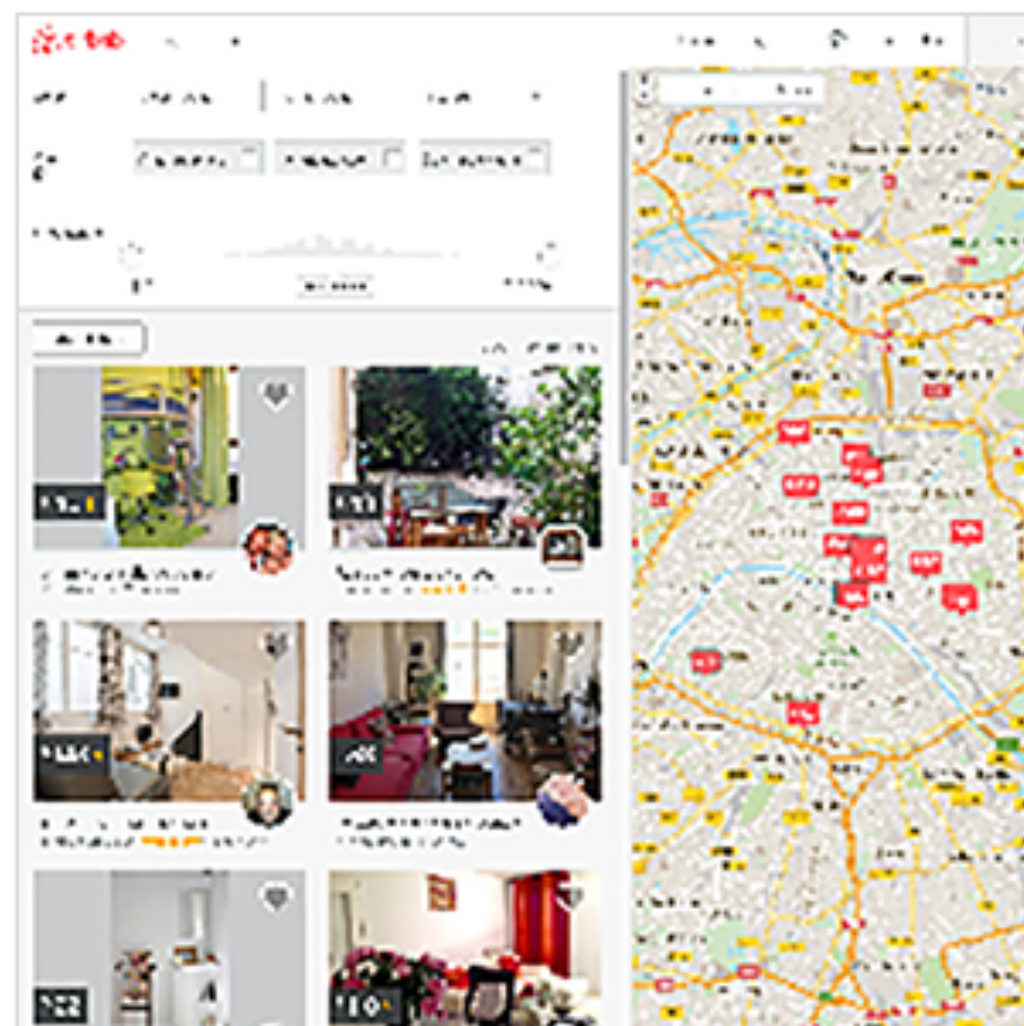
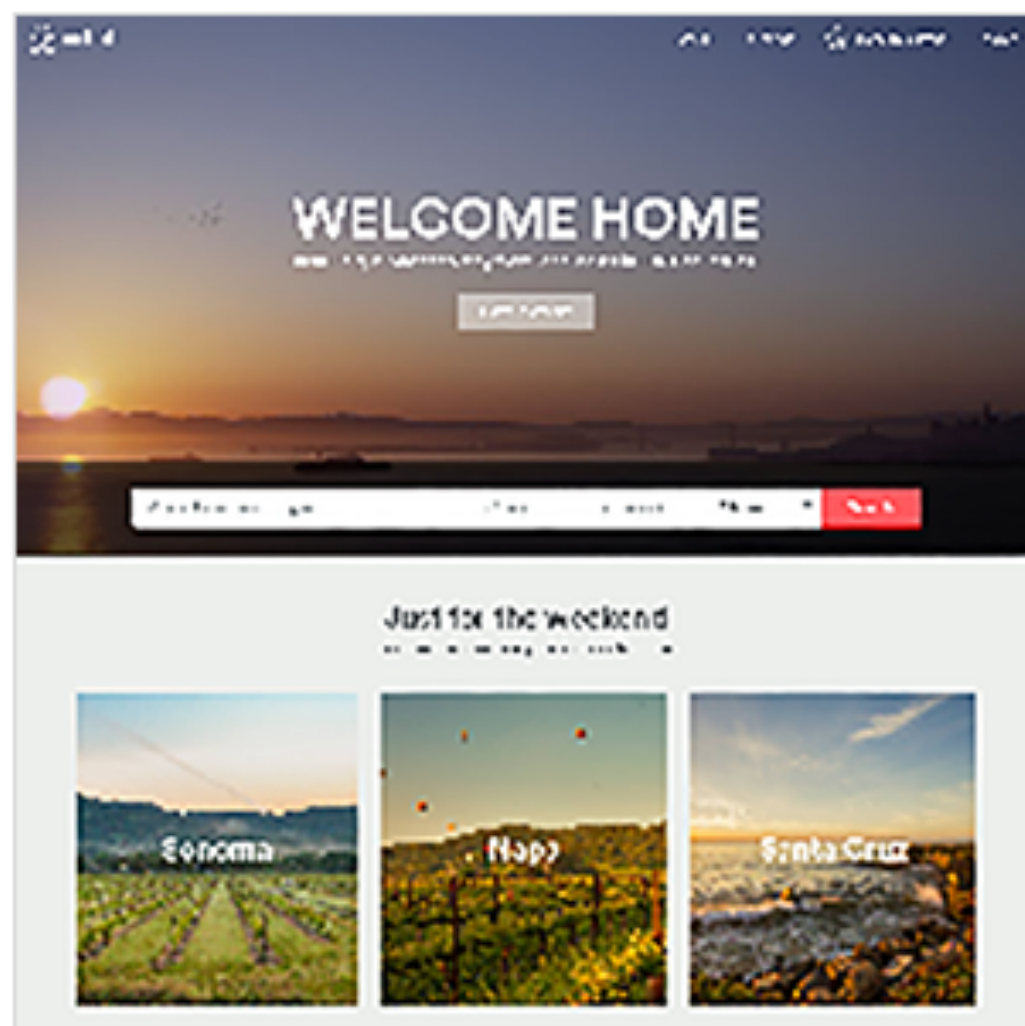
Nexus 7



Nexus 9

Web > Guest > Booking Flow

☰ 2 🗨️ 15 ↑ 32



Web > Host > Message Flow

☰ 2 🗨️ 15 ↑ 30

# air/shots

dls ios ✕

iPhone 6 ✕

Pages and Flows

ZH-HANT ✕

EN ✕

FR ✕

ES ✕

RU ✕

Showing 56 flows

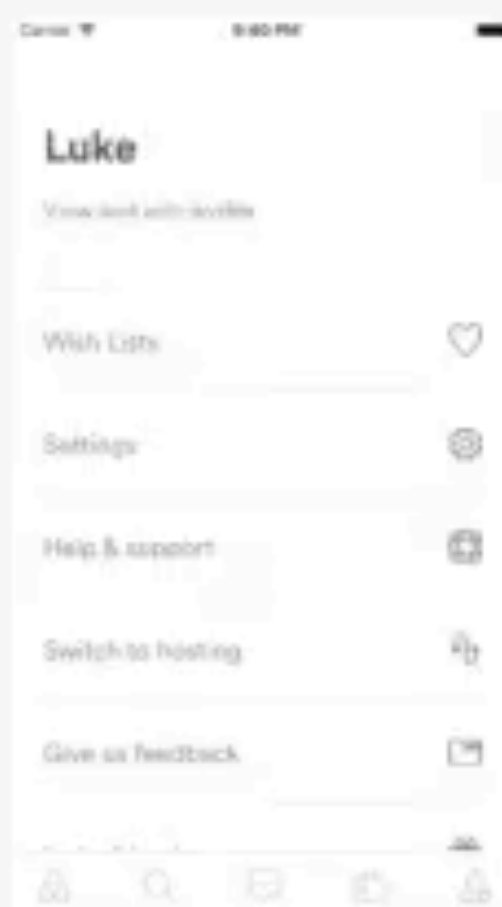
Narrow your selection with the filters above.

Try out different combinations of Device Type, User Flow and Language.

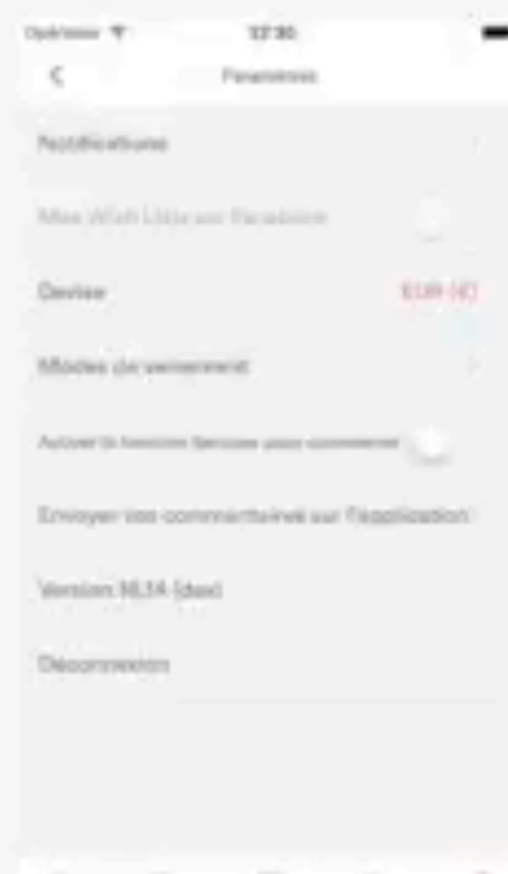
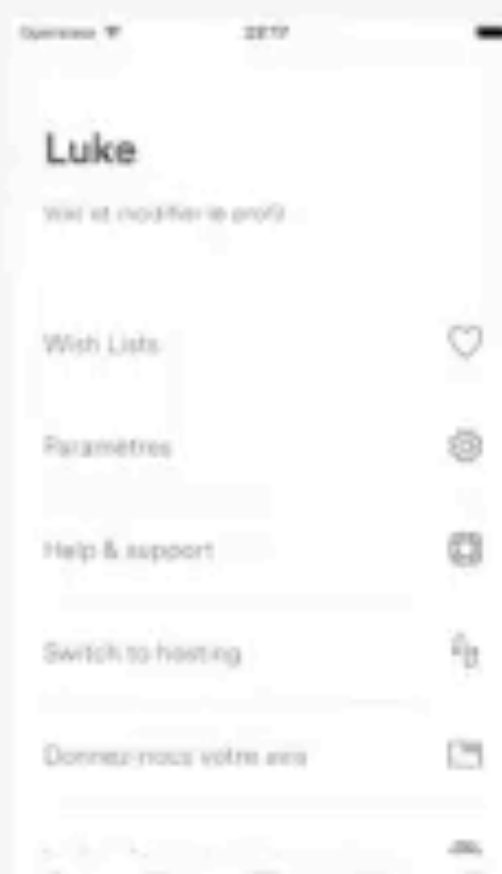
If you leave a filter empty, you'll see all screens for that



dls ios / iPhone 6 / EN / Settings



dls ios / iPhone 6 / FR / Settings



# airshots



Galaxy S5  
EN DLS



iPhone 6  
EN DLS



iPad  
EN DLS



Nexus Tablet  
EN DLS



Galaxy S5  
EN v15.14



iPhone 6  
EN v15.14



iPad  
EN v15.14

Nex  
EN

ios v15.14 / iPhone 4 / CA / Signup

Versions

iPhone 4 ✕

iPhone 6 ✕

Signup ✕

Language

Signup form on iPhone 4 simulator. Fields: Correo electrónico, Contrasenya, Nom, Cognom, Data de naixement. A pink bar is visible at the bottom.

Signup form on iPhone 4 simulator with keyboard. Fields: auraspring@airbnb.com, Contrasenya, Nom, Cognom, Data de naixement.

Signup form on iPhone 4 simulator with keyboard. Fields: auraspring@airbnb.com, Contrasenya (masked with dots), Nom, Cognom, Data de naixement.

Signup form on iPhone 4 simulator with keyboard. Fields: Auras (masked with dots), Cognom, Data de naixement.

ios v15.14 / iPhone 4 / CS / Signup

Signup form on iPhone 4 simulator. Fields: Email, Hello, Jimeno, Pigneri, Data de naixement. A pink bar is visible at the bottom.

Signup form on iPhone 4 simulator with keyboard. Fields: auraspring@airbnb.czcom, Hello, Jimeno, Pigneri, Data de naixement.

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Signup form on iPhone 4 simulator with keyboard. Fields: Auras (masked with dots), Pigneri, Data de naixement.

Showing 52 flows

Links

FAQ/About

Feedback Form

“ If machine learning algorithms can classify a complex set of thousands of handwritten symbols — such as handwritten Chinese characters — with a high degree of accuracy, then we should be able to classify the **150 components** within our system and teach a machine to recognize them.

— *Benjamin Walkins*

<https://airbnb.design/sketching-interfaces/>







**innish design is an**  
of inspiration. See  
designers tackled t  
ago, with a limited  
how timeless, even  
the pieces are

fascinating. With this Quick Tip, w  
behind current trends and indulge in



Communities have **dimension.**

Communities are **vibrant.**



SMASHING



A LIST APART  
(CORPORATE)



SITEPOINT  
(BLAH)



CSS TRICKS  
(MUDDY)



CREATIVE BLOG  
(SAFE)



WEIGHT



LIGHT



Communities are **quirky & soft.**

Communities are **vibrant.**



SMASHING



A LIST APART  
(CORPORATE)



SITEPOINT  
(BLAH)



CSS TRICKS  
(MUDDY)



CREATIVE BLOG  
(SAFE)



PROXIMA NOVA  
○ SHARP & UTILITARIAN



MIJA  
○ QUIRKY & SOFT



Communities are **turned up to 11.**

Communities are **vibrant.**



SMASHING



A LIST APART  
(CORPORATE)



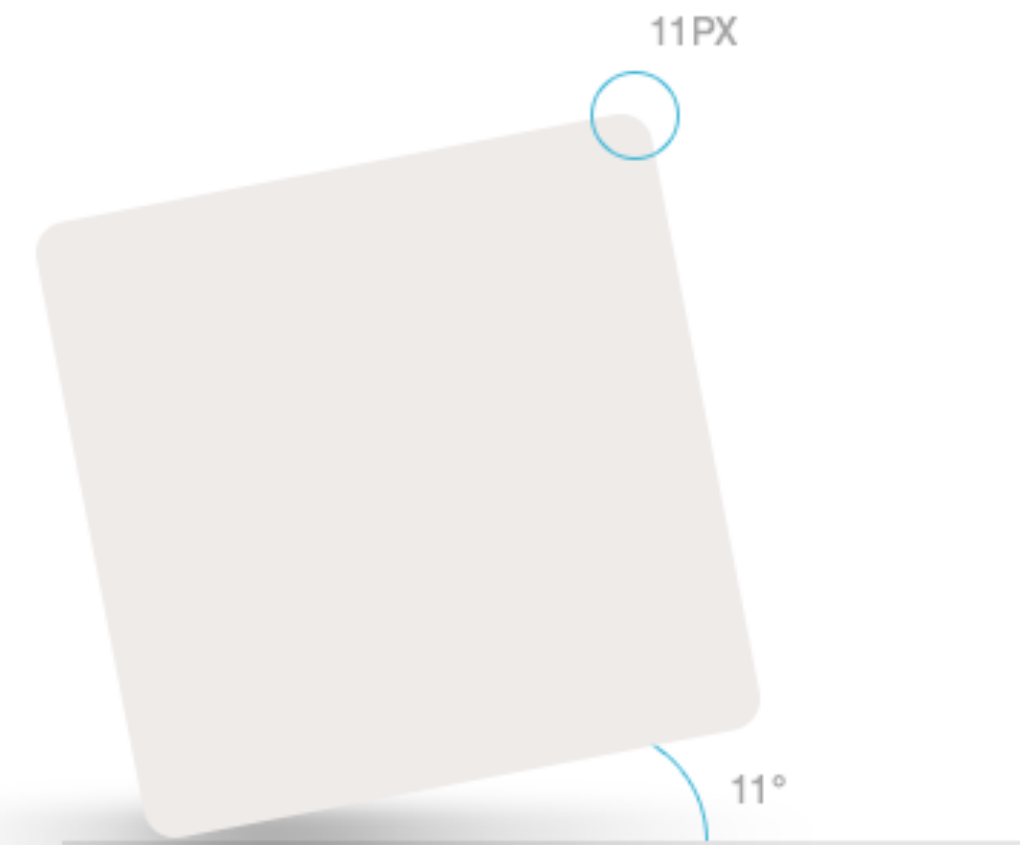
SITEPOINT  
(BLAH)



CSS TRICKS  
(MUDDY)



CREATIVE BLOG  
(SAFE)



 **Coding**

 **Graphics**

 **Design**

 **UX Design**

 **Mobile**

 **WordPress**



ABOUT THE AUTHOR

## Matt Mullenweg

Matthew Charles “Matt” Mullenweg is an American online social media entrepreneur and web developer living in San Francisco. He is best known for developing the free and open source web software WordPress, now managed by The WordPress Foundation.





Pamela Pavliscak wrote

# Designing For The Internet Of Emotional Things

Emotional Design


Psychology

*More and more of our experience online is personalized. Search engines, news outlets and social media sites have become quite smart at giving us what we want.*

APRIL 20, 2016 – Perhaps Ali, one of the hundreds of people I’ve interviewed about our emotional attachment to technology, put it best: “Netflix’s recommendations have become so right for me that even though I know it’s an algorithm, it feels like a friend.”

Personalization algorithms can shape what you discover, where you focus attention, and even who you interact with online. When these algorithms work well, they can feel like a friend. At the same time, personalization doesn’t feel all that personal. There can be an uncomfortable disconnect when we see an ad that doesn’t match our expectations. When personalization tracks too closely to interests that we’ve expressed, [it can seem creepy](#). Personalization can create a filter bubble by showing us more of what we’ve clicked on before, rather than exposing us to new people or ideas.

Your personalization algorithm, however, has only one part of the equation – your behaviors. The likes, videos, photos, locations, tags, comments, recommendations and ratings shape your online experience. But so far, your apps and sites and



As browsers constantly improve their graphical rendering abilities, the ability to truly design within them is becoming more of a reality. A few lines of code can now have quick and dramatic visual impact, and allow for consistency without a lot of effort. And as with most things in web development, there are often many ways to achieve the same effect.

13 View comments

ADVERTISEMENT

```
width: 100%;
line-height: 1.2em;
font-size: 1.2em;
padding-right: 20px;

@ (
  color: #000 !important;
  display: inline-block;
)
White Label Your Web
Design with LightCMS
@media (min-width: 768px) {
  text-align: left;
  float: left;
  margin: 0 0 20px;
  font-size: 1.2em !important;
  width: 90%;
}
```


 Una Kravets wrote

## Web Image Effects Performance Showdown

 CSS
  Responsive Images
  SVG

APRIL 20, 2016 – In this post, we'll take a look at one of the most popular image effects, grayscale, and assess both the ease of implementation and performance implications of HTML canvas, SVG, CSS filters, and CSS blend modes. Which one will win?

Filters on the web work like a lens laid over an image. They are applied to the image [after the browser renders](#) layout and initial paint. In supporting browsers, [filters can be applied individually or layered](#) on top of one another. Because they can be applied as image modifications after the initial render, and are likely an enhancement, filters gracefully degrade by merely not being visible in browsers which do not support them.

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### CSS Filters Link [↗](#)

Let's get started with the most straightforward method for producing a grayscale effect: the humble, yet powerful CSS filter.


 Unfiltered image.


 Cosima Mielke wrote

## Delightful Bits Of Vintage Graphic Design Inspiration



**innish design is an endless source** of inspiration. Seeing how fellow designers tackled their job decades ago, with a limited set of tools, and how timeless, even classic, some of the pieces are still today, is fascinating. With this Quick Tip, we want to leave behind current trends and indulge in the aesthetic of past times. We'll dive into wanderlust-awaking travel posters, design manuals that wrote history, and, last but not least, we'll bridge the gap to today by looking at how a mid-century design movement still influences designers. Buckle up... and off we are to a journey through pre-Photoshop, pre-Sketch and -Illustrator times!

ADVERTISEMENT

```
width: 100%;
line-height: 1.2em;
font-size: 1.2em;
padding-right: 20px;

@ (
  color: #000 !important;
  display: inline-block;
)
White Label Your Web
Design with LightCMS
@media (min-width: 768px) {
  text-align: left;
  float: left;
  margin: 0 0 20px;
  font-size: 1.2em !important;
  width: 90%;
}
```

APRIL 20, 2016 – With the rise of passenger air travel, the world grew closer together. Once distant, unreachable places were suddenly within reach. And what could tell the story of excitement and adventure better than vibrant travel posters of the time?

In retrospect, our idea of the early days of travel are shaped by these posters. Depictions of exotic countries, famous landmarks, smiling flight attendants, [happy passengers and proud pilots](#) – that's what traveling dreams were made of. But apart from these common stereotypes, there were also some timeless graphic design gems that are bound to fuel our ideas, and, well, wanderlust too, still today.

You're up for some gold mining? Then Yulia Yudinseva's immense collection of vintage airline posters is for you. The Travel Gear Reviews also showcases 100 vintage travel posters, not only flying-themed. And Galerie 123 (un deux trois) and Tamar Heller's Pinterest board are rich sources for eye-candy, too.

### Designing Wanderlust [↗](#)

The NASA Graphics Standards Manual from 1975 is another classic. It describes the radical, often-criticized but later award-winning design that shaped the NASA's appearance until 1992. Designed by [Richard Danne](#) and [Bruce Blackburn](#), the graphics manual evolved for one decade until it finally reached an impressive 90 pages covering every aspect of the space

administration – from office forms to satellite markings. The core piece is the logotype that became widely known as the “worm” because of its one-width, continuous stroke letters.

To dive deeper into the NASA universe, check out the high-resolution scans that Jesse Reed and Hamish Smyth provide of each page of the graphics manual. Stunning.

Few designs gain as much attention as the ones that give the Olympic Games a new face every four years. One of the most memorable designs is certainly Georges Huel's and Pierre-Yves Pelletier's concept for the 1976 Montreal Olympics. Luckily for us, Antonio Carusone's gallery on Flickr lets us indulge in its minimalistic and timeless beauty still today.

The core part of the Montreal design is the logo for the Games. As stated in the design manual, it represents the letter “M” for Montreal which doubles as a crown to represent victory (the three arches above the Olympic rings), the running track, and, of course, [the Olympic rings](#). Apart from standards on using and constructing the symbol and how to combine it with the official logotype from the Univers family, the manual (a graphics manual is obligatory for the Olympics since the 1964 Tokyo Games, by the way) also defines acceptable and unacceptable uses of color and grids for positioning. If you're up for more Olympic design inspiration, Olympic Design features sneak peeks into the graphic standards of nearly all Games since 1964.



 **Una Kravets** wrote

## Web Image Effects Performance Showdown



**s browsers constantly improve** their graphical rendering abilities, the ability to truly design within them is becoming more of a reality. A few lines of code can now have quick and dramatic visual impact, and

allow for consistency without a lot of effort. And as with most things in web development, there are often many ways to achieve the same effect.

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### CSS Filters Link [↗](#)

Let's get started with the most straightforward method for producing a grayscale effect: the humble, yet powerful CSS filter.



Unfiltered image

To achieve this effect, we add a single line of CSS: `filter: grayscale(1)`. This filter desaturates the image and can be used with any numeric or percentage-based value between 0 and 1 (or 0% to 100%). Note: currently, filters for WebKit-based browsers must be prefixed with `-webkit-`. However, a solution such as [Autoprefixer](#) would eliminate the need to add them by hand.

### LIVE DEMO — CSS FILTER [↗](#)



```
.cssfilter-gray {
  -webkit-filter: grayscale(1);
  background: url('img/bird.jpg');
  filter: grayscale(1);
}
```

### Background Blend Mode Link

CSS blend modes provide an endless variety of options for image effect combinations. There are two ways to use blend modes: the `mix-blend-mode` property and the `background-blend-mode` property.

- `mix-blend-mode` is the property which describes how the element will blend with the content behind it.
- `background-blend-mode` is used for elements with multiple backgrounds, and describes the relationship between these backgrounds.

We'll use the `background-blend-mode: luminosity` to pull luminosity channels over a gray background in our example, resulting in a grayscale image. One thing to note is that background order is constant: **background images must always be ordered before solid colors or gradient backgrounds for effects to render properly**. [Color must be the last background layer](#). This is also a safeguard against older browsers which do not support `background-blend-mode` — the image will still render without the effect.

### Smashing Job Board

**User Experience Designer (f/m) - blogfoster GmbH - (Berlin, Germany) - FullTime**  
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**Una Kravets** is a UI Engineer at [DigitalOcean](#). She writes technical articles around the web and on her website [una.im](#), is a SASS community organizer, and cohosts the [Toolsday](#) podcast. Una frequently contributes to the open source community, being a core member of the [Open Design Foundation](#) and creator of [CSSgram](#).

APRIL 20, 2016

## Web Image Effects Performance Showdown

[# CSS](#) [# Responsive Images](#) [# SVG](#)

**It's not that robots are useless. They're** great at repetitive tasks, perfect for finding data and remembering anything you've ever written down. As sidekicks, robots can help offer more personalized support, doing the tedious parts of support so that you can focus on actually solving problems. You just have to give them the right job.

Here's how to find the perfect job for your robots, so that you can automate support *and* offer more personalized, hands-on support at the same time. We speak from our experience of working at Zapier, a little tool we built to make it easy to automate tasks between web apps.

### Sensible Automation [↗](#)

Customer support, at its simplest, is easy. Answer questions, solve problems and make people happy — that's all there is to it.

It's not that answering questions and solving problems is so hard. It's that there are so many questions to answer and so many problems to solve; so, getting to the end of the queue is hard. If you have to look up customer data and figure out how to fix each problem by hand, you'll never have time to answer everyone.

That's why it's so easy to turn to basic automation for the appearance of faster customer support. If you annoy customers with delays, maybe they'll give up and not ask you their question. At least that's one less thing to answer, right?

Yet, that's exactly the opposite of what support should be. You should value each question, because it's the perfect opportunity to give a personal face to your company and to make your customer's day better. What better way to make sure people tell others about your product than to make sure they love it?

Sensible automation helps you do just that. Leverage robots for their ideal jobs, and let them find data, diagnose problems and answer the simplest questions automatically. Then, you'll have more time to add a personal touch to the rest of your emails.

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# Web Image Effects Performance Showdown

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APRIL 20, 2016 ■ [3 COMMENTS](#)

# Web Image Effects Performance Showdown

[#CSS](#) <sup>25</sup> [#Responsive Images](#) <sup>61</sup> [#SVG](#) <sup>13</sup>

*As browsers constantly improve their graphical rendering abilities, the ability to truly design within them is becoming more of a reality. A few lines of code can now have quick and dramatic visual impact, and allow for consistency without a lot of effort. And as with most things in web development, there are often many ways to achieve the same effect.*

#### ADVERTISEMENT

```
width: 60px;
line-height: 80px;
font-size: 80px !important;
padding-right: 20px;

a {
  color: #000 !important;
  display: inline-block;
  vertical-align: middle;
  text-decoration: none;
}
```

[White Label Your Web](#)

# Good choice, Tiger!

You're going for the **Smashing** membership for \$9 per month. You really know how to make a cat happy, don't you?

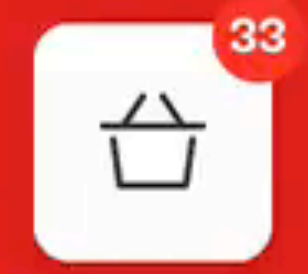


First name  
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Last name  
Ilya

Your country  
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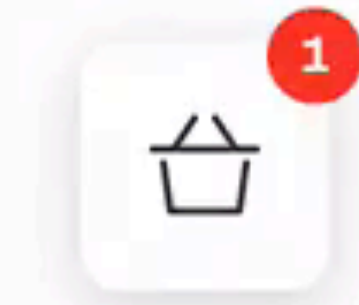
I don't even like cats. I'm a dog person!



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Smashing Redesign — Smashir x Vitaly

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on Smashing**

 **Vitaly Friedman wrote** — 2 MONTHS AGO

**A Little Surprise Is Waiting For You Here — Meet The Next Smashing Magazine**


101 comments

# Smashing Magazine <sup>1</sup> # Redesign <sup>6</sup>

 **Anastasia Shevchuk wrote** — 3 MONTHS AGO

**The Art Of Calligraphy: Getting Started And Lessons Learned** 8 comments

# Inspiration <sup>469</sup> # Typography <sup>121</sup> # Fonts <sup>95</sup>



**Focus.**

Boooo-yah! You've landed on an (unfinished) open Beta of the next SmashingMag. Something looks weird? [Report a bug on GitHub](#) or [via email](#) (Also: beware of cats.)

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Heydon Pickering wrote ABOUT 2 MONTHS AGO

## Building Pattern Libraries With Shadow DOM in Markdown

No comments yet



Ilya Birman wrote ABOUT 2 MONTHS AGO

## Things to Keep In Mind when Designing A Transportation Map

No comments yet

00:00 ————— -01:54

Audio player controls including volume, play/pause, and progress indicators.



# Conference page adjustments #962

Edit

Merged

vitalyfriedman merged 18 commits into master from membership-adj 7 days ago

Conversation 1

Commits 18

Files changed 15

+222 -43



vitalyfriedman commented 7 days ago



Minor type adjustments for speakers and talks, including the accordion and schedule.



vitalyfriedman added some commits 7 days ago

- More cat illustrations f82a2f4
- Cat with dog outfit adjustments 31b4a9e
- Minor adjustment for the conference page 7ebf2ed
- Conference selector adjusted 99d4fbe
- Adding new cat illustrations ef33d01
- Adjusted the design for the titles 1302444
- Adjusted the styling for talk titles a792f19
- Horizontal lines for .meow-content ff88b64
- Adjusted the position of show/hide ae241ef
- Hidden another cat in the print stylesheet 49cbcd7
- Wording adjustments + CTA adjustments 1bf5915

Reviewers



pukhalski



Assignees



vitalyfriedman

Labels



enhancement

Projects



Front-end issues (awaiting triage)

Milestone



Magazine

## Design Systems

As the web continues to become more complex, designing static pages has become untenable, so that many of us have started to approach design in a more systematic way. In this book, Alla Kholmatova sets out to identify what makes an effective design system that can empower teams to create great digital products.

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Added by Ricardo G. on Aug 16 · 29 KB

12 comments

Label...



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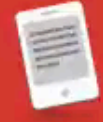
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# Hello, Ilya!

It's refreshing to be in a situation where the spotlight is on someone else.  
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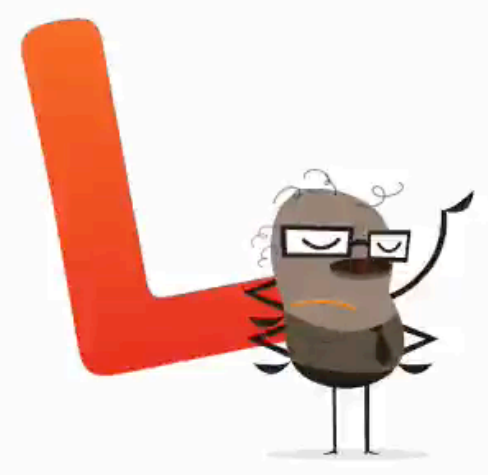


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**ABOUT THE AUTHOR**

Rachel Andrew is a web developer, writer and speaker and one of the people behind the content management system, Perch. She is the author of a number of books ... [More about Rachel...](#)



**Layout on the web is hard.** The reason it is so hard is that the layout methods we've relied on ever since using CSS for

layout became possible were not really designed for complex layout. While we were able to achieve quite a lot in a fixed-width world with hacks such as faux columns, these methods fell apart with responsive design

NOVEMBER 8, 2016 • [22 COMMENTS](#)

# The New Layout Standard For The Web: CSS Grid, Flexbox And Box Alignment

# [CSS](#) <sup>227</sup> # [Flexbox](#) <sup>12</sup> # [CSS Grid](#) <sup>4</sup>



Smashing Redesign — Smashir x


localhost:3000

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`h2.featured-👉👑` | 529.22 x 168

# Building Pattern Libraries With Shadow DOM In Markdown

[Leave a comment](#)

# Coding <sup>26</sup> # Style Guides <sup>2</sup> # Pattern Libraries <sup>4</sup>

Developer Tools - http://localhost:3000/

Sources Elements Console Network

123 3

```

<header class="article_👉">
  <ul class="article_meta">...</ul>
  <h1>Building Pattern Libraries With Shadow DOM In Markdown</h1>
  <div class="article_👑" role="group" aria-label="article tags">
    <li class="article_👑">
      <a href="/category/coding">Coding</a>
      <span class="article_👑_1234">...</span>
    </li>
    <h2 class="featured_👉👑" == $0
      <a href="/category/style-guides">Building Patte
      Library With Shadow DOM In Markdown</a>
      <span class="article_👑_1234">...</span>
    </h2>
    <h2 class="featured_👉👑"></h2>
    <a href="/category/pattern-libraries">Pattern
    Libraries</a>
  </div>
</header>

```

html body #main article div div div header div **h2.featured\_👉**

Styles Event Listeners DOM Breakpoints Properties

Filter `:hov .cls` +

position	0
margin	-
border	-

element.style {  
}  
}

New Audits panel, powered by Lighthouse  
Find out whether your site qualifies as a Progressive

Developer Tools - http://localhost:3000/

Sources Elements Console >> 20 3

```
▶ <nav class="main-nav closed slideUp" id="main-nav">...</nav>
  ::after
</div>
...
▼ <a href="#menu" class="🍔" id="🍔-button" aria-controls="main-nav"> == $0
  ▶ <svg viewBox="0 0 24 24" height=".8em" width=".8em">...</svg>
    " Menu"
  </a>
  ▶ <div class="search-topics-dropdown container--header closed" id="header-dropdown">...</div>
  ::after
</div>
```

html body header div div.header\_\_head a#🍔-button.🍔

Styles Computed Event Listeners DOM Breakpoints Properties

Filter :hov .cls +

```
element.style {
}
🍔 {
  text-decoration: ▶ none;
  padding: ▶ 10px 0;
  background-image: linear-gradient(currentColor, currentColor);
  background-repeat: ▶ no-repeat;
}
```

main.css:1503

**1**  
Design

**2**  
Front-End

**3**  
Back-End

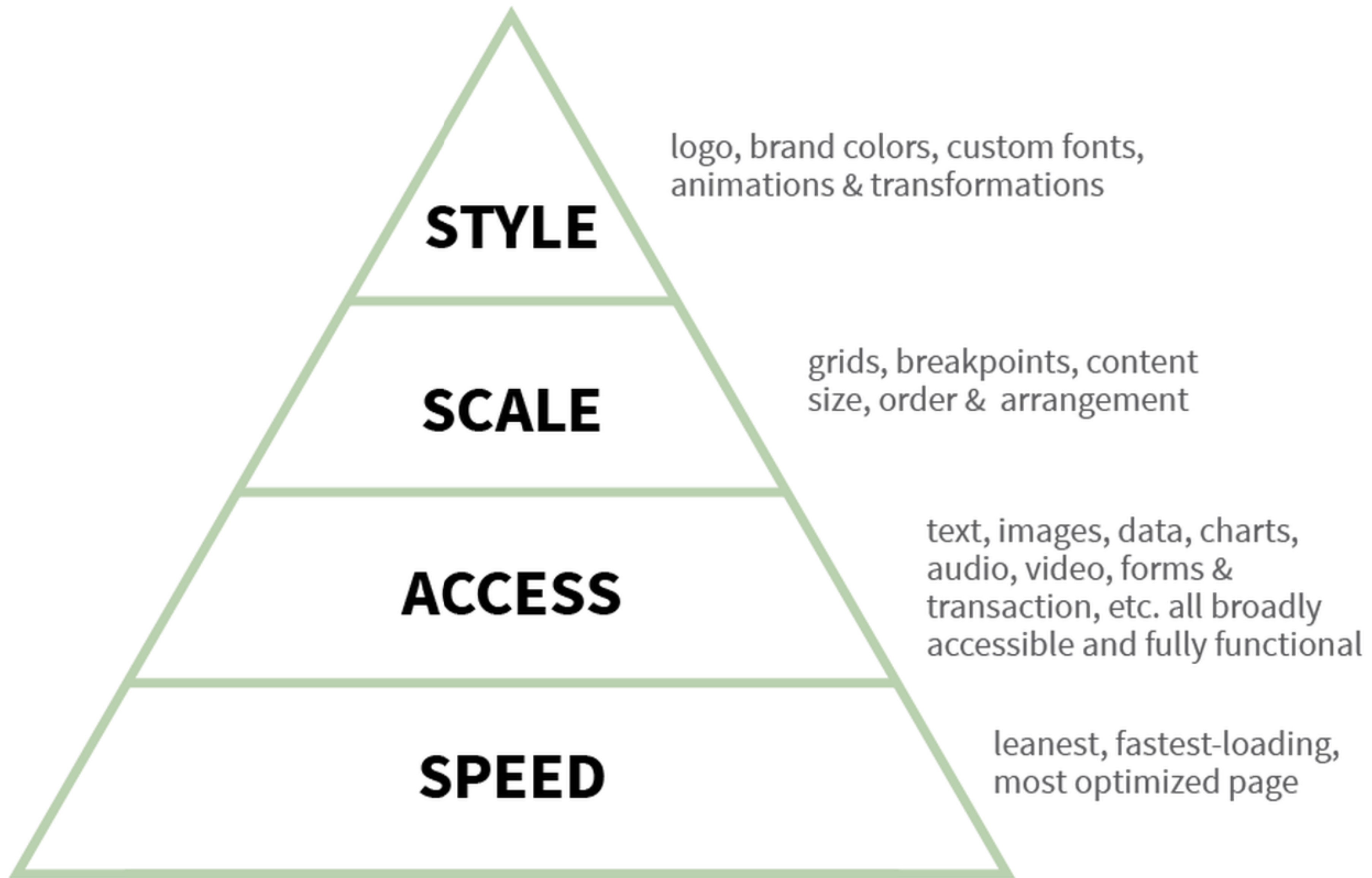
**4**  
To-Dos

2

Front-End

# Browsers (Dec 2015)

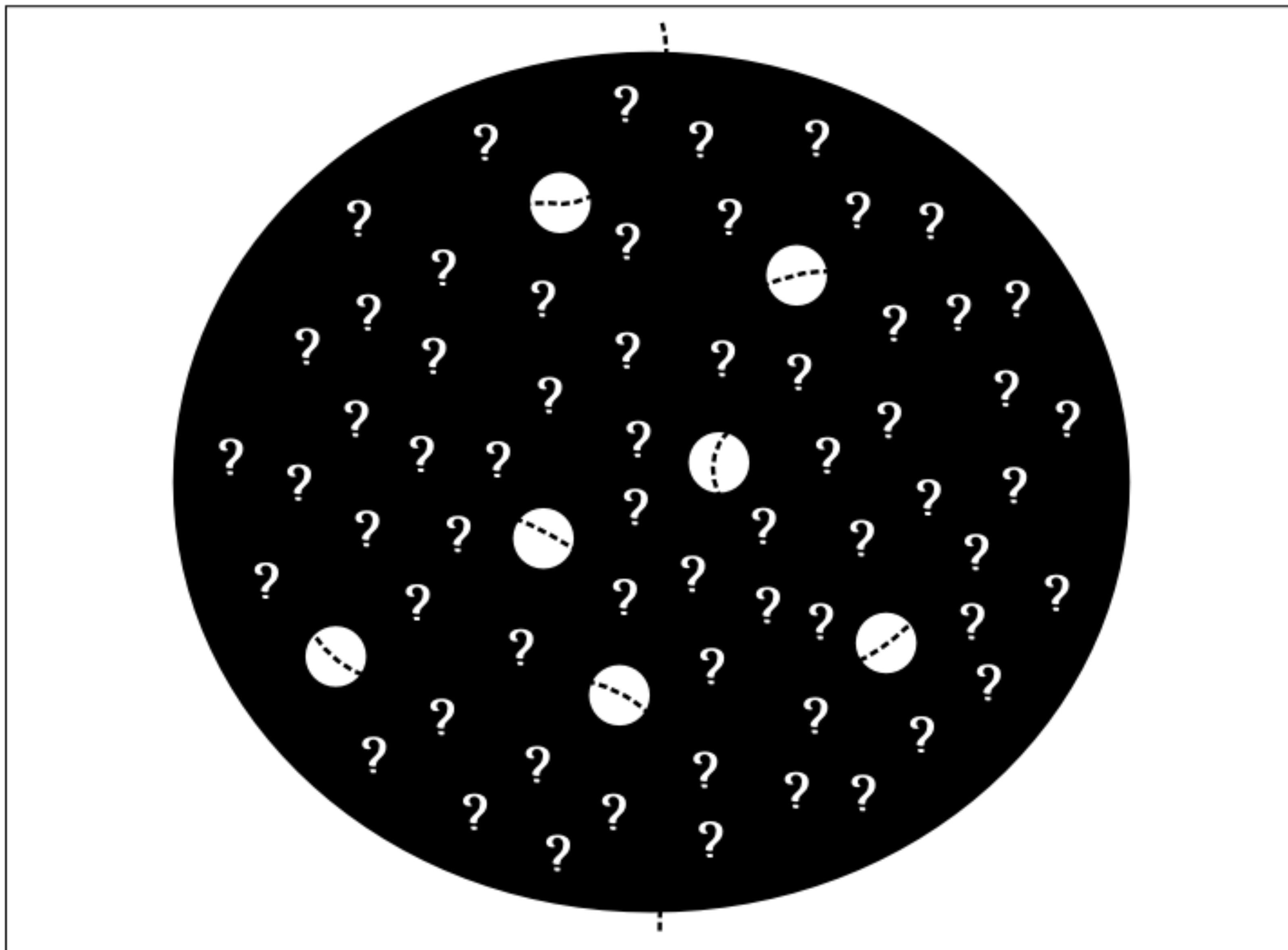
Chrome	56.7%	IE11	1.8%
Firefox	12.5%	IE10	0.2%
Safari	7.4%	IE8	0.0254%
Edge	1.2%	IE666	1 person
Safari Mob	7.5%		
Chrome Mob	9%	Mobile	19.5%



~~Frameworks.~~



# How I feel using frameworks





**Smashing Magazine** ✓

@smashingmag



# Are you using jQuery in production these days?

**39%** Yes, absolutely!

**23%** Yes, sometimes.

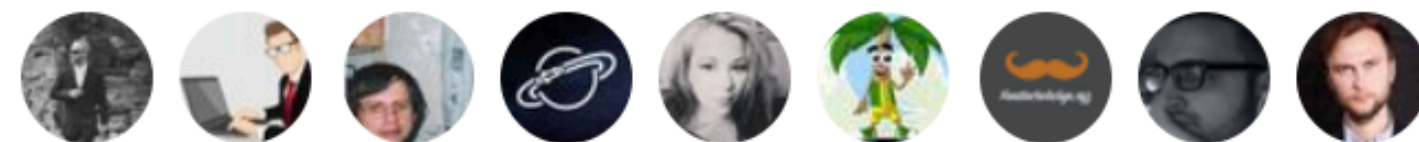
**11%** Yes, but very rarely.

**27%** No, not really.

2,812 votes • 3 days left

12:02 AM - 16 Sep 2017

**22** Retweets **23** Likes



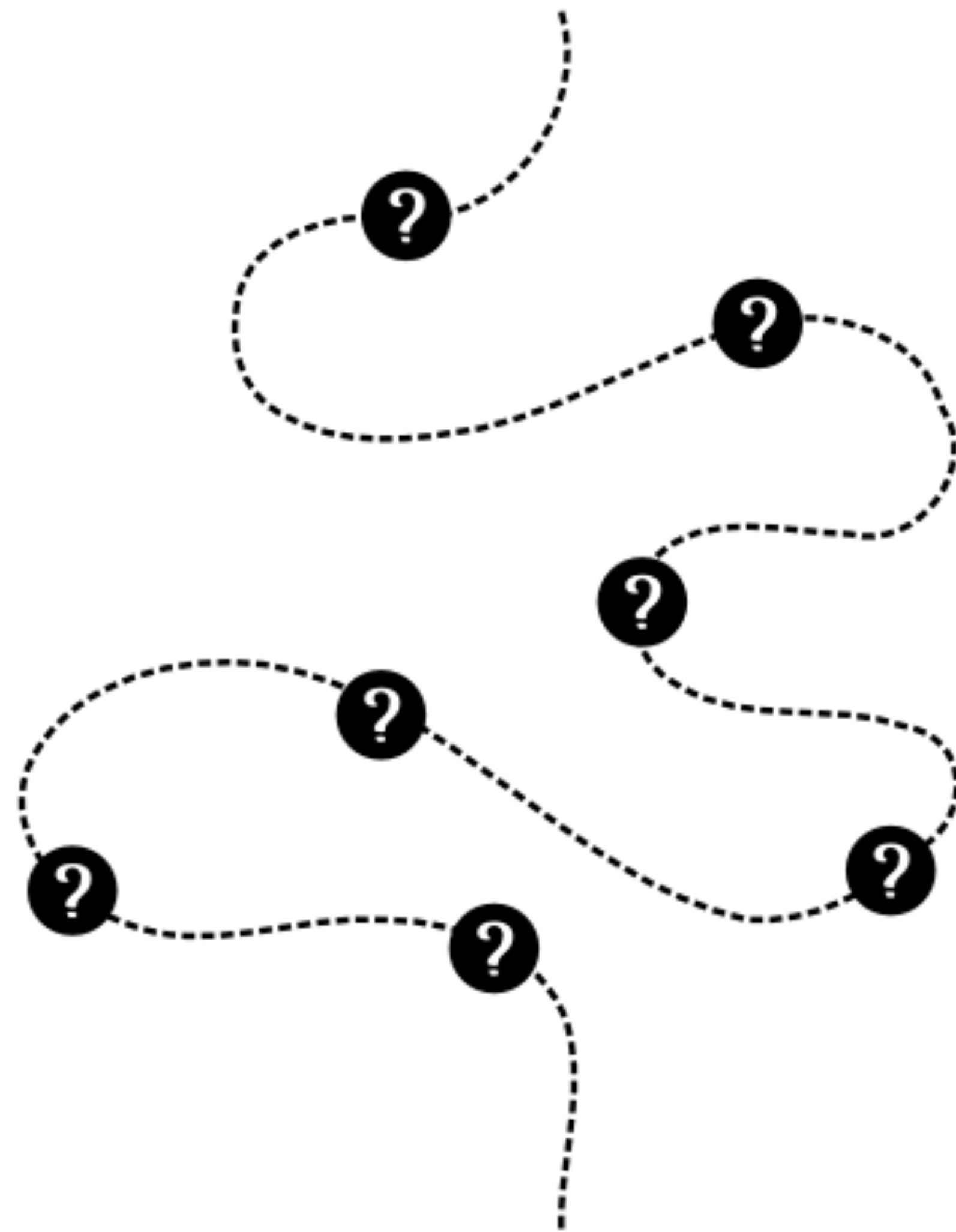
13

22

23



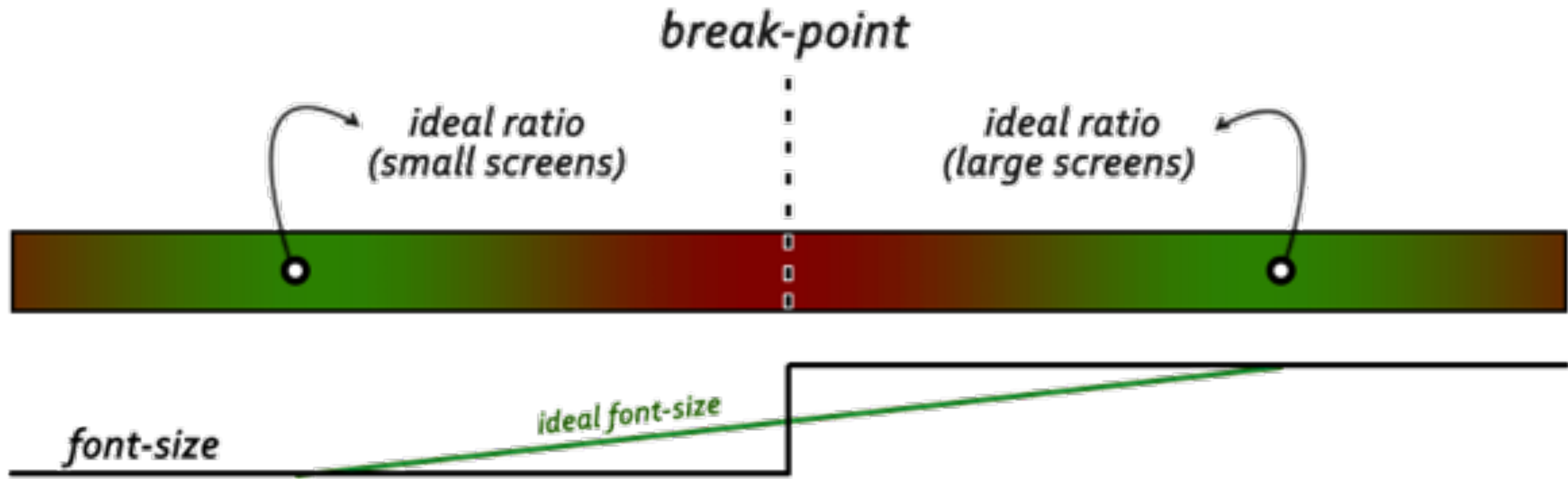
# How I feel using libraries

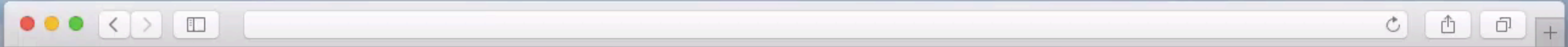






~~Media queries.~~





» **Web Directions**

**Events:** Transform **Respond** Code Direction **Publications:** Wrap Scroll

A Web Directions event

# Respond 2017

**Sydney**  
May 4 & 5

**Melbourne**  
May 8 & 9

**Brisbane**  
Workshop Day May 11

**Australia's Front End Design Conference, takes place in  
Sydney and Melbourne**



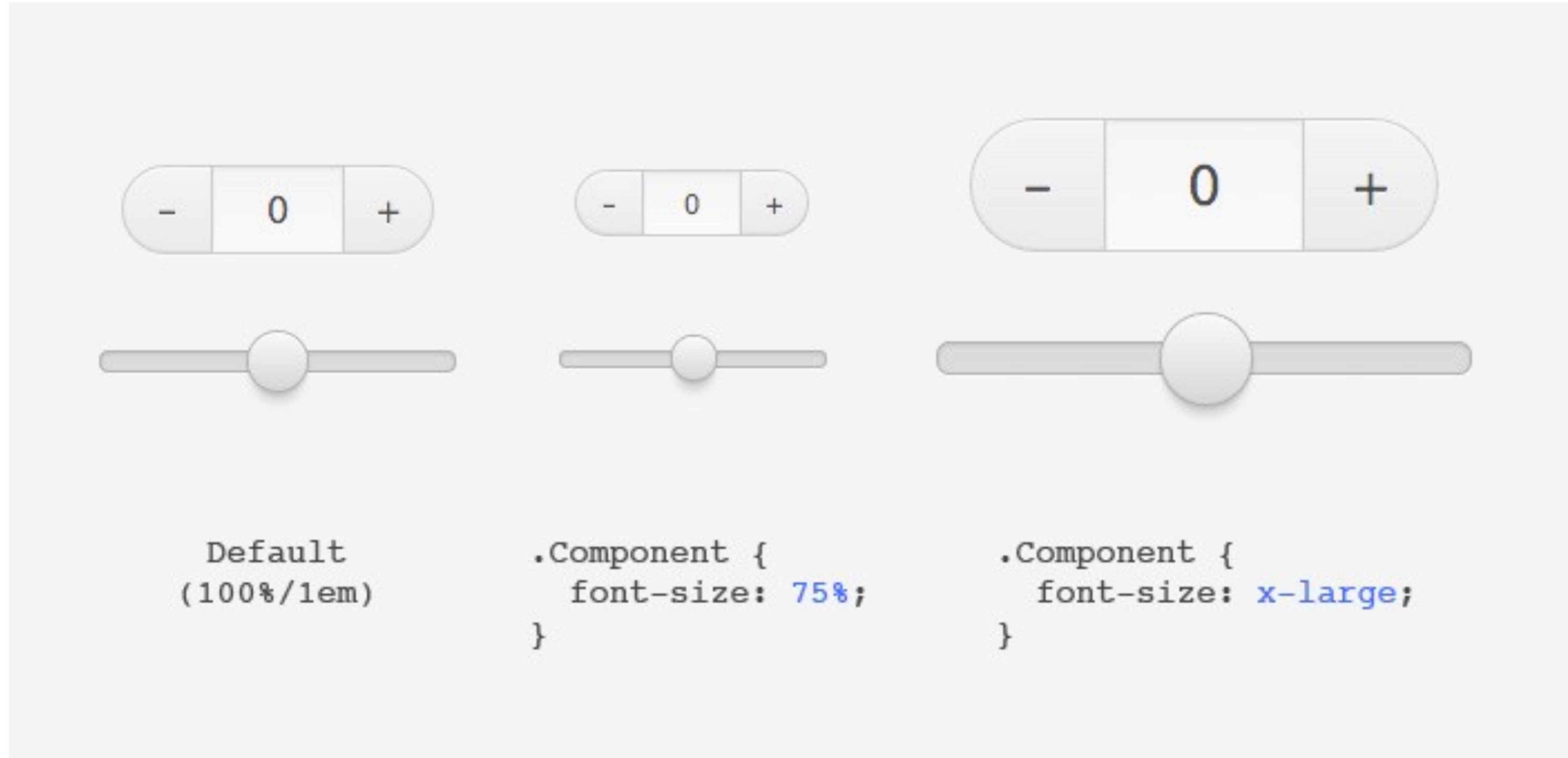
**Fluid Sizing.**

“ How do you *efficiently* scale up / down any UI component (e.g. a slider or calendar) and keep all the proportions intact—without fiddling with width, height or border-radius manually?

— @simurai


“ By sneaking a *Trojan horse* into your components. We use *rem* for components “root” and *em* for sub-parts of the components. Then, by adjusting the *font-size of the root*, we adjust *all* size-related CSS properties of a component at once.

— @simurai



*Example used: Digit components*

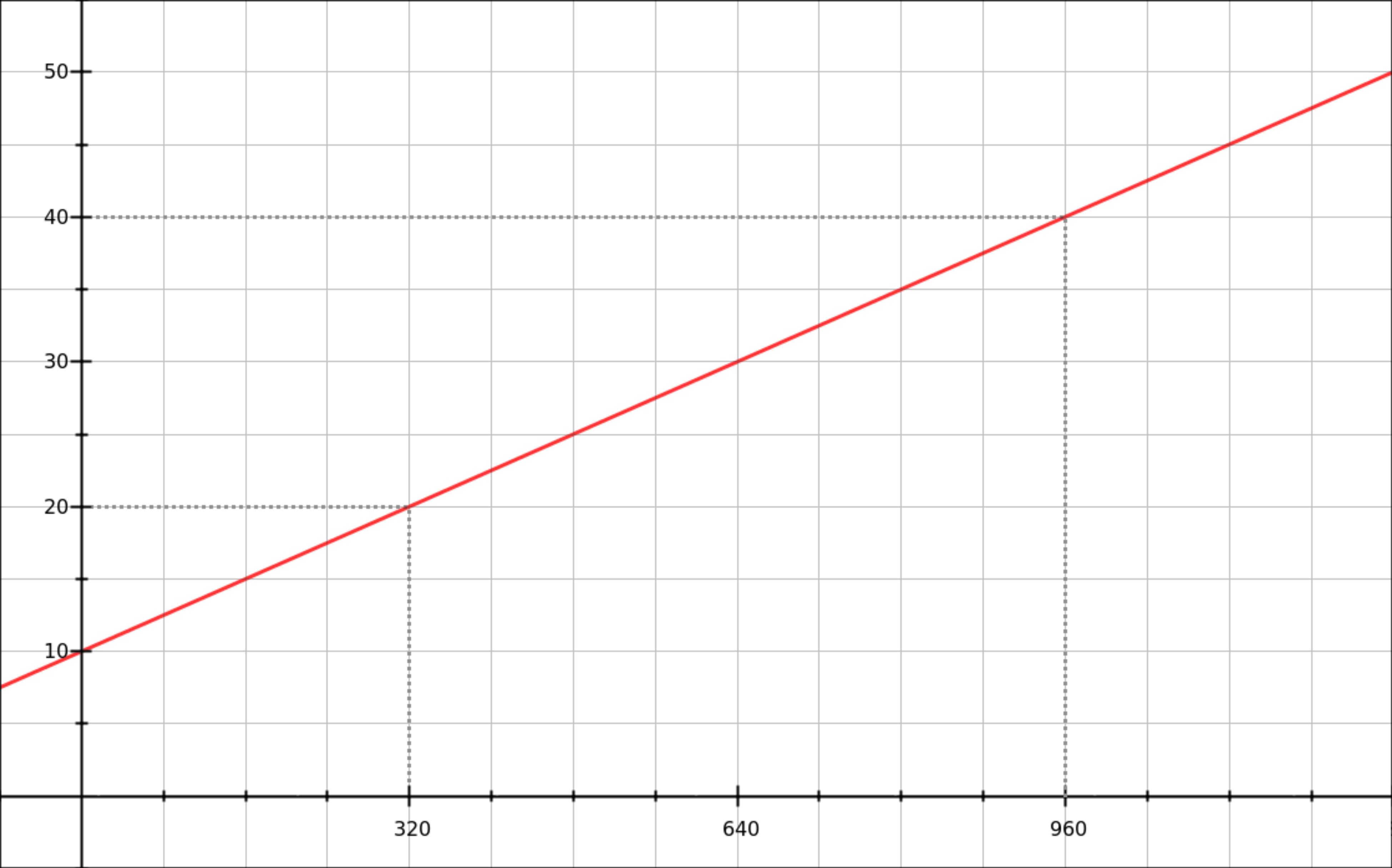


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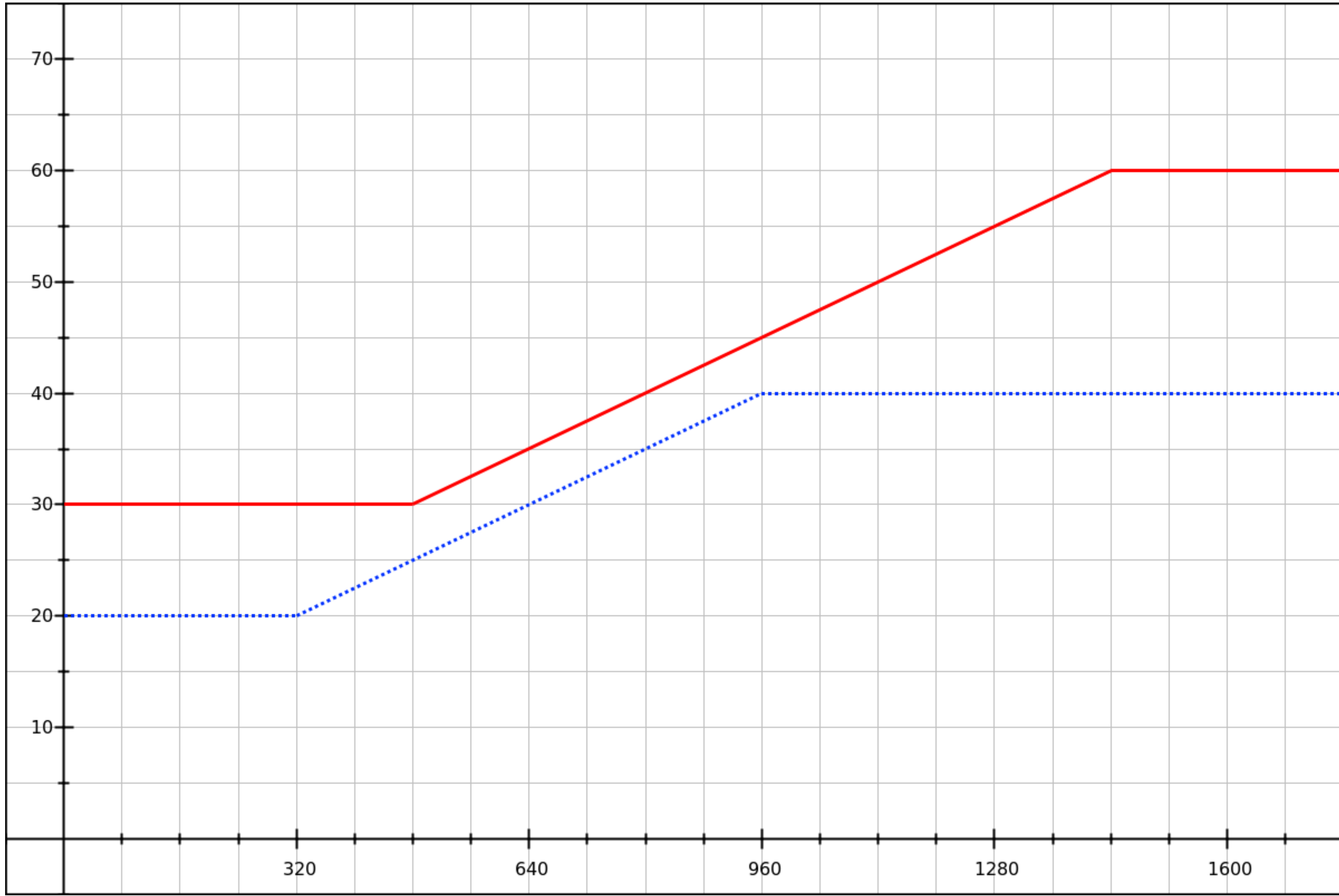


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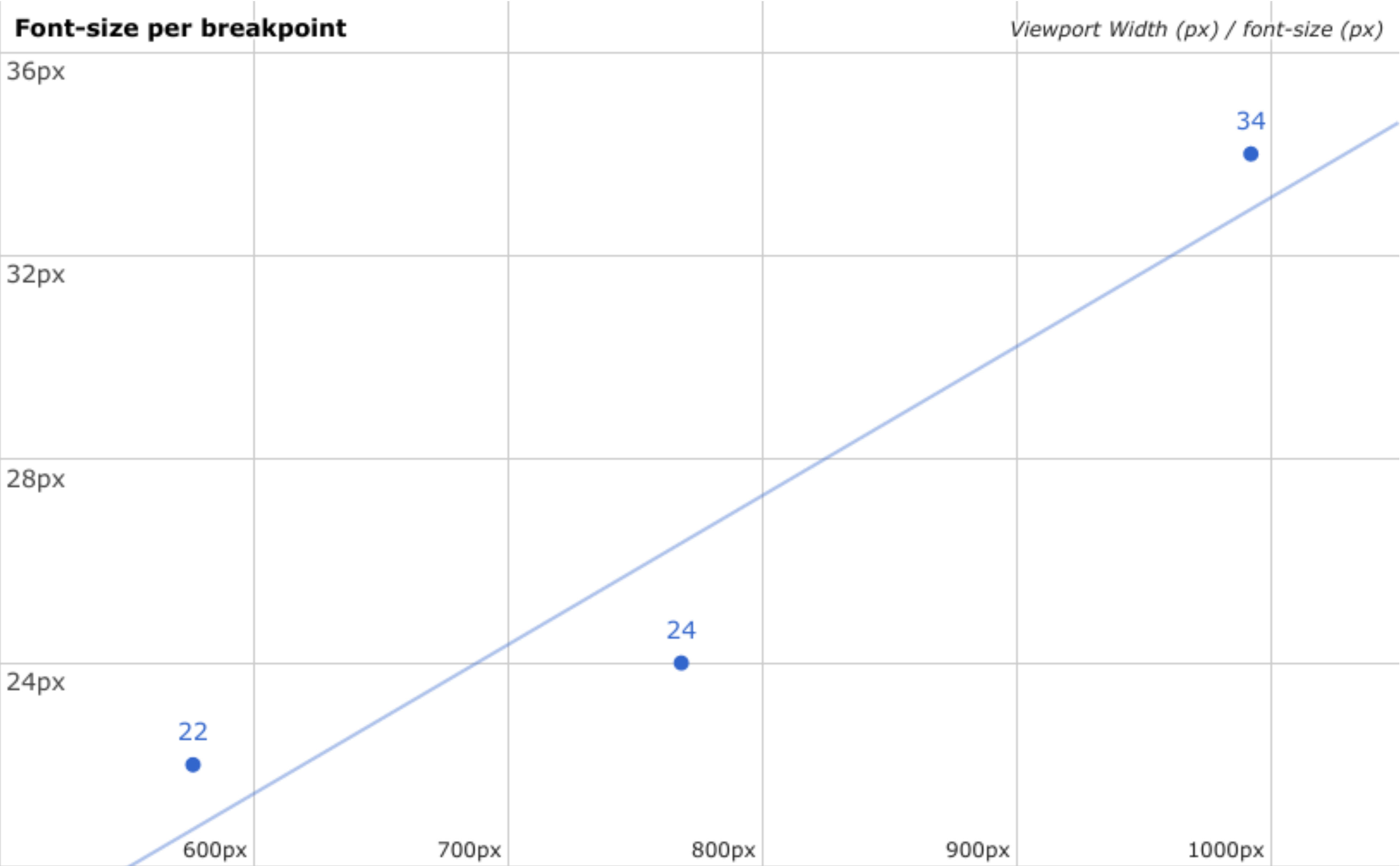
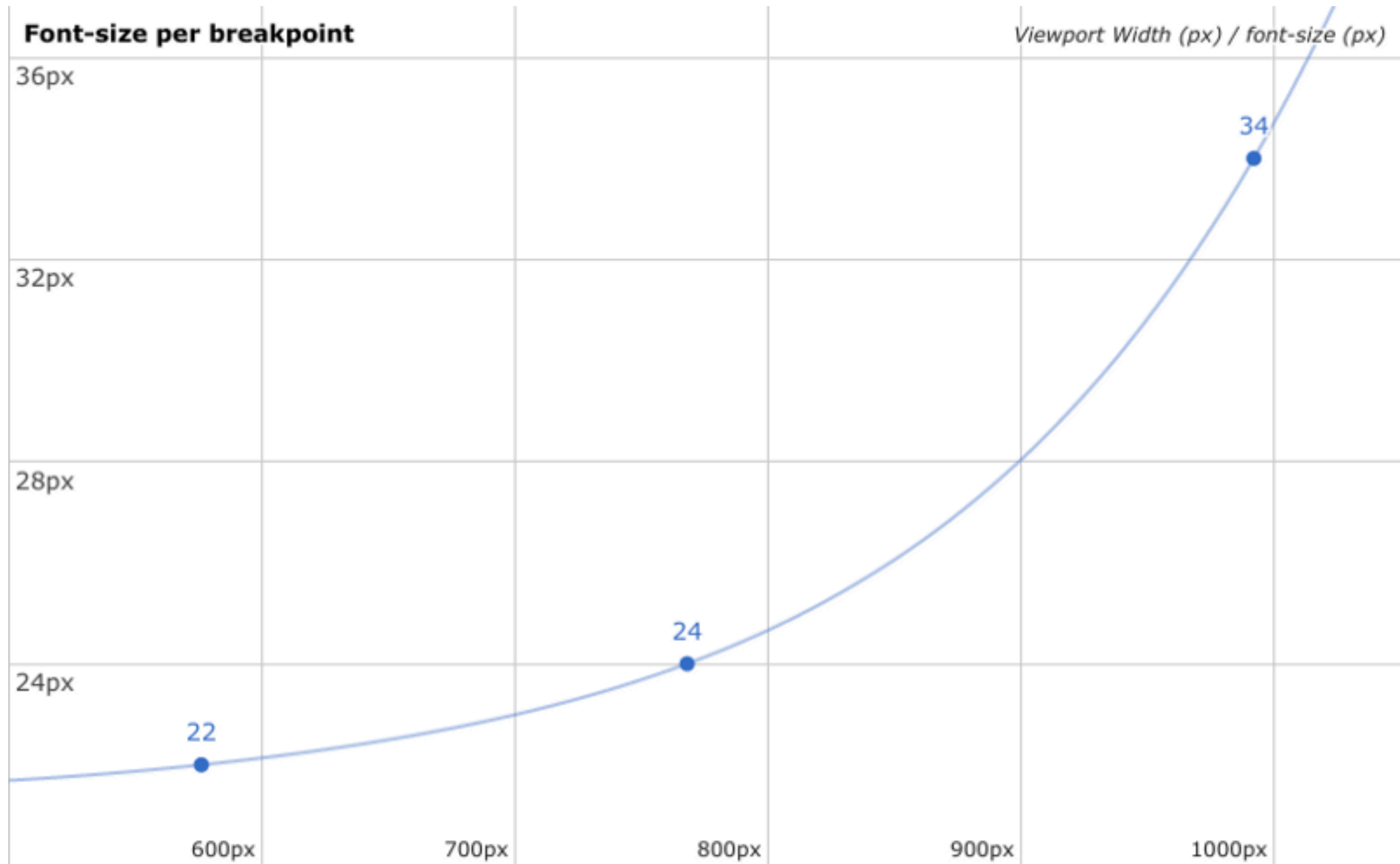


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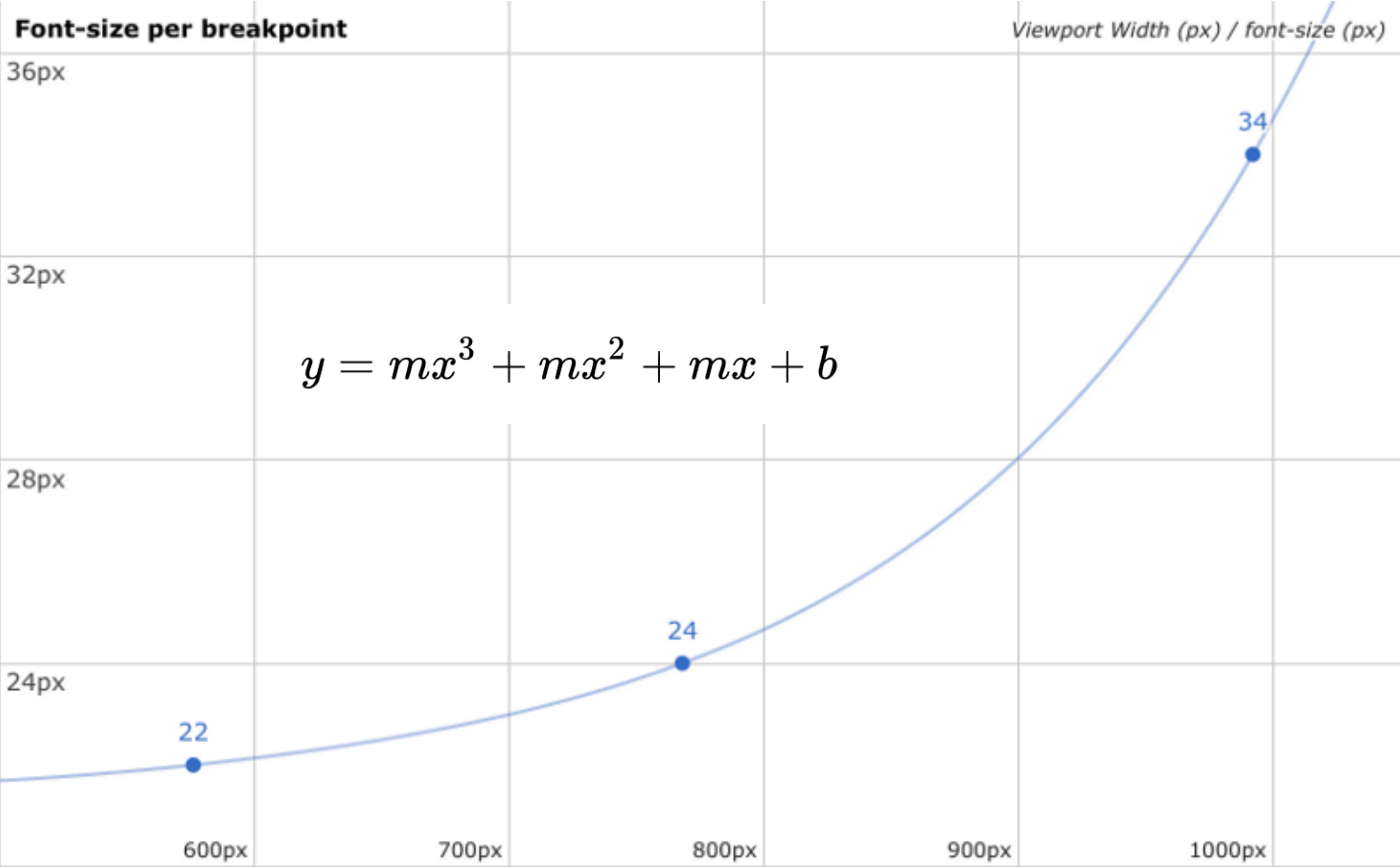


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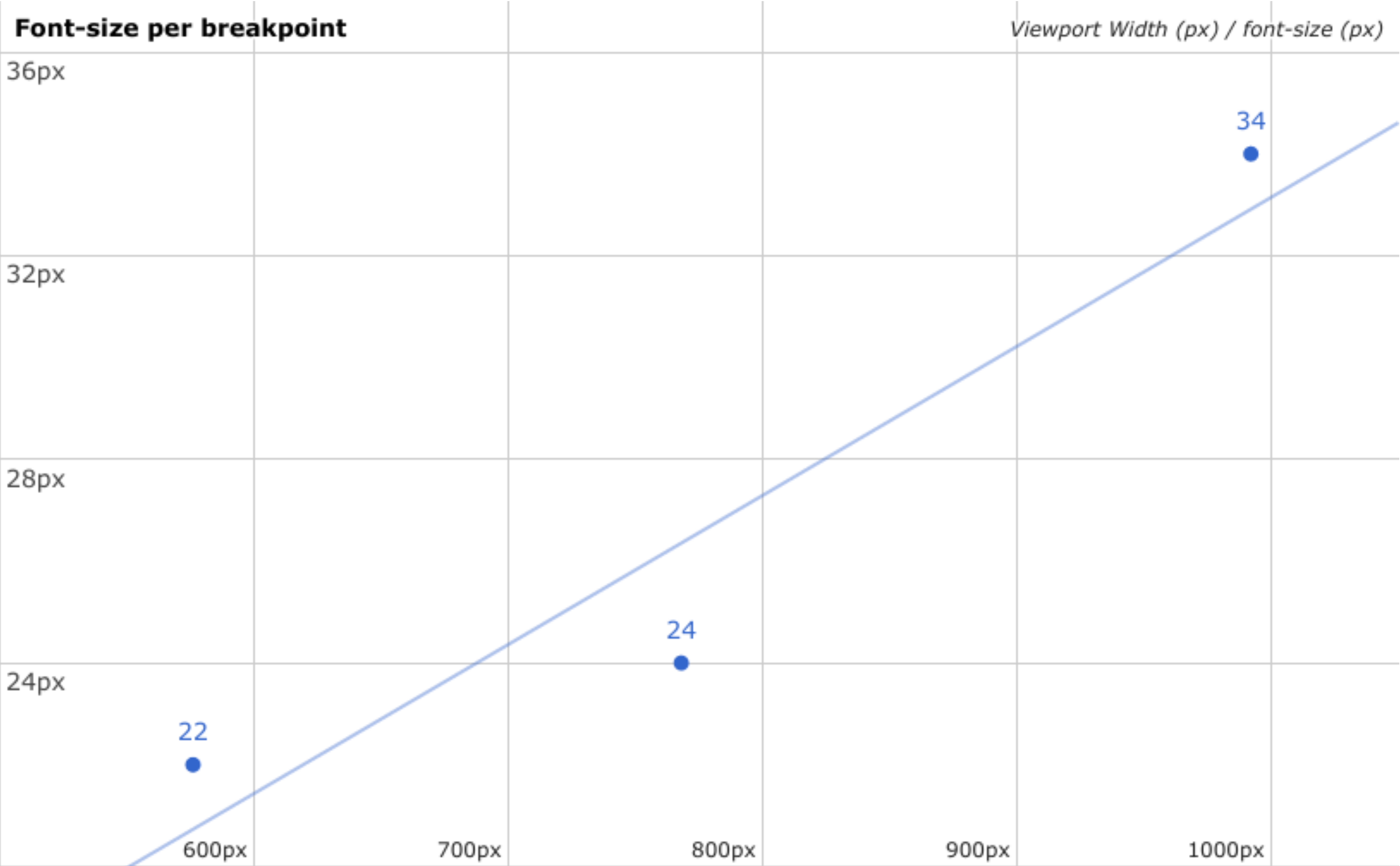
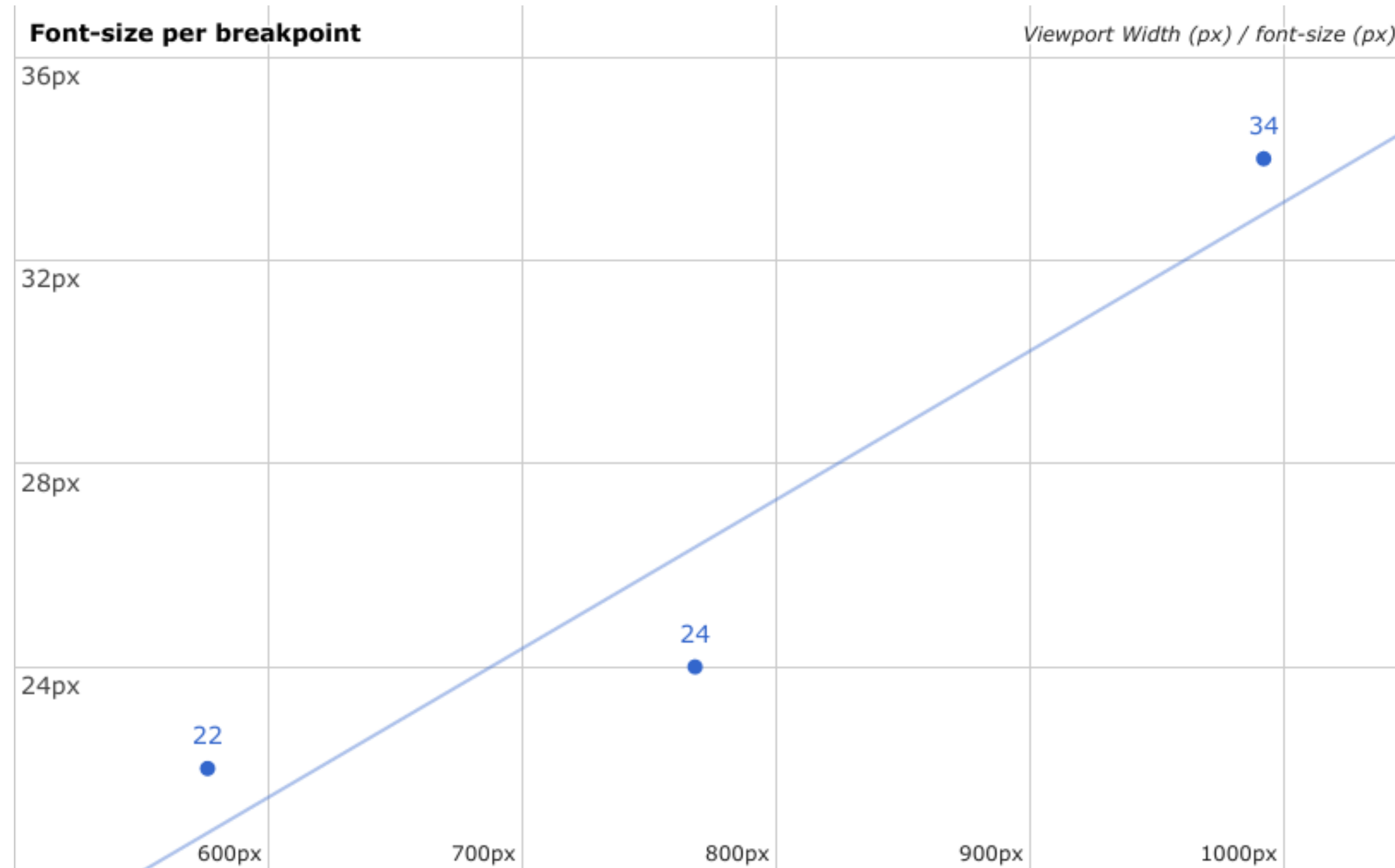


Image credit: Jake Wilson, <https://www.smashingmagazine.com/2017/05/fluid-responsive-typography-css-poly-fluid-sizing/>

$$y = mx + b$$



**m** = slope

**x** = current **viewport width**

**b** = the y-intercept

**y** = resulting **font size**

$$\begin{aligned}\bar{X} &= \frac{\sum_{i=1}^n x_i}{n} & m &= \frac{\sum_{i=1}^n (x_i - \bar{X})(y_i - \bar{Y})}{\sum_{i=1}^n (x_i - \bar{X})^2} & b &= \bar{Y} - m\bar{X} \\ \bar{Y} &= \frac{\sum_{i=1}^n y_i}{n}\end{aligned}$$

**m** = slope

**x** = current **viewport width**

**b** = the y-intercept

**y** = resulting **font size**

# Posuere magnis con

Lorem ipsum dolor sit amet, tamquam saperet partiendo no pri, quem nobis epicurei ne sed, qui in inermis pertinacia voluptaria. Officiis vulputate ne nam, an facete lobortis platonem pro. Posse deleniti no vim, agam legimus ea vix, at ullum repudiare per. Ne nam veniam euismod.

Has eu integre voluptatum eloquentiam, ut his nulla suscipit principes. Ius tacimates dissentias te, nibh accusata id sed. Eum deleniti senserit expetendis ei. Eum ex amet tacimates electram, sit an admodum expetendis cotidieque.

## Molestie rutrum

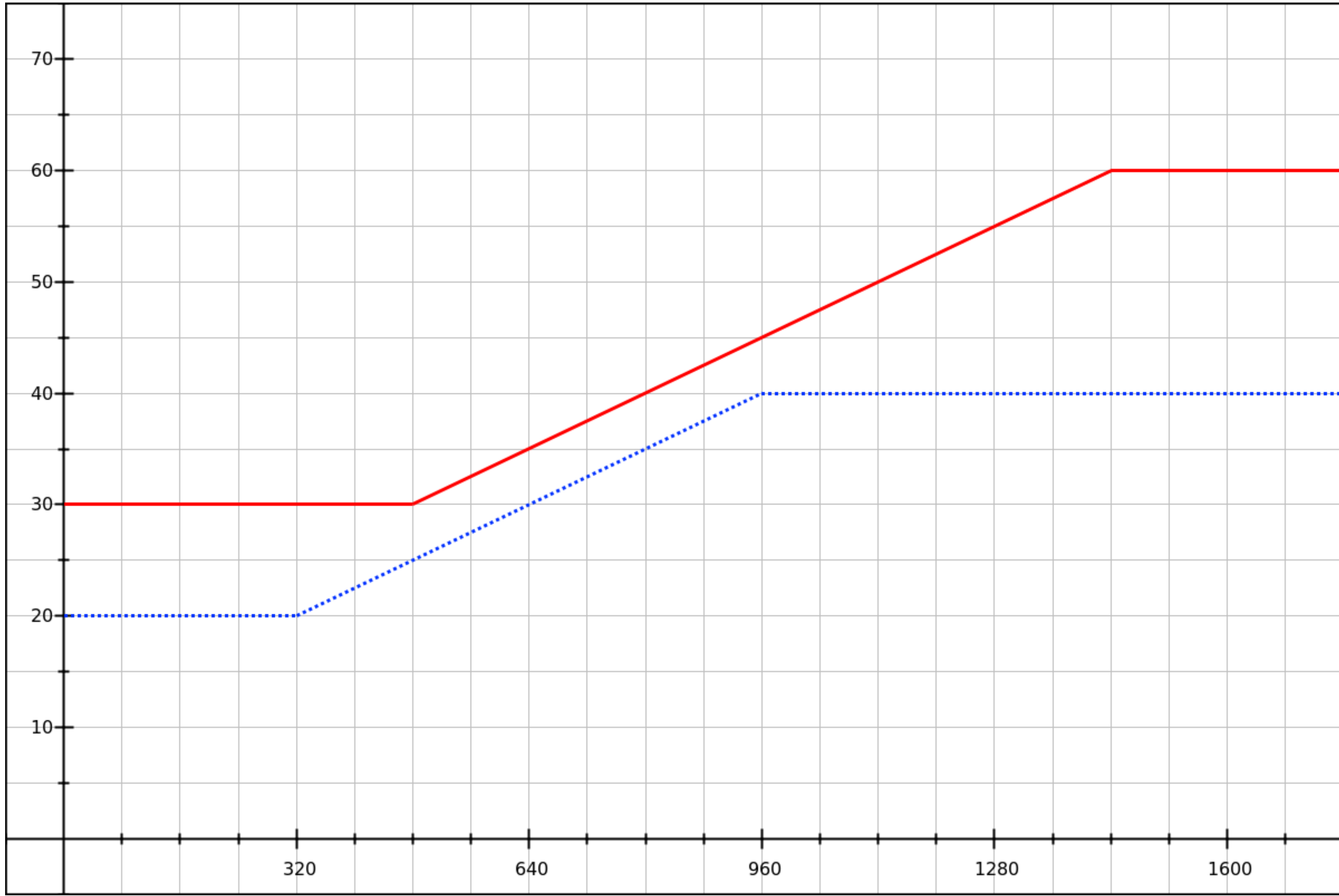


Image credit: Jake Wilson

min font size

min screen size

```
font-size: calc( 16px + (24 - 16) * (100vw - 400px) / (800 - 400) );
```

max font size - min font size

max screen size - min screen size



min font size

min screen size

```
font-size: calc( 16px + (24 - 16) * (100vw - 400px) / (800 - 400) );
```

max font size - min font size

max screen size - min screen size

You choose the *min* and *max* font-size and the *screen sizes*, over which the font should scale and plug them into the equation. You can use any unit type including ems, rems or px.

— *Mike Riethmuller*

Fluid modular scale headings

A PEN BY Mike

Fork Settings

```
HTML
1 <h1>Fluid modular
  scale
  headings</h1>
2 <p>These heading

CSS
1 $mod_1: 1.067;
2 $mod_2: 1.333;
3
4 @function strip-
```

# Fluid modular scale headings

These heading scale between a modular scale of 1.067 and 1.333. Resize the window to see the effect.

---

## Fluid modular scale

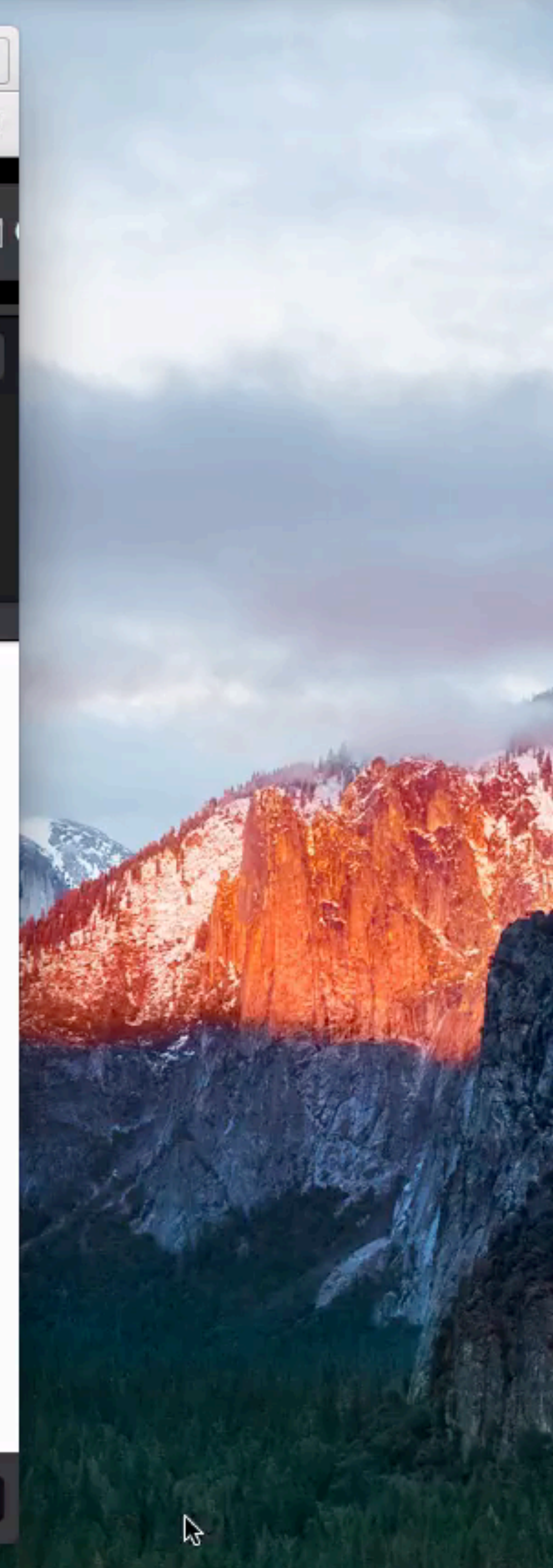
### Fluid modular scale

#### Fluid modular scale

##### Fluid modular scale

###### Fluid modular scale

Console Assets Embed Comments ☰ Share Export



## # calc() as CSS unit value - CR

Global 74.65% + 3.03% = 77.68%  
 unprefixed: 74.29% + 3.03% = 77.31%

Method of allowing calculated values for length units, i.e. width:

calc(100% - 3em)

Current aligned Usage relative Show all

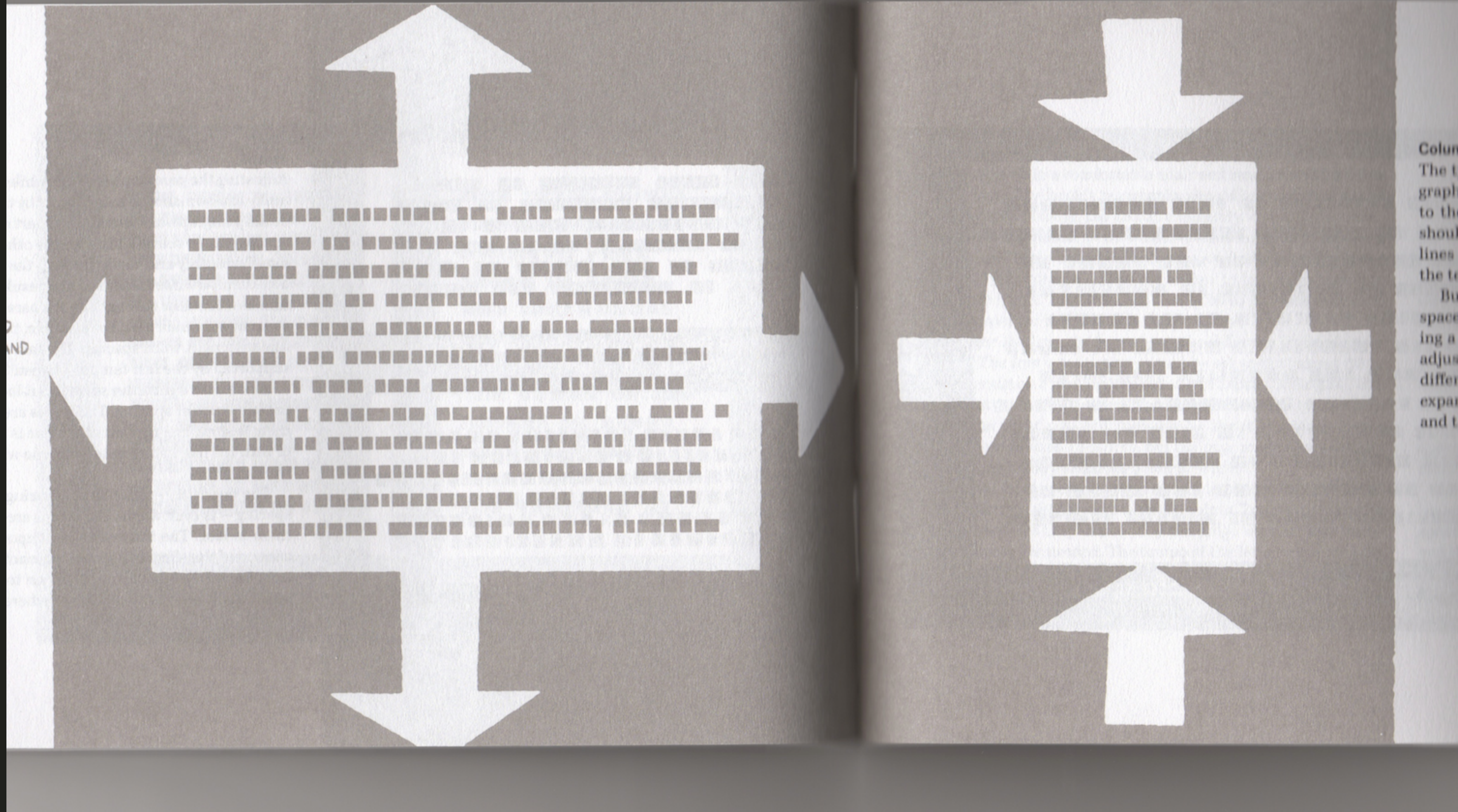
IE	Edge *	Firefox	Chrome	Safari	Opera	iOS Safari *	Opera Mini *	Android Browser *	Chrome for Android
			29						
			45						
			48					4.3	
		45	49			8.4		<sup>1</sup> 4.4	
8		46	50			9.2		<sup>1</sup> 4.4.4	
11	13	47	51	9.1	38	9.3	8	50	50
	14	48	52	10	39				
		49	53	TP	40				
		50	54						

Notes Known issues (9) Resources (6) Feedback

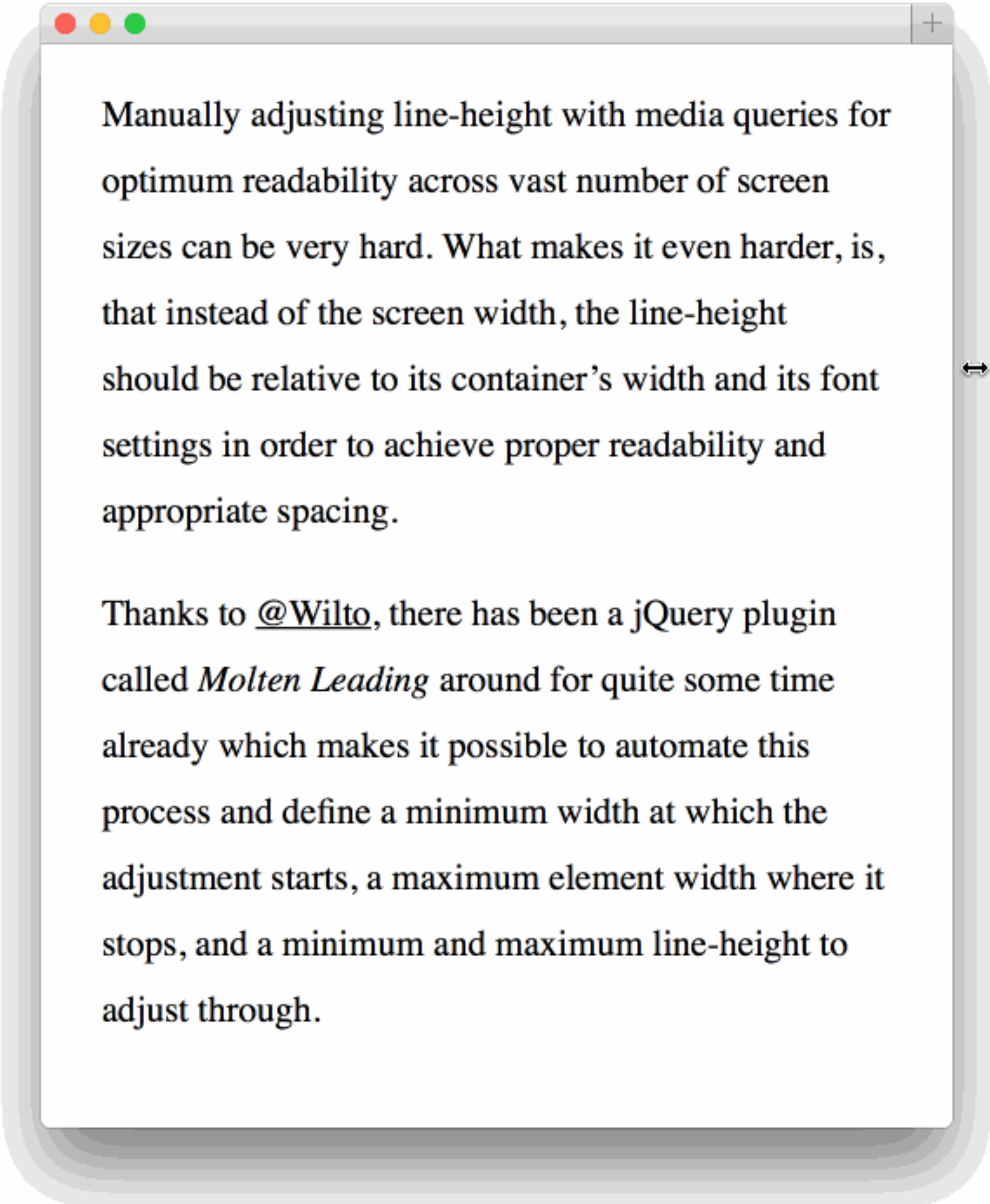
Support can be somewhat emulated in older versions of IE using the non-standard `expression()` syntax.

Due to the way browsers handle **sub-pixel rounding** differently, layouts using `calc()` expressions may have unexpected results.

<sup>1</sup> Partial support in Android Browser 4.4 refers to the browser lacking the ability to multiply and divide values.

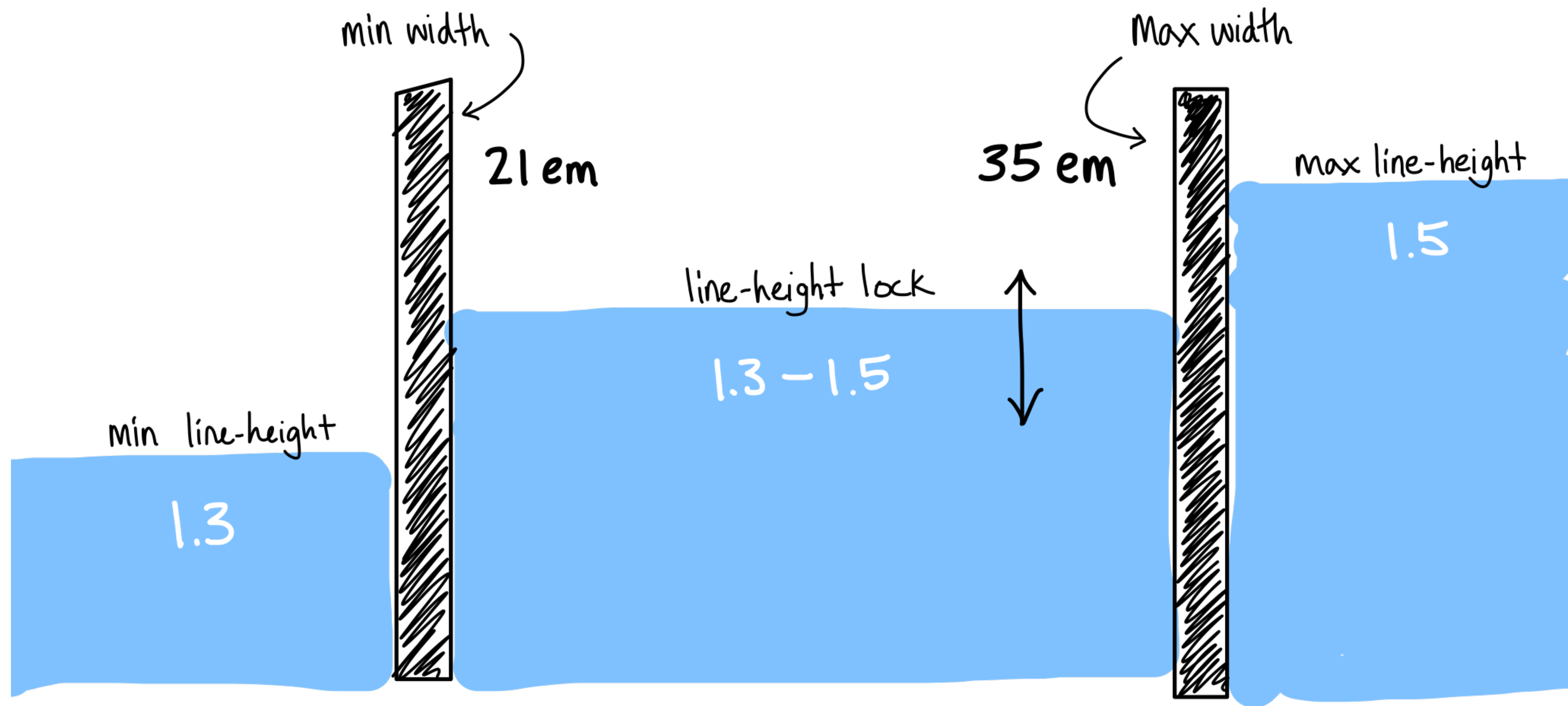


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Manually adjusting line-height with media queries for optimum readability across vast number of screen sizes can be very hard. What makes it even harder, is, that instead of the screen width, the line-height should be relative to its container's width and its font settings in order to achieve proper readability and appropriate spacing.

Thanks to [@Wilto](#), there has been a jQuery plugin called *Molten Leading* around for quite some time already which makes it possible to automate this process and define a minimum width at which the adjustment starts, a maximum element width where it stops, and a minimum and maximum line-height to adjust through.



And here's what a CSS lock looks like in code:

```
line-height: calc(1.3em + (1.5 - 1.3) * ((100vw - 21em) / (35 - 21)));
```

To understand how the formula works within `calc()`, we're going to work through it backwards.

1. See the very last part? **35-21**. That gives us the *full range of our paragraph's width*. It resolves to 14, because **14em** is the difference between our paragraph's width at its most narrow and most wide.
2. To the left of that, we've got **100vw-21em**. Because of [the way CSS calc works](#), this resolves to an em-based value — and gives us a numerator to place above the 14em we already figured out. So, for example, let's say the viewport width (100vw) is equivalent to 34em.  $34em - 21em = 13em$ . *Note that the [viewport unit](#) in this step is our secret sauce. The fact that this value can change dynamically with browser window width is what makes a dynamic line-height value possible.*
3. So the whole expression to the right of the multiplication sign gets distilled down to this:  $13em / 14em$ , or **0.928571429em**. Think of this as how close we are to the "upper gate" of our lock. If it's near zero, we're close to the lower gate. If it's near one, we're close to the upper gate.
4. Moving to the left of the multiplication sign, we compute the difference between our maximum and minimum line heights.  $1.5 - 1.3 = 0.2$ . This gives us *the full range of our fluid line height*.
5. Now we multiply the full range of our fluid line height (step 4) by how far along we are toward the upper gate of our lock (step 3):  
 $0.2 * 0.928571429em = 0.185714286em$ .

And here's what a CSS lock looks like in code:

```
line-height: calc(1.3em + (1.5 - 1.3) * ((100vw - 21em) / (35 - 21)));
```

To understand how the formula works within `calc()`, we're going to work through it backwards.

1. See the very last part? **35-21**. That gives us the *full range of our paragraph's width*. It resolves to 14, because **14em** is the difference between our paragraph's width at its most narrow and most wide.
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codepen.io/timbrown/pen/akXvRw/?editors=1100

# CSS calc lock for line-height

A PEN BY Tim Brown

Fork Settings Change View Log In Sign Up

```
HTML
1 <!--
  http://www.gutenberg.org/files/3177/3177-h/3177-h.htm --
  >

CSS
11 line-height: 1.3em;
12 }
13
14 @media screen and (min-width: 24.15em) { /* 21em "gate" * 1.15
   font-size: *
```

By and by, an old friend of mine, a miner, came down from one of the decayed mining camps of Tuolumne, California, and I went back with him. We lived in a small cabin on a verdant hillside, and there were not five other cabins in view over the wide expanse of hill and forest. Yet a flourishing city of two or three thousand population had occupied this grassy dead solitude during the flush times of twelve or fifteen years before, and where our cabin stood had once been the heart of the teeming hive, the centre of the city. When the mines gave out the town fell into decay, and in a few years wholly disappeared—streets, dwellings, shops, everything—and left no sign. The grassy slopes were as green and smooth and desolate of life as if they had never been disturbed. The mere handful of miners still remaining, had seen the town spring up spread, grow and flourish in its pride; and they had seen it sicken and die, and pass away like a dream. With it their hopes had died, and their zest of life. They had long ago resigned themselves to their exile, and ceased to

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# Fluid Behavior, Turn OFF

```
html {  
    font-size: calc(100% + 8 * ((100vw - 400px) / 400));  
}  
  
.testimonial { /* Use rem to adjust font-sizes */  
    width: 4.5rem;  
    padding: 0.5rem;  
    font-size: 1.75rem;  
}  
  
/* Turn OFF fluid behavior in a fixed container */  
.fixed-container { font-size: 18px; }  
.fixed-container .testimonial { font-size: 2em; }
```

# Posuere magnis con

Lorem ipsum dolor sit amet, tamquam saperet partiendo no pri, quem nobis epicurei ne sed, qui in inermis pertinacia voluptaria. Officiis vulputate ne nam, an facete lobortis platonem pro. Posse deleniti no vim, agam legimus ea vix, at ullum repudiare per. Ne nam veniam euismod.

Has eu integre voluptatum eloquentiam, ut his nulla suscipit principes. Ius tacimates dissentias te, nibh accusata id sed. Eum deleniti senserit expetendis ei. Eum ex amet tacimates electram, sit an admodum expetendis cotidieque.

## Molestie rutrum

### Information not important

Pro wisi munere accumsan eu, sea ne adhuc volutpat, duo justo vituperatoribus ea. Nec ei fierent dolores, eam in mundi suscipit. Qui at iudico invidunt. Id simul fierent concludaturque cum, ius an sumo dicant nominati.

# Fluid Behavior, Turn ON

```
html {  
  font-size: 100%;  
}  
  
.testimonial { /* Use rem to adjust font-sizes */  
  width: 4.5rem;  
  padding: 0.5rem;  
  font-size: 1.75rem;  
}  
  
/* Turn ON fluid behavior in a fluid container */  
.fluid-container { font-size: calc(100% + 8 * ((100vw - 400px) / 400)); }  
.fluid-container .testimonial { font-size: 2em; }
```

## Posuere magnis con

Lorem ipsum dolor sit amet, tamquam saperet partiendo no pri, quem nobis epicurei ne sed, qui in inermis pertinacia voluptaria. Officiis vulputate ne nam, an facete lobortis platonem pro. Posse deleniti no vim, agam legimus ea vix, at ullum repudiare per. Ne nam veniam euismod.

## Emphasised if space is available

Pro wisi munere accumsan eu, sea ne adhuc volutpat, duo justo vituperatoribus ea. Nec ei fierent dolores, eam in mundi suscipit. Qui at iudico invidunt. Id simul fierent concludaturque cum, ius an sumo dicant nominati.

Has eu integre voluptatum eloquentiam, ut his nulla suscipit principes. Ius tacimates dissentias te, nibh accusata id sed. Eum deleniti senserit expetendis ei. Eum ex amet tacimates electram, sit an admodum expetendis cotidieque.

## Molestie rutrum

Meis reprimique mei an. Ius primis aperiri accusata te, nam quas postulant eu. Ferri doming cetero ut has, sed an alia atqui constituto, in est salutatus moderatius. Sea aperiri fastidii cu, nec cu veniam electram vituperata. Lobortis scriptorem definitionem no mea. Eum malorum graecis qualisque cu, per velit corrumpit reprehendunt id, quis alterum sadipscing mea ut.

Etiam habemus ius te, qui primis reformidans at, et vocent laoreet salutandi vix. Elit nemore consequat eu mea, eam ei nobis detraxit antiopam. Ea agam commune qui. Ius eros mollis an, cu diam decore sit, at quod partem elaboraret usu. In aequae epicuri has, putent oportere ne per.

Pro wisi munere accumsan eu, sea ne adhuc volutpat, duo justo vituperatoribus ea. Nec ei fierent dolores, eam in mundi suscipit. Qui at iudico invidunt. Id simul fierent concludaturque cum, ius an sumo dicant nominati. Vis at omnes aperiri.

Truly Fluid Typography With `vh` And `vw` Units

By [Michael Riethmuller](#)

May 10th, 2016 [CSS](#), [Responsive Web Design](#), [Typography](#)

[28 Comments](#) [Edit](#)

Embracing fluid typography might be easier than you think. It has wide browser support, is simple to implement and can be achieved without losing control over many important aspects of design.

Unlike [responsive typography](#), which changes only at set breakpoints, **fluid typography resizes smoothly** to match any device width. It is an intuitive option for a web in which we have a practically infinite number of screen sizes to support. Yet, for some reason, it is still used far less than responsive techniques.

This might be because typography is so deeply rooted in the centuries-old history of typesetting. The concept of having “fluid” anything is often at odds with this tradition. In print, dimensions have always been fixed, but they don’t need to be on the web.

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email address

**195,992** Subscribers powered by MailChimp

 It's finally here. [Smashing Book #5](#), our new book on **real-life responsive design**. With front-end techniques and patterns from actual projects, it's a playbook to master all the tricky facets and hurdles of responsive design. [Get the book](#). **Free shipping.**

**INCLUSIVE** DESIGN PATTERNS

We build inaccessible websites all the time, but it's not for the lack of care or

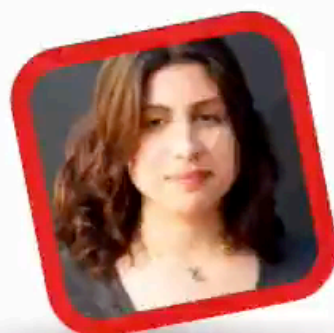
FEBRUARY 7, 2017 • [18 COMMENTS](#)

# HTML APIs: What They Are And How To Design A Good One

# [Coding](#) 584 # [CSS](#) 243 # [JavaScript](#) 162

## ABOUT THE AUTHOR

Lea is currently busy doing research in Human-Computer Interaction at [MIT CSAIL](#). She has previously written an advanced CSS book for O'Reilly ([CSS Secrets](#)) and ... [More about Lea...](#)



Summary

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## QUICK SUMMARY

*As JavaScript developers, we often forget that not everyone has the same knowledge as us. It's called the curse of knowledge: When we're an expert on something, we cannot remember how confused we felt as newbies. We overestimate what people will find easy.*



HTML APIs: What They Are And How To Design A Good One

FEBRUARY 7, 2017 • 18 COMMENTS

# Coding 584 # CSS 243 # JavaScript 162

**ABOUT THE AUTHOR**

Lea is currently busy doing research in Human-Computer Interaction at [MIT CSAIL](#). She has previously written an advanced CSS book for O'Reilly ([CSS Secrets](#)) and ... [More about Lea...](#)

[Summary](#) [Table of Contents](#)

QUICK SUMMARY

As JavaScript developers, we often forget that not everyone has the same knowledge as us. It's called the curse of knowledge: When we're an expert on something, we cannot remember how confused

# No Media Queries Needed

```
h1 {  
    font-size: calc(1.375em + 1.6vw);  
}
```

```
button.menu {  
    padding: calc(.4em + 2vw) 0.5em;  
}
```

```
figcaption {  
    line-height: calc(1.5em + 0.2vw);  
}
```



**Namespacing.**

Selectors

# Namespaces

“ I don't know what this does. I don't know where else it's used. I don't know if I can delete it. I don't know if I can change it. I don't know if I can use it elsewhere. I don't know anything!

# Namespacing

- **.o-media** {}  
Reusable structural objects, wrappers, containers.
- **.l-grid**, *.l-container* {}  
Layout modules used to position components.
- **.c-modal**, *c-modal\_\_title*, *.c-modal--gallery* {}  
Finite, implementation-specific components.
- **.t-high-contrast** {}  
High level theme rules that scope other rules.

# Namespacing

- **.s-cms-content** {}

Dangerous species for scoped content.

- **.is-open**, *.has-dropdown*, *.is-visible* {}

Stateful namespaces that describe a behavior.

- **.u-clearfix** {}

Utilities with a single responsibility.

- **.js-tab-switcher** {}

JavaScript hooks attached to a component.

# Namespacing

- **.\_c-footer-mobile {}**

Hack namespacing for coding debt.

- **.qa-error-login {}**

A namespace for automated testing tools.

Working Files



• index.html

main.css

better-ui ▾

\_generic.normalize.scss

\_generic.reset.scss

\_generic.shared.scss

\_layer.partial.scss

\_objects.box.scss

\_objects.flag.scss

\_objects.layout.scss

\_objects.tables.scss

\_settings.colors.scss

\_settings.debug.scss

\_settings.global.scss

\_settings.responsive.scss

\_tools.functions.scss

\_tools.griddle.scss

\_tools.mixins.scss

\_tools.responsive.scss

\_trumps.clearfix.scss

\_trumps.colors.scss

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, minimum-scale=1.0">
6
7   <title>Better UI - Better Collective CSS Framework and UI Toolkit</title>
8
9   <link rel="stylesheet" href="css/main.css">
10
11   <style>
12     html {
13       padding: 1.5rem;
14       padding-bottom: auto;
15     }
16   </style>
17
18 </head>
19 <body>
20
21   <div class="o-"
22     *.o-layout--middle
23     *.o-flag
24     *.o-flag__minor
25     *.o-flag__major
26     *.o-flag--rev
27     *.o-flag--small
28     *.o-flag--large
29     *.o-table--fixed
30
31
32
33
34
35
36
```

Working Files



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main.css

better-ui ▾

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12     html {
13       padding: 1.5rem;
14       padding-bottom: auto;
15     }
16   </style>
17
18 </head>
19 <body>
20
21   <h1 class="c-he|
22     *.c-heading-ribbon
23     *.c-heading-ribbon--large
24
25
26
27
28
29
30
31
32
33
34
35
36
```

Working Files



• index.html

main.css

better-ui ▾

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```
1 <!DOCTYPE html>
2 <html lang="en">
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5   <meta name="viewport" content="width=device-width, minimum-scale=1.0">
6
7   <title>Better UI - Better Collective CSS Framework and UI Toolkit</title>
8
9   <link rel="stylesheet" href="css/main.css">
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13       padding: 1.5rem;
14       padding-bottom: auto;
15     }
16   </style>
17
18 </head>
19 <body>
20
21   <h1 class="c-heading-ribbon c-hea|
22     *.c-heading-ribbon--large
23
24
25
26
27
28
29
30
31
32
33
34
35
36
```



## Highlight Types of Namespace

If you'd like to visualise the amount of, say, Components that are currently in any given view, you simply need a bit of CSS like this:

```
[class^="c-"],  
[class*=" c-"] {  
  outline: 5px solid cyan;  
}
```

This works by:

- `[class^="c-"]`: Find all class attributes that start with the string `c-`, e.g.:

```
<blockquote class="c-testimonial">
```

- `[class*=" c-"]`: Find all class attributes that contain the string `<space>c-`, e.g.:

```
<blockquote class="o-media c-testimonial">
```

```
[class^="o-"],  
[class*=" o-"] {  
  outline: 5px solid orange;  
}
```

```
[class^="c-"],  
[class*=" c-"] {  
  outline: 5px solid cyan;  
}
```

```
[class^="u-"],  
[class*=" u-"] {  
  outline: 5px solid violet;  
}
```

```
[class^="_"],  
[class*=" _"] {  
  outline: 5px solid red;  
}
```

**BEM/SMCSS.**

```
<div class="c-card">
  <div class="c-card__header">
    <h2 class="c-card__title">Title text here</h2>
  </div>

  <div class="c-card__body">

    
    <p class="c-card__text">Lorem ipsum dolor sit amet, consectetur</p>
    <p class="c-card__text">Adipiscing elit. Pellentesque.</p>

    <!-- My *new* cross-component approach -->
    <button class="c-button c-button--rounded c-button--small">Click me!</button>

  </div>
</div>
```

```
<div class="c-card">
  <div class="c-card__header">
    <h2 class="c-card__title">Title text here</h3>
  </div>

  <div class="c-card__body"><div class="c-card__body">

    <p>I would like to buy:</p>

    <!-- Much nicer - a layout module -->
    <ul class="l-list">
      <li class="l-list__item">

        <!-- A reusable nested component -->
        <div class="c-checkbox">
          <input id="option_1" type="checkbox" name="checkbox" class="c-checkbox__input">
          <label for="option_1" class="c-checkbox__label">Apples</label>
        </div>

      </li>
      <li class="l-list__item">

        <div class="c-checkbox">
          <input id="option_2" type="checkbox" name="checkbox" class="c-checkbox__input">
          <label for="option_2" class="c-checkbox__label">Pears</label>
        </div>

      </li>
    </ul>
  </div>
</div>
```

**Responsive Suffixes.**

```
<ul class="c-image-list@small-screen c-carousel@large-screen">
```

```
.c-image-list\@small-screen {  
  /* styles here */  
}
```

**State hooks.**



```
<!-- standalone state hook -->  
<div class="c-card is-active">  
  [...]  
</div>
```

```
<!-- or BEM modifier -->  
<div class="c-card c-card--is-active">  
  [...]  
</div>
```

✘ NOT GOOD

- `js-trigger`
- `js-target`
- `js-list`
- `js-close-button`

✔ GOOD

- `js-drop-down-menu-trigger`
- `js-drop-down-menu-target`
- `js-drop-down-menu-list`
- `js-drop-down-menu-close-button`

- `is-active`
- `is-expanded`
- `is-visible`
- `has-loaded`
- `is-active`
- `has-loaded`
- `is-loading`
- `is-visible`
- `is-disabled`
- `is-expanded`
- `is-collapsed`

`.rf-*` classes.

# .RF-\* CLASSES

Prefix any refactored classes with rf-.

This means developers can see which classes are new...

But it also means we can do this:

```
/**  
 * If it's a class containing the string rf-,  
 * put a green border around it.  
 */
```

```
[class*="rf-"] {  
    outline: 5px solid green;  
}
```

Welcome to the BBC  
Thursday, 28 July

Sign in with your BBC ID, or Register to see Weather, Local News and more

Customise your Homepage



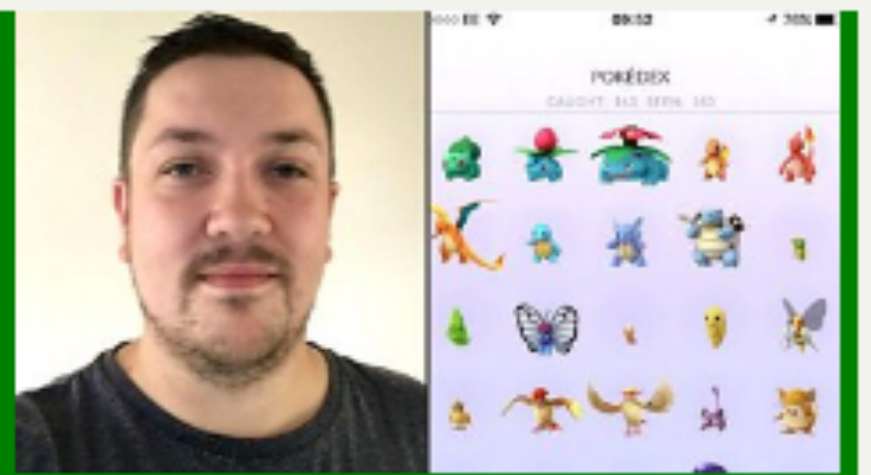
Corbyn ballot challenge rejected by High Court

UK POLITICS



Most expensive UK cities for students revealed

SCOTLAND



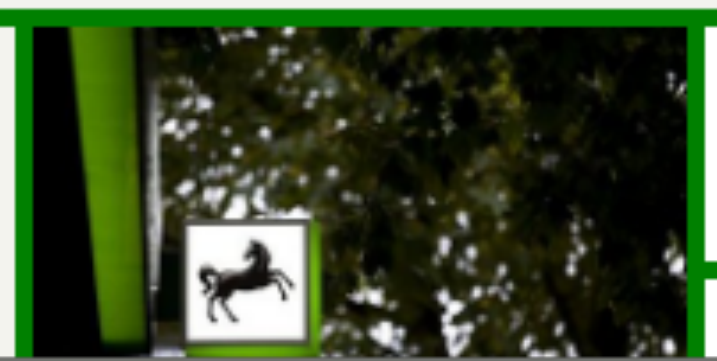
This man says he's caught all 143 Pokemon Go creatures

ENGLAND

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X



Lloyds axes thousands more jobs

BUSINESS



LIVE Man City v Dortmund and US PGA updates

SPORTSDAY

```
/**
```

```
 * If it's a class, but isn't a class containing  
 * the string rf-, put a red border around it.  
 */
```

```
[class]:not([class*="rf-"]) {  
  outline: 5px solid red;  
}
```

# WEATHER

Settings Language

**London**  
17:00

**20°C**  
12

Thu	Fri	Sat	Sun	Mon
Min. night 15°C	<b>23°C</b> 15°C	<b>24°C</b> 15°C	<b>22°C</b> 14°C	<b>22°C</b> 14°C

**Add location**

Did you know you can add favourite locations? Here is London as an example.

[+ Add London](#)

**UK Today**

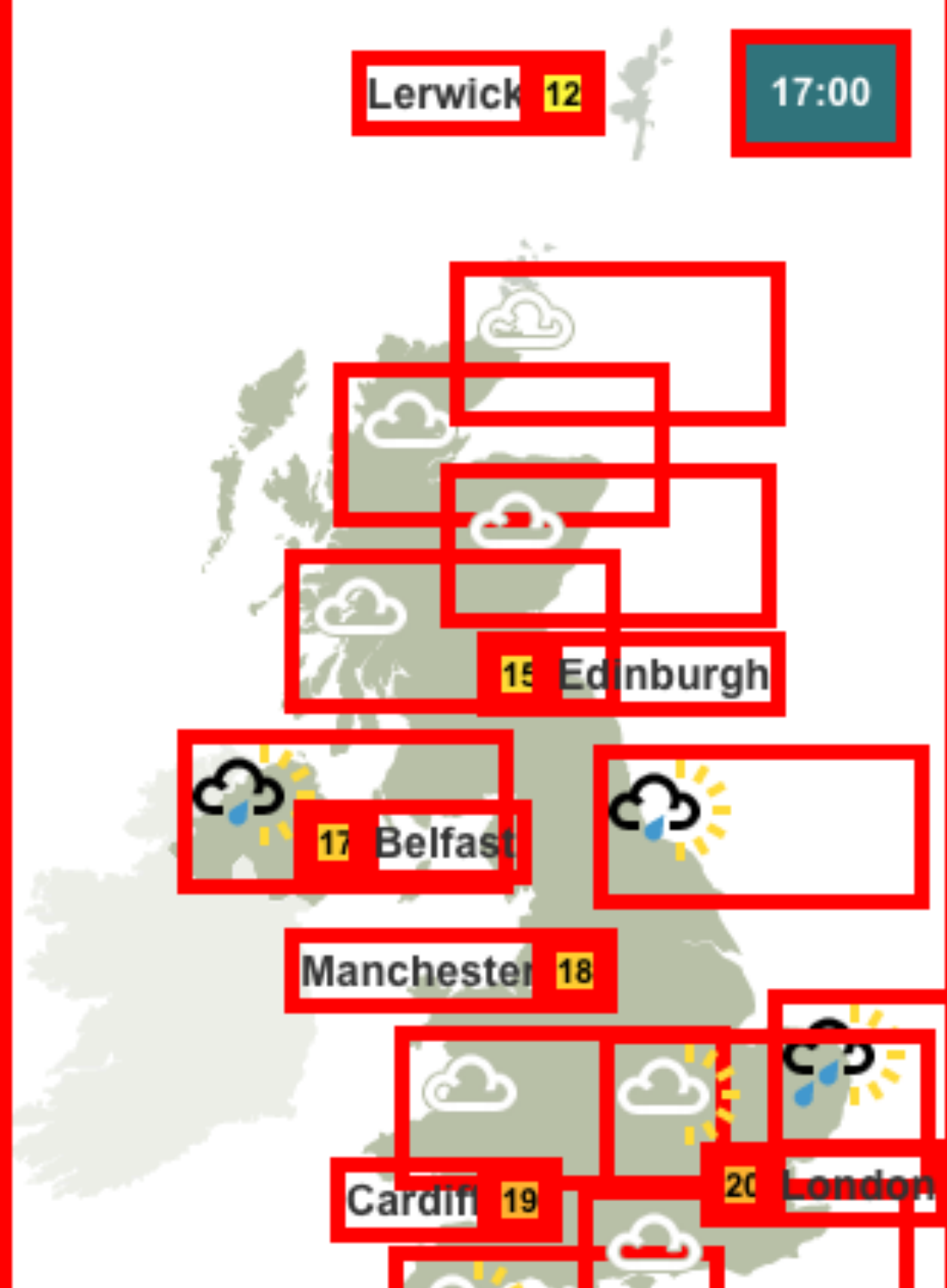
**Rain moving east, brighter with showers later for some.**

Rain in the west will move eastwards, this persistent and locally heavy over Northern Ireland, northern England and southern Scotland. Brighter with showers over northern Scotland. Turning brighter across Wales and southern England later with a risk of heavy showers.

[More UK Weather](#)

[Monthly Outlook](#)

[Coast & Sea](#)



**Find a Forecast**

Enter a town, county or UK postcode

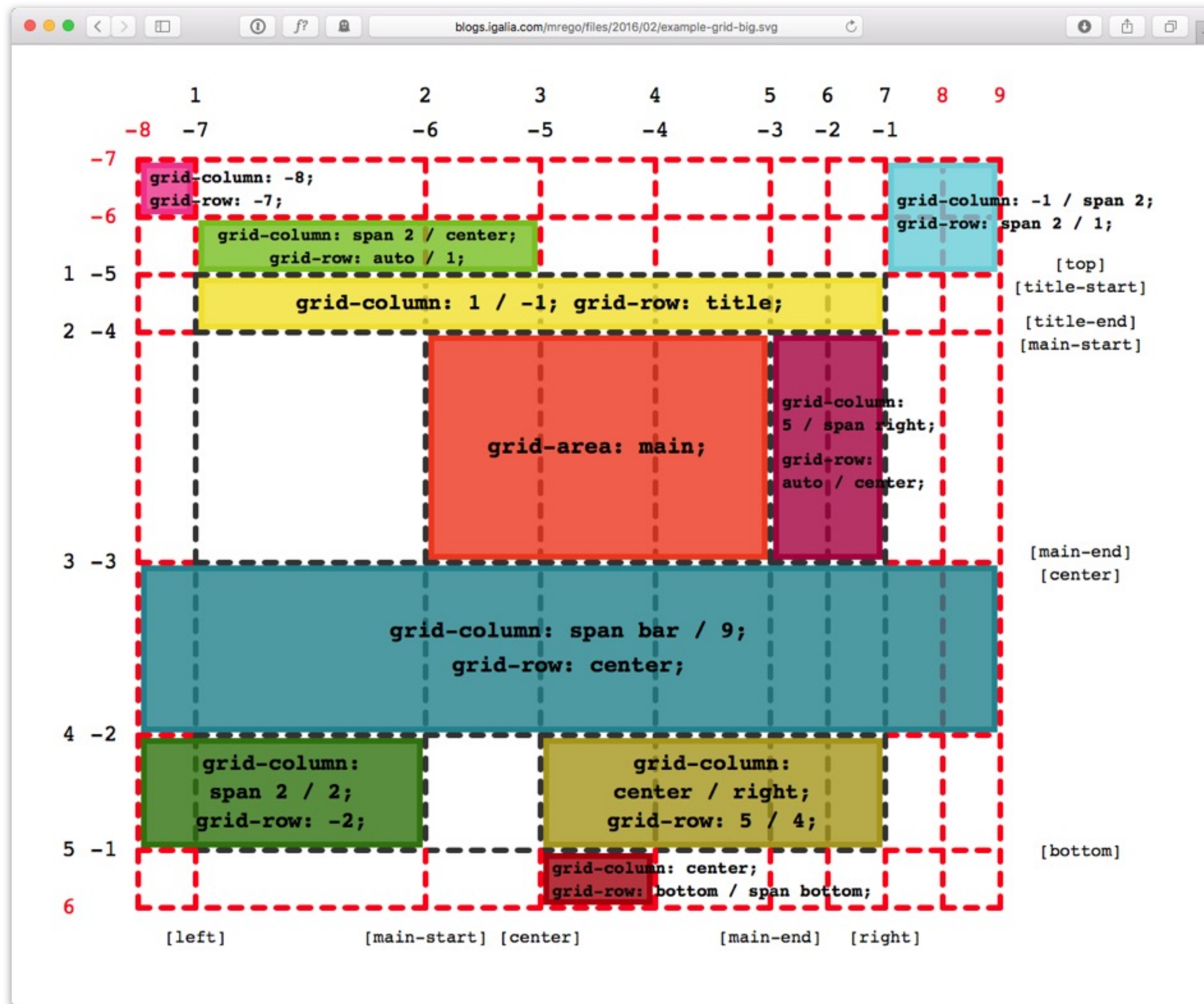
[Favourite Locations 0](#)

**UK Forecast Video**

LAST UPDATED 12:28 BST, THURSDAY 28 JUL



**Almighty Grid.**



by Manuel Rego Casasnovas

<http://blogs.igalia.com/mrego/2016/02/01/deep-dive-into-grid-layout-placement/>



New Order Movement Experi... x +

labs.jensimmons.com/examples/futurismo-2.html

**NEW ORDER**  
**FACT. 50 1981**  
**MOVEMENT**

# THE EXPERIMENTAL LAYOUT LAB

## OF JEN SIMMONS

WORKSHOP EXAMPLES

Includes examples for  
REVOLUTIONIZE YOUR  
PAGE: REAL ART  
DIRECTION ON THE  
WEB

PROGRESSING OUR  
LAYOUTS

MODERN LAYOUTS:  
GETTING OUT OF OUR  
RUTS

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# CSS Grid Layout - CR

Global

69.57% + 5.77% = 75.34%

unprefixed:

69.57%

Method of using a grid concept to lay out content, providing a mechanism for authors to divide available space for layout into columns and rows using a set of predictable sizing behaviors. Includes support for all `grid-*` properties and the `fr` unit.

Current aligned

Usage relative

Date relative

Show all

IE	Edge *	Firefox	Chrome	Safari	Opera	iOS Safari *	Opera Mini *	Android Browser *	Chrome for Android
			<sup>1</sup> 49						
		<sup>4</sup> 52	60			10.2			
	<sup>2</sup> 15	55	61	10.1		10.3		4.4	
<sup>2</sup> 11	16	56	62	11	48	11	all	56	61
	17	57	63	TP	49				
		58	64		50				
		59	65						

Notes

Known issues (2)

Resources (13)

Feedback

<sup>1</sup> Enabled in Chrome through the "experimental Web Platform features" flag in `chrome://flags`

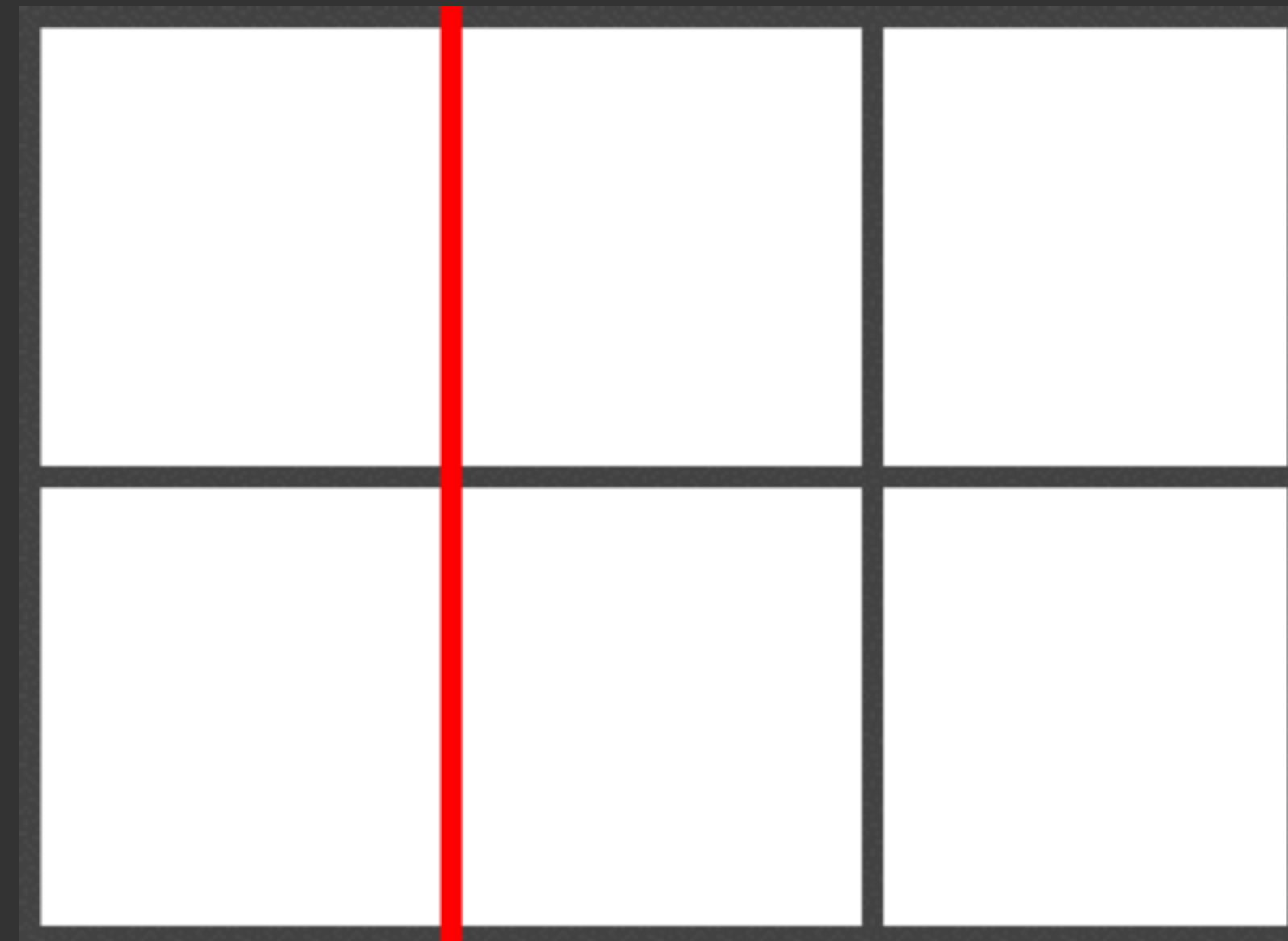
<sup>2</sup> Partial support in IE refers to supporting an **older version** of the specification.

<sup>4</sup> There are some bugs with overflow ([1356820](#), [1348857](#), [1350925](#))

# Grid Lines

Lines can be horizontal or vertical. They are referred to by number and can be named.

Highlighted is Column Line 2.



# Grid Track

A Grid Track is the space between two Grid Lines. Tracks can be horizontal or vertical (rows or columns).

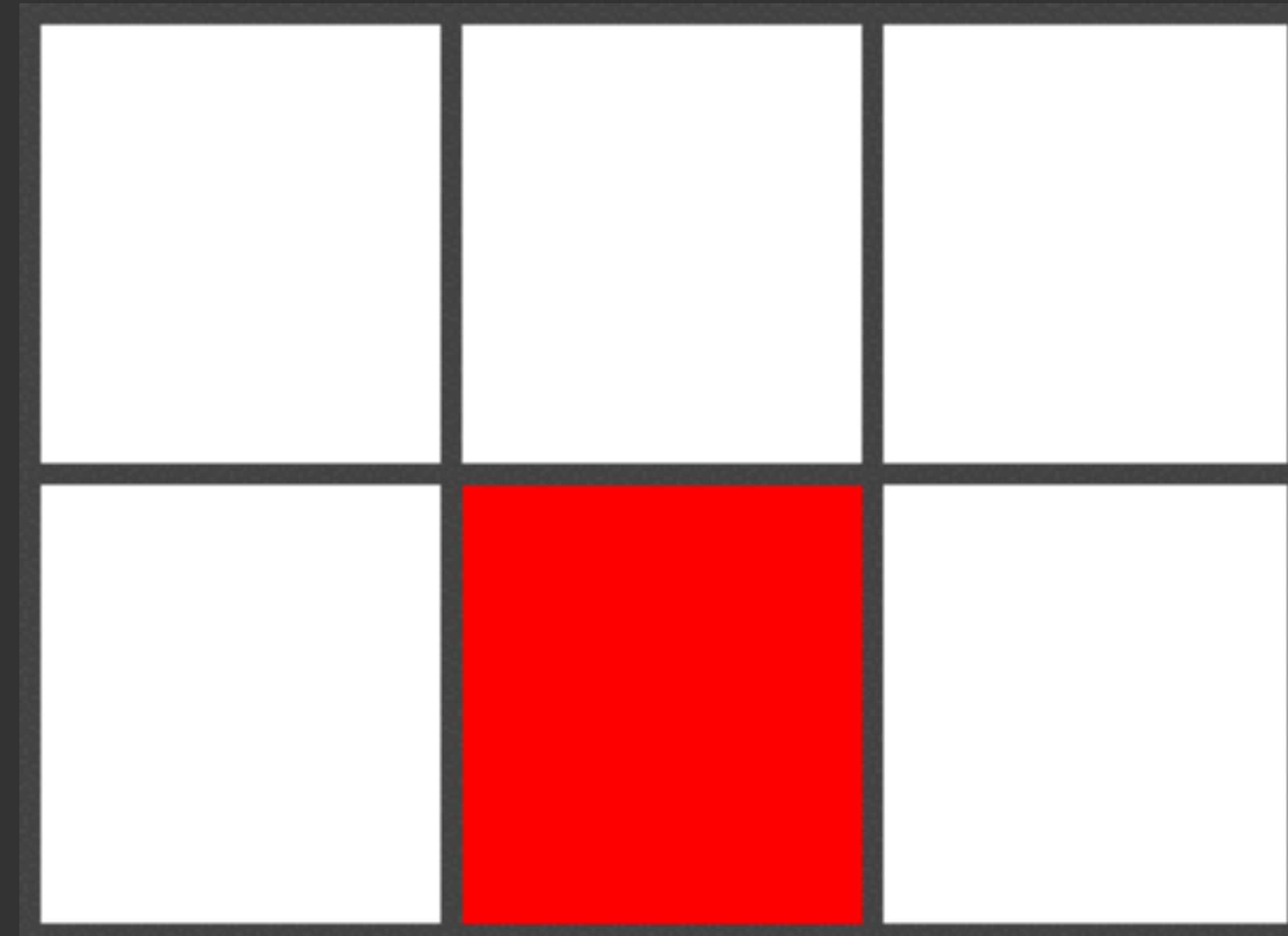
The highlighted Grid Track is between Row Lines 2 and 3.



# Grid Cell

The smallest unit on our grid, a Grid Cell is the space between four Grid Lines. It's just like a table cell.

The highlighted Grid Cell is between row lines 2 and 3 and column lines 2 and 3.

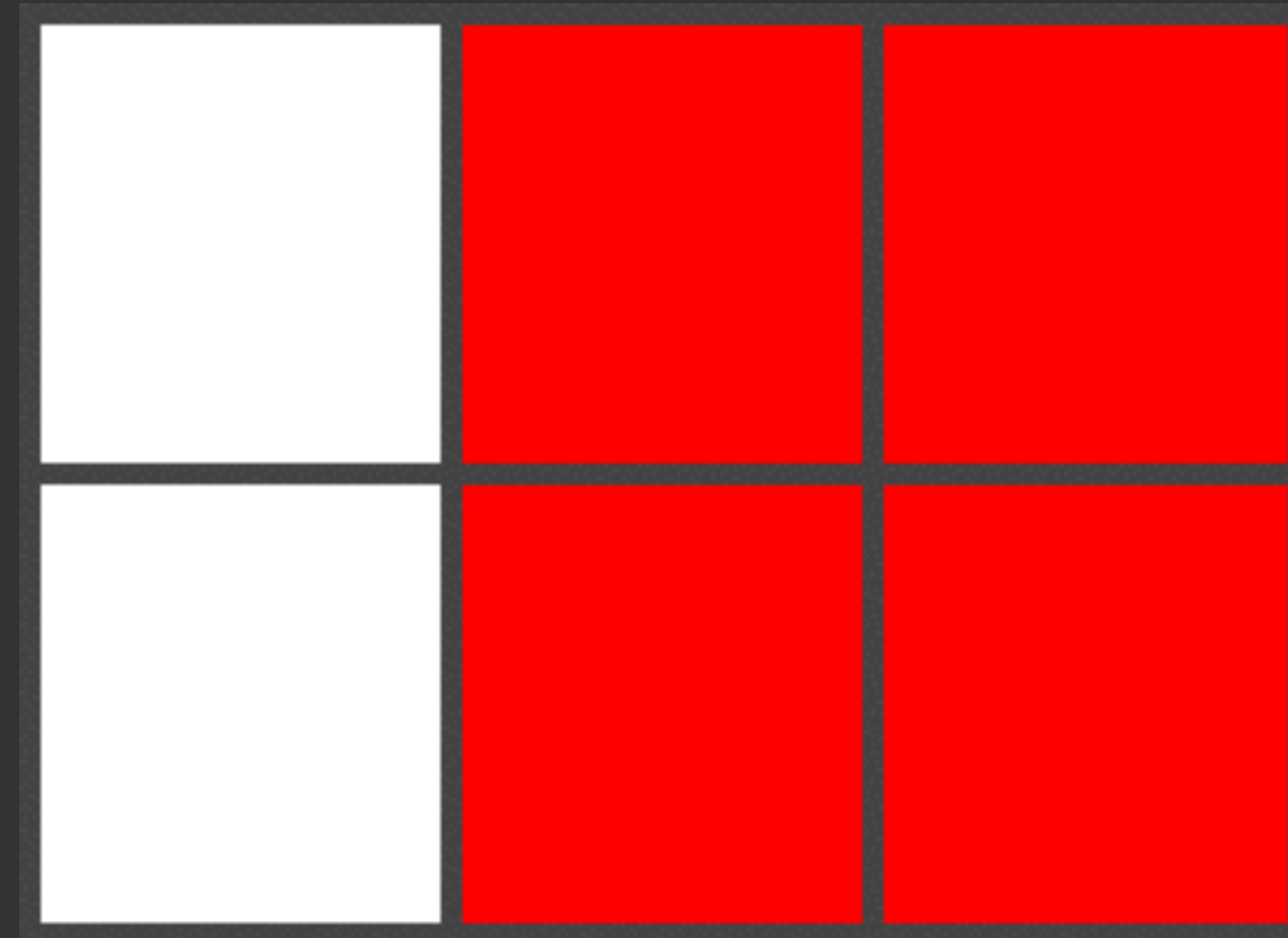




# Grid Area

Any area of the Grid bound by 4 Grid Lines. It can contain many Grid Cells.

The highlighted Grid Area is between row lines 1 and 3, column lines 2 and 4.



— *grid-template-columns* declares the number of columns and the size of each column.

```
grid-template-columns: 250px 250px 250px 250px;
```

— *repeat* keyword allows to avoid repetition.

```
grid-template-columns: repeat(4, 250px);
```

```
grid-template-columns: repeat(5, 1fr 2fr);
```

```
grid-template-columns: 20px repeat(6, 1fr) 20px;
```

— *grid-auto-rows* and *grid-auto-columns* define set size of tracks within implicit grid.

```
grid-auto-rows: minmax(100px, auto);
```

— *auto-fill* and *auto-fit* deal differently with the overflow of space on a line.

— *auto-fill* tries to put the largest number of items into a column but leaves space open.

`grid-template-columns:`

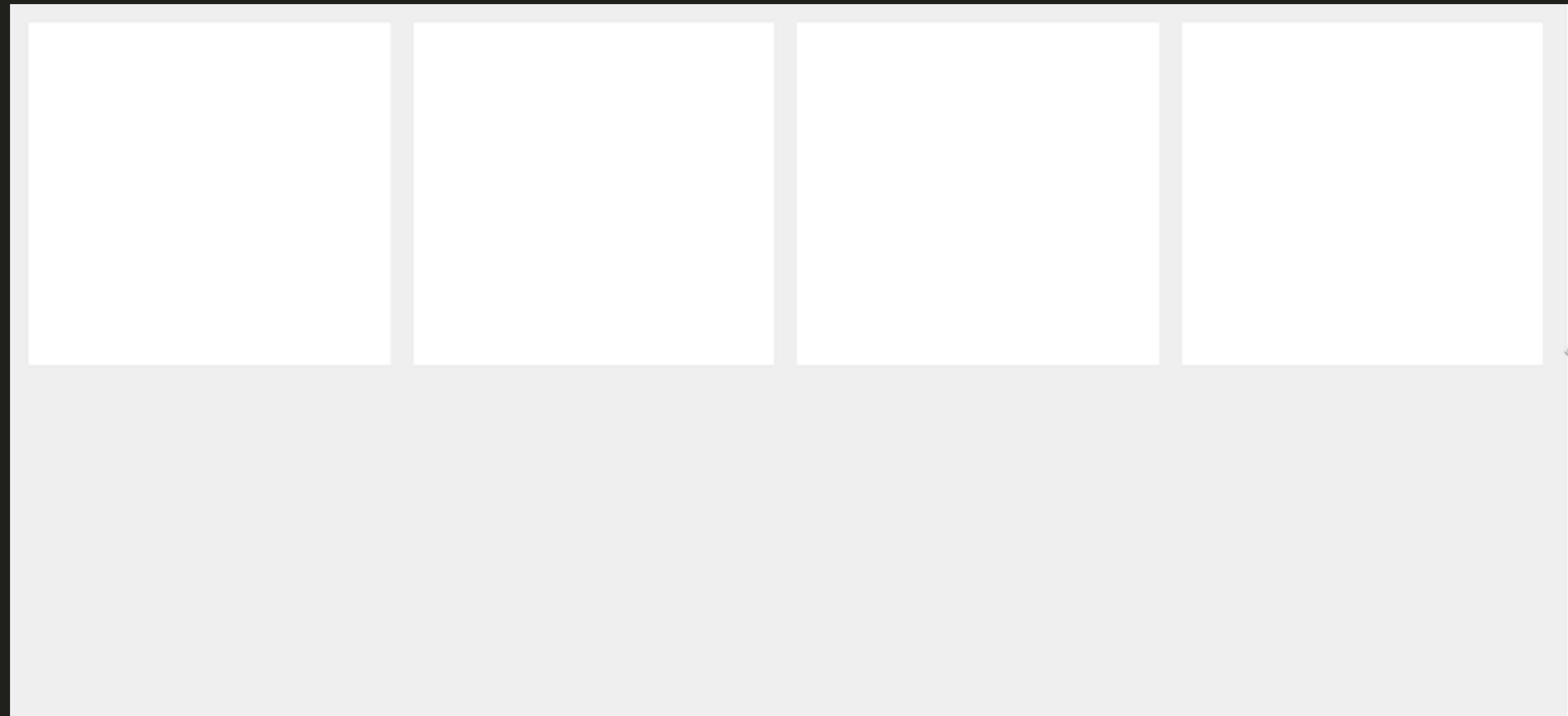
```
repeat(auto-fill, minmax(250px, 1fr));
```



— *auto-fit* provides a Flexbox-like experience, collapsing empty space and stretching items.

`grid-template-columns:`

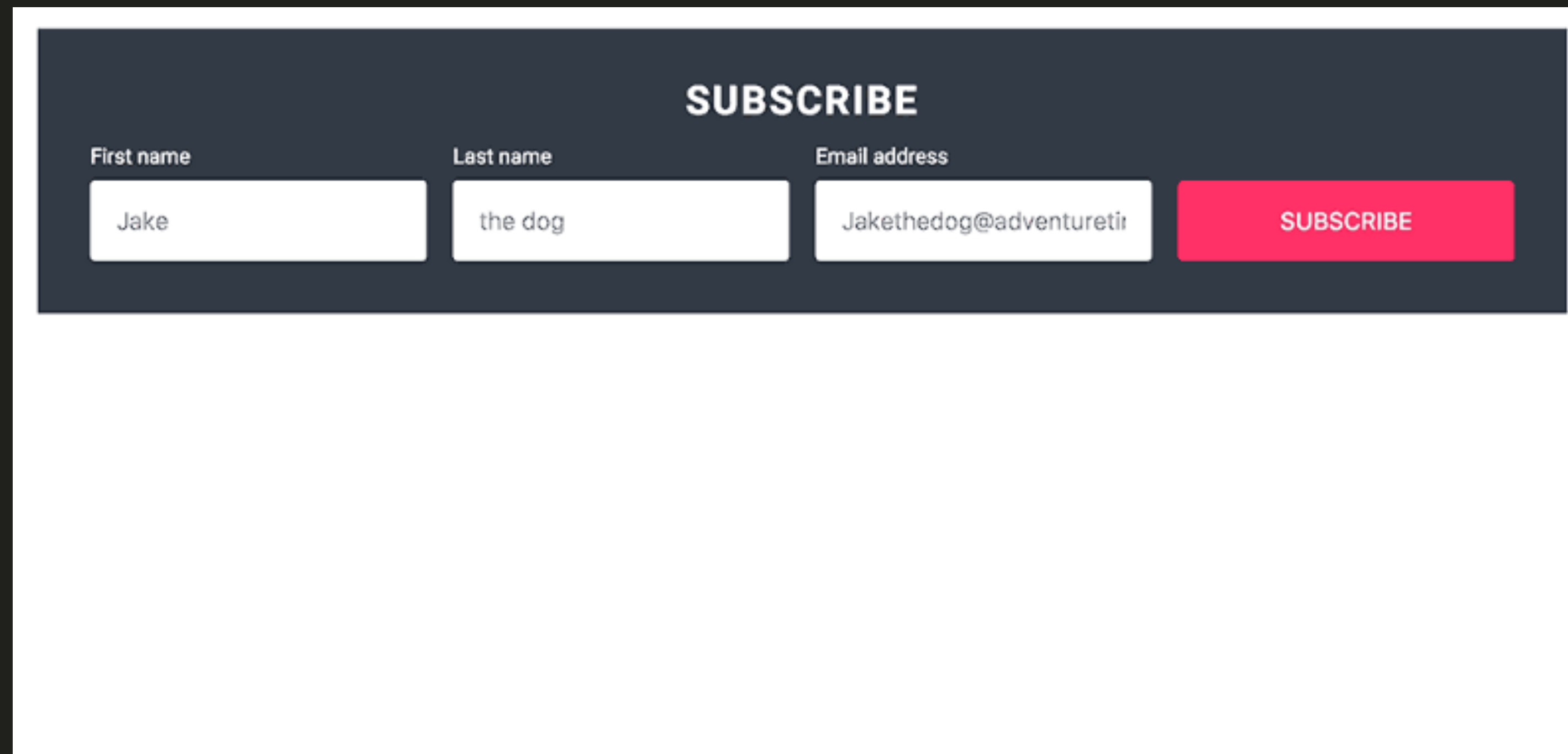
```
repeat(auto-fit, minmax(250px, 1fr));
```



— *auto-fit* provides a Flexbox-like experience, collapsing empty space and stretching items.

`grid-template-columns:`

```
repeat(auto-fit, minmax(250px, 1fr));
```



The image shows a dark blue rectangular form with the word "SUBSCRIBE" centered at the top in white. Below the title, there are three input fields and a button. The first field is labeled "First name" and contains the text "Jake". The second field is labeled "Last name" and contains the text "the dog". The third field is labeled "Email address" and contains the text "Jakethedog@adventuretir". To the right of the input fields is a red button with the text "SUBSCRIBE" in white. The form is set against a white background.

— *auto-fit* and *auto-fill* deal differently with the overflow of space on a line.

`grid-template-columns:`

```
repeat(auto-fit, minmax(250px, 1fr));
```

— *auto-fit* tries to put the largest number of items into a column but leaves space open.

— *auto-fill* provides a Flexbox-like experience, collapsing empty space and stretching items.

- *1fr*, a *fraction unit*, takes up a share of available space, accounting for *grid-gap*.

```
grid-template-columns: repeat(4, 250px 1fr);
```

- *minmax* specifies a range of the largest and smallest values a row or column could be:

```
grid-template-columns: repeat(4, minmax(250px, 1fr));
```

- *alignment* is achieved as in Flexbox. *stretch* pulls an element from start to end of a track.

```
align-items: center; justify-content: center;
```

**Follow the conventions of HTML as much as possible.** For example, if you use an attribute for a boolean setting, its presence means `true` regardless of the value, and its absence means `false`. Do not expect things like `data-foo="true"` or `data-foo="false"` instead. Sure, ARIA does that, but if ARIA jumped off a cliff, would you do it, too?

Want to better understand the topic? Our pal *Yoav Weiss* wrote a fully fledged chapter about the ins and outs of responsive images in a Hollywood blockbuster **Smashing Book 5**. *Just sayin'!*

[Table of Contents →](#)

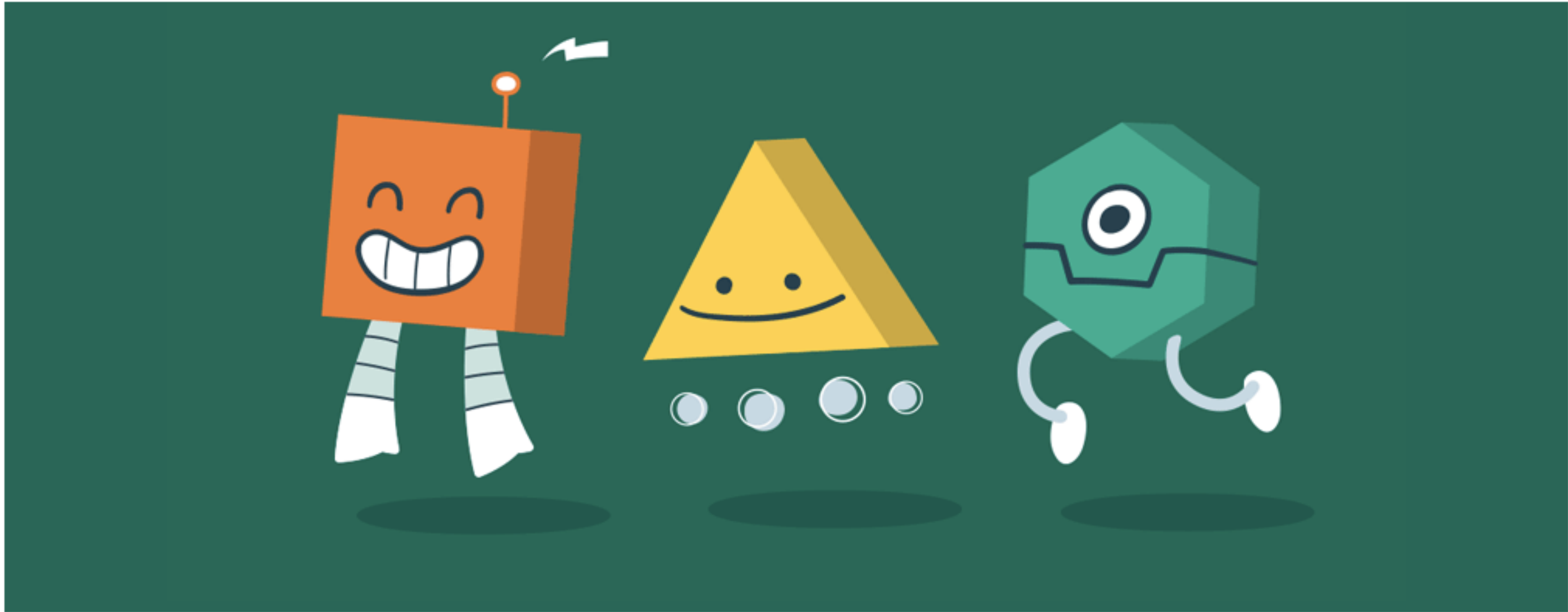


When the setting is a **boolean**, you could also use classes. Typically, their semantics are similar to boolean attributes: The presence of the class means `true`, and the absence means `false`. If you want the opposite, you can use a `no-` prefix (for example, `no-line-numbers`). Keep in mind that class names are used more than `data-*` attributes, so there is a greater possibility of collision with the user's existing class names.



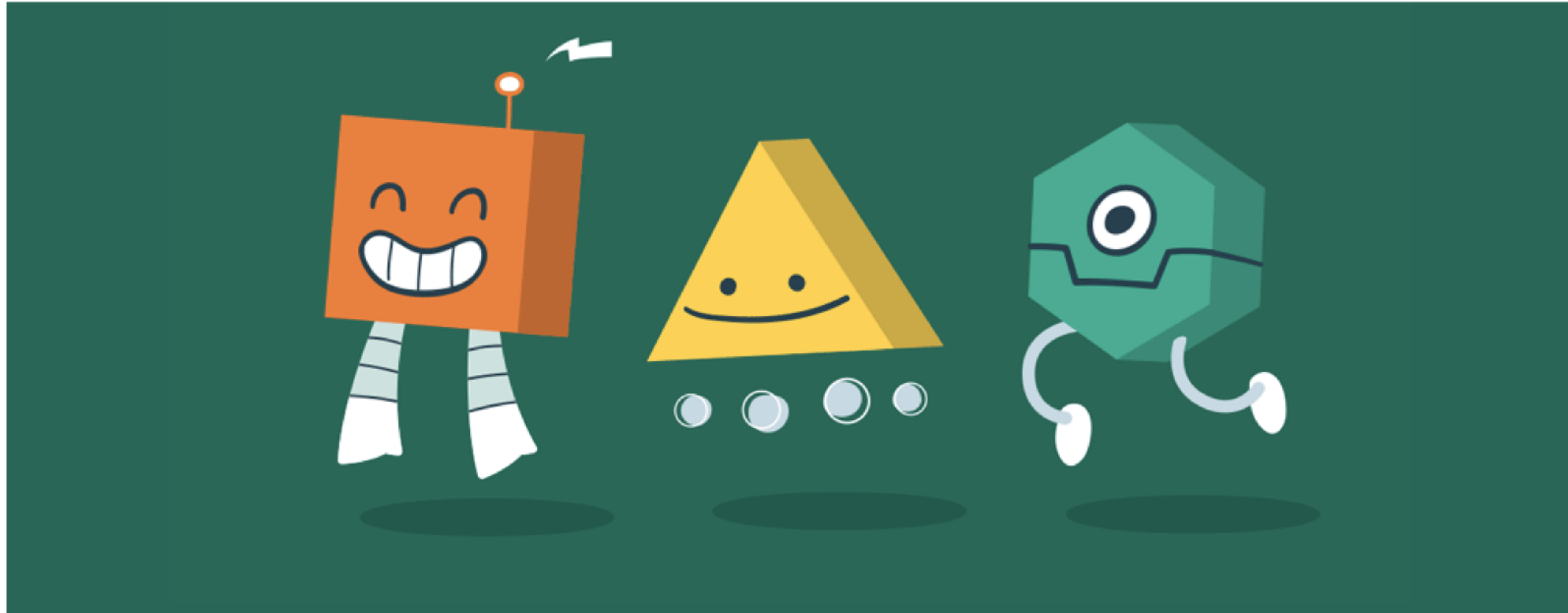


[Redacted text]



[Redacted text]

[Redacted text]



- HTML:

```
<div class="u-containProse">  
  <p>...</p>  
  <p>...</p>  
</div>
```

- CSS:

```
.u-containProse {  
  margin: 0 auto;  
  max-width: 40em;  
}
```

- HTML:

```
<div class="u-containProse">  
  <p>...</p>  
</div>
```

```

```

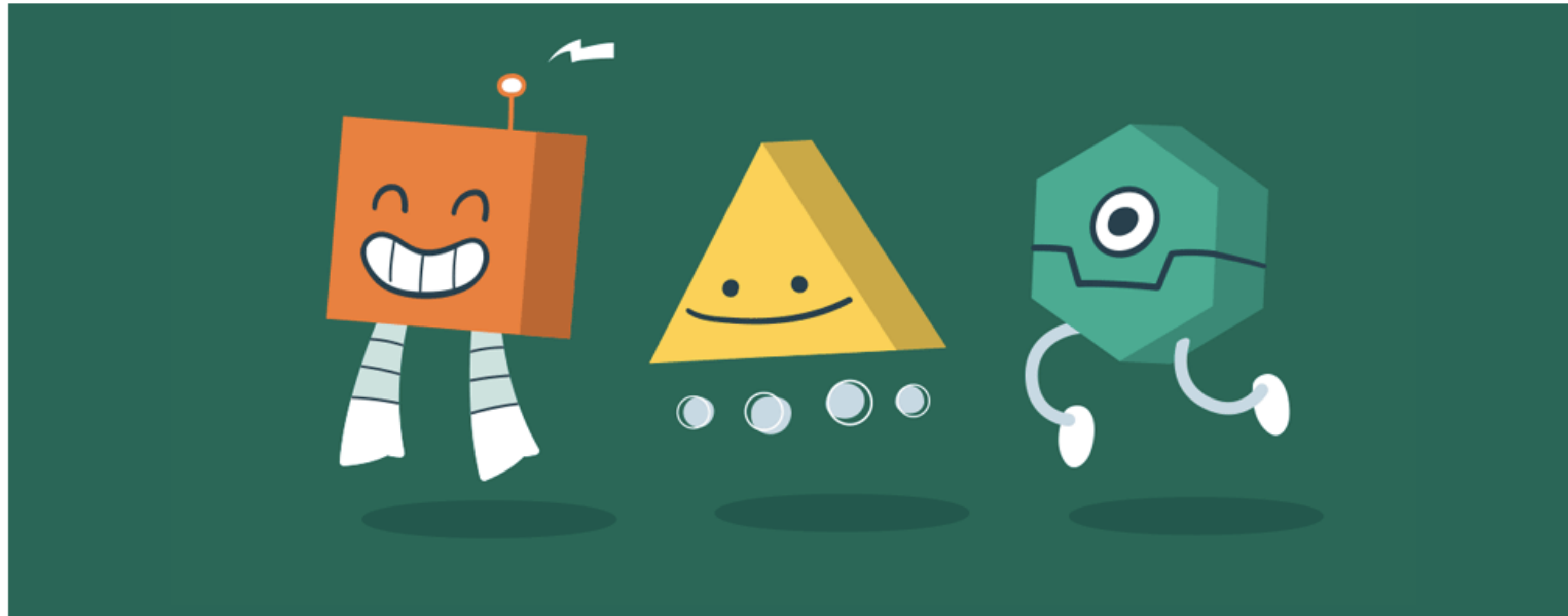
```
<div class="u-containProse">  
  <p>...</p>  
</div>
```

- CSS:

```
.u-containProse {  
  margin: 0 auto;  
  max-width: 40em;  
}
```

To *release* our child element from its container, we need to know *how much space* there is between the container edge and the viewport edge.

What's this space exactly? Well, we just need to subtract *half the container width* from *half the viewport width*. *calc()* to the rescue!

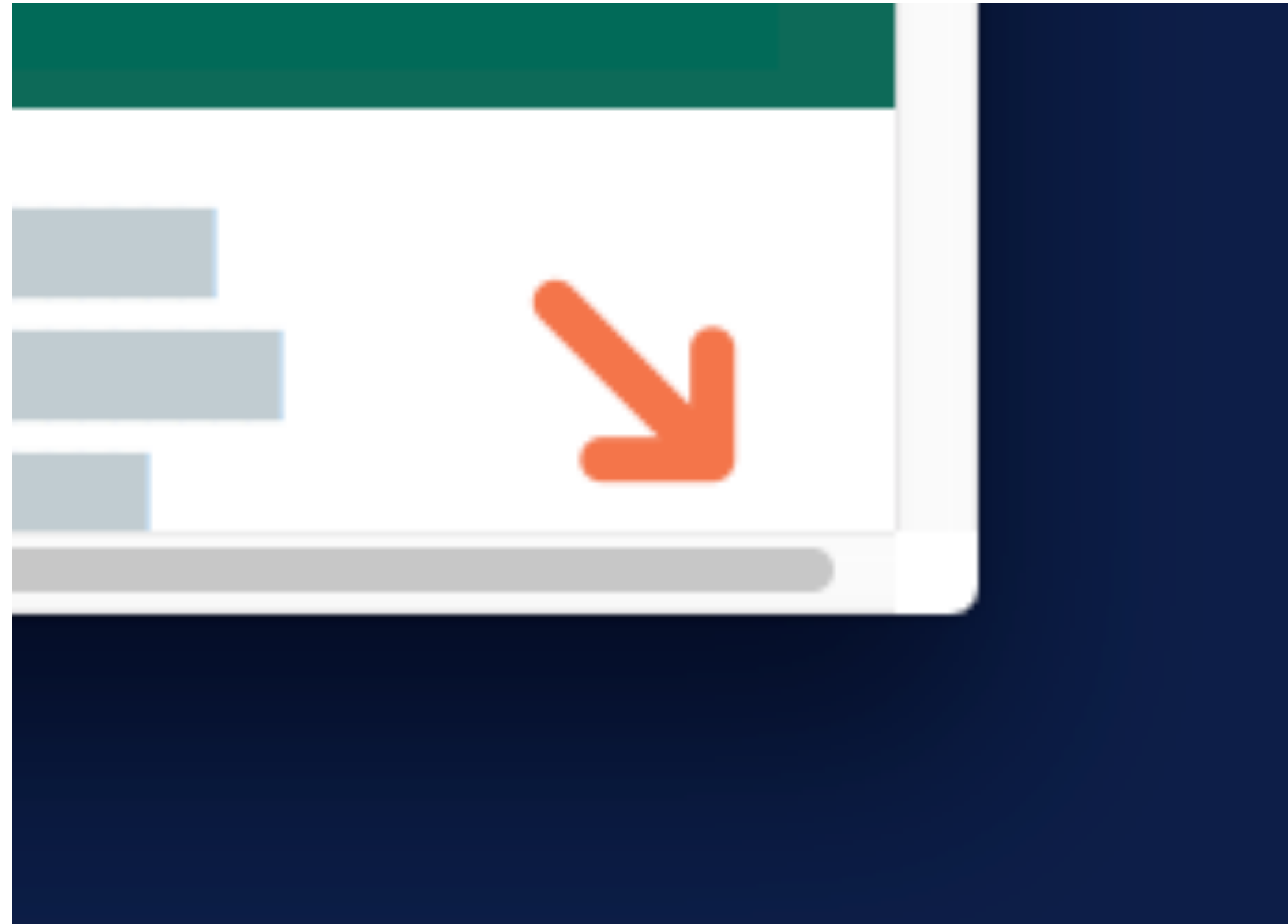


- HTML:

```
<div class="u-containProse">  
  <p>...</p>  
    
  <p>...</p>  
</div>
```

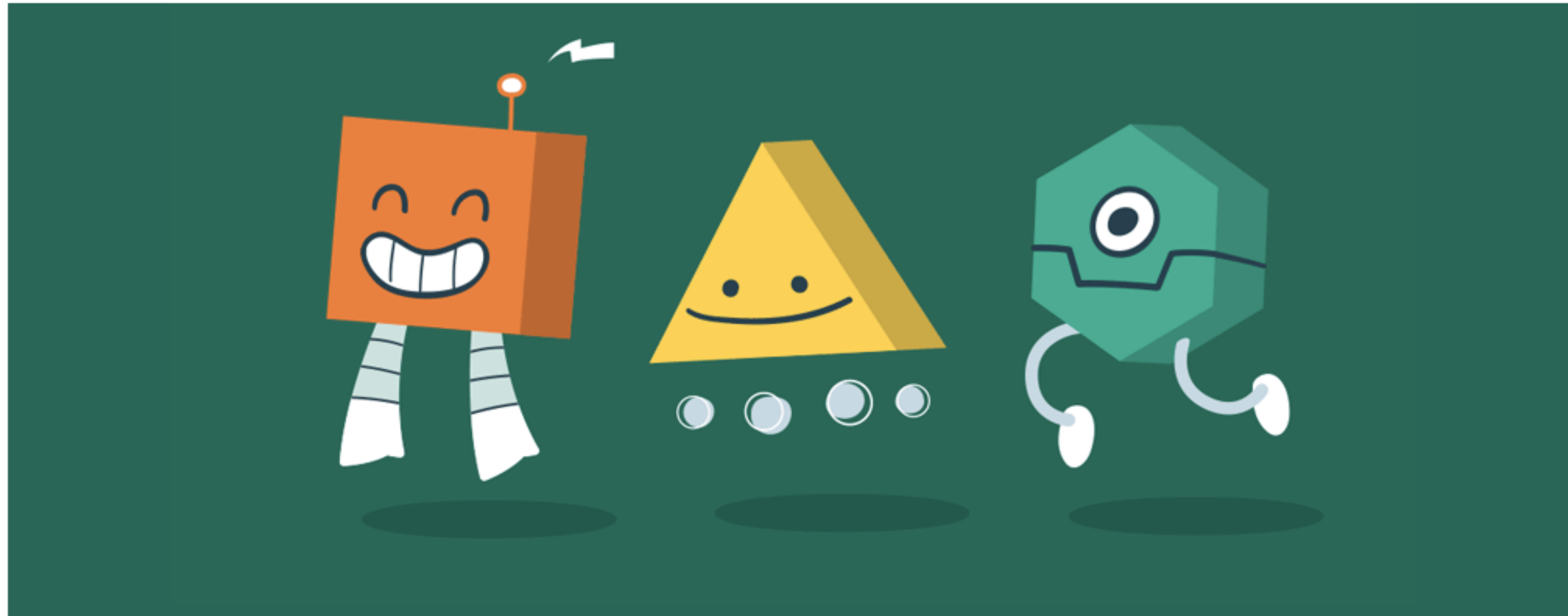
- CSS:

```
.u-release {  
  margin-left: calc(-50vw + 50%);  
  margin-right: calc(-50vw + 50%);  
}
```



When the height or width of the initial containing block is changed, they are *scaled* accordingly. Note that the initial containing block's size is *affected* by the presence of scrollbars on the viewport.



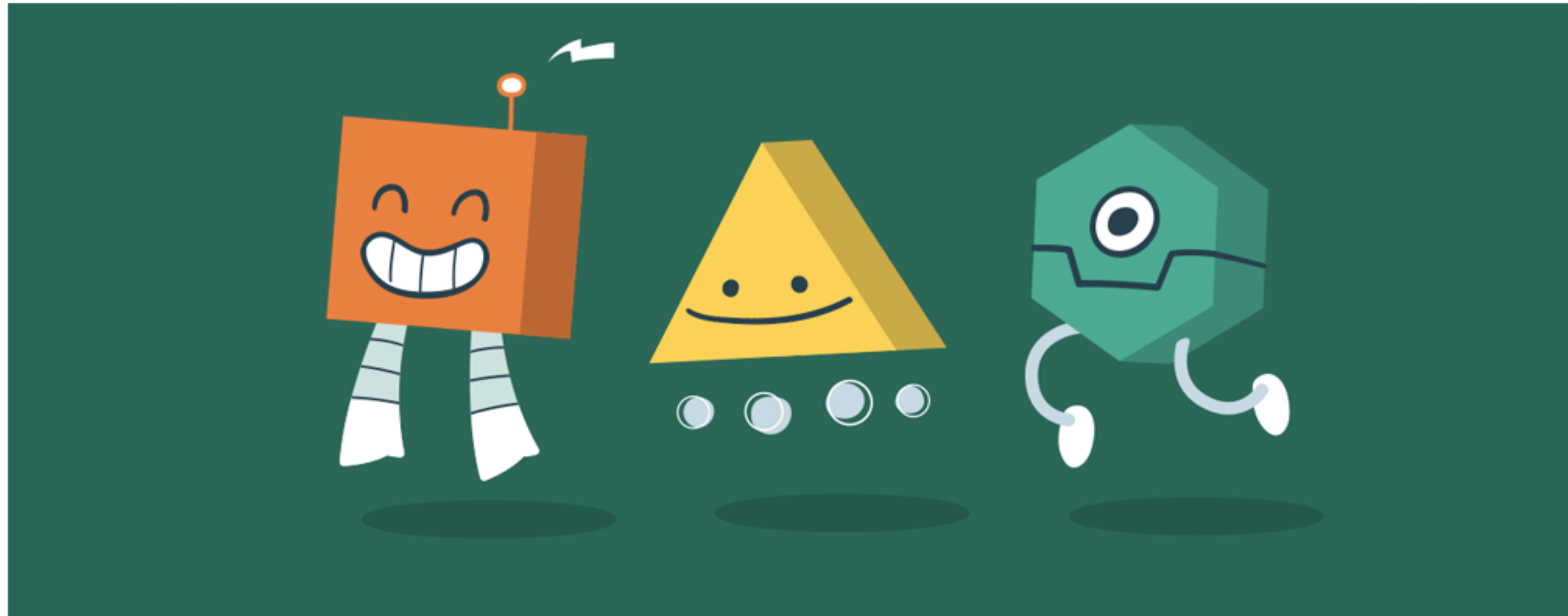


- HTML:

```
<div class="u-containProse">  
  <p>...</p>  
    
  <p>...</p>  
</div>
```

- CSS:

```
.u-release {  
  margin-left: calc(-50vw + 50%);  
  margin-right: calc(-50vw + 50%);  
}
```



- HTML:

```
<div class="u-containProse">  
  <p>...</p>  
    
  <p>...</p>  
</div>
```

- CSS:

```
.u-release {  
  margin-left: calc(-50vw + 50%);  
  margin-right: calc(-50vw + 50%);  
}  
  
html, body {  
  overflow-x: hidden;  
}
```

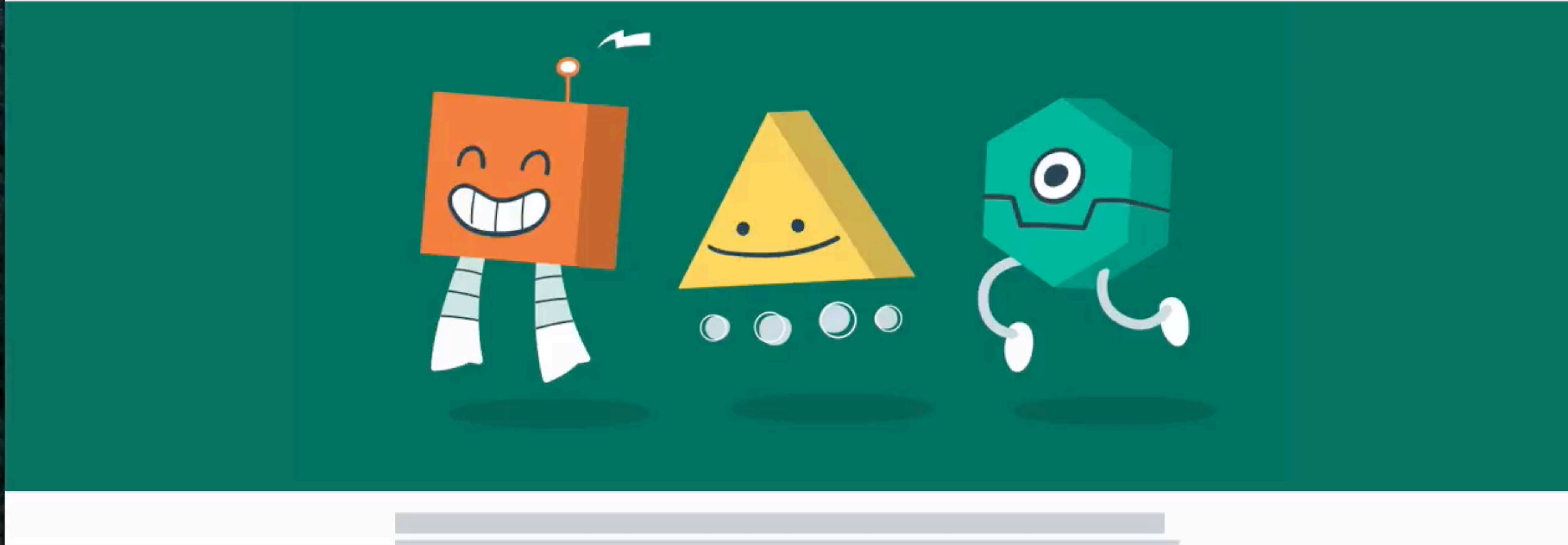
# Full-width element in fixed-width container example

A PEN BY Tyler Sticka

Fork Settings Change View Log In Sign Up

```
HTML
1 <div class="u-containProse">
2 <p>Lorem ipsum dolor sit amet,
consectetur adipiscing elit. Donec
lobortis enim sit amet metus laoreet, ut

CSS
1 html,
2 body {
3   overflow-x: hidden;
4 }
```





We push the container to the exact *middle* of the browser window with *left: 50%*, then pull it back to the left edge with *-50vw* margin (h/t Sven Wolfermann).

- CSS:

```
.u-release {  
  width: 100vw;  
  position: relative;  
  left: 50%;  
  right: 50%;  
  margin-left: -50vw;  
  margin-right: -50vw;  
}
```

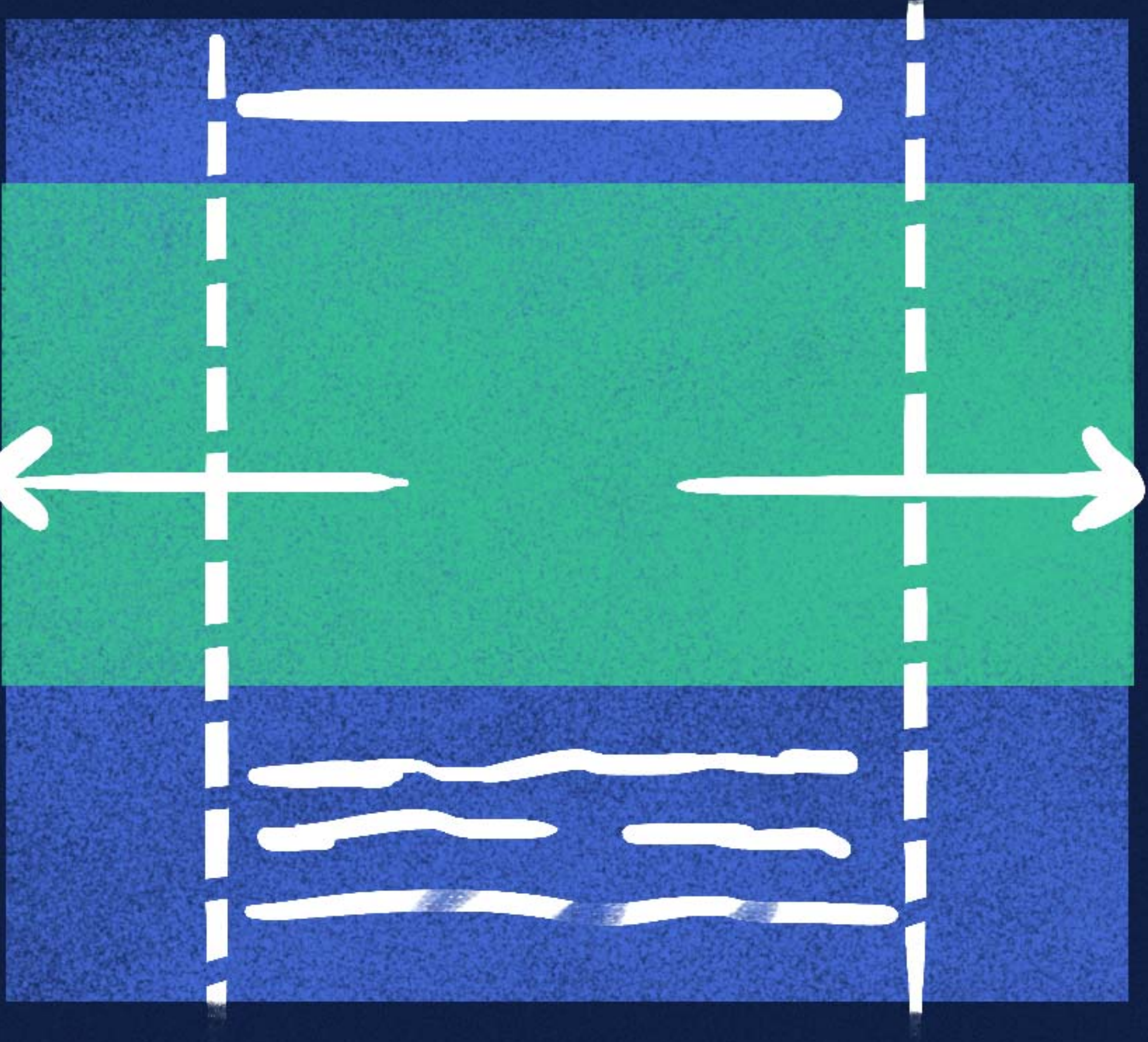
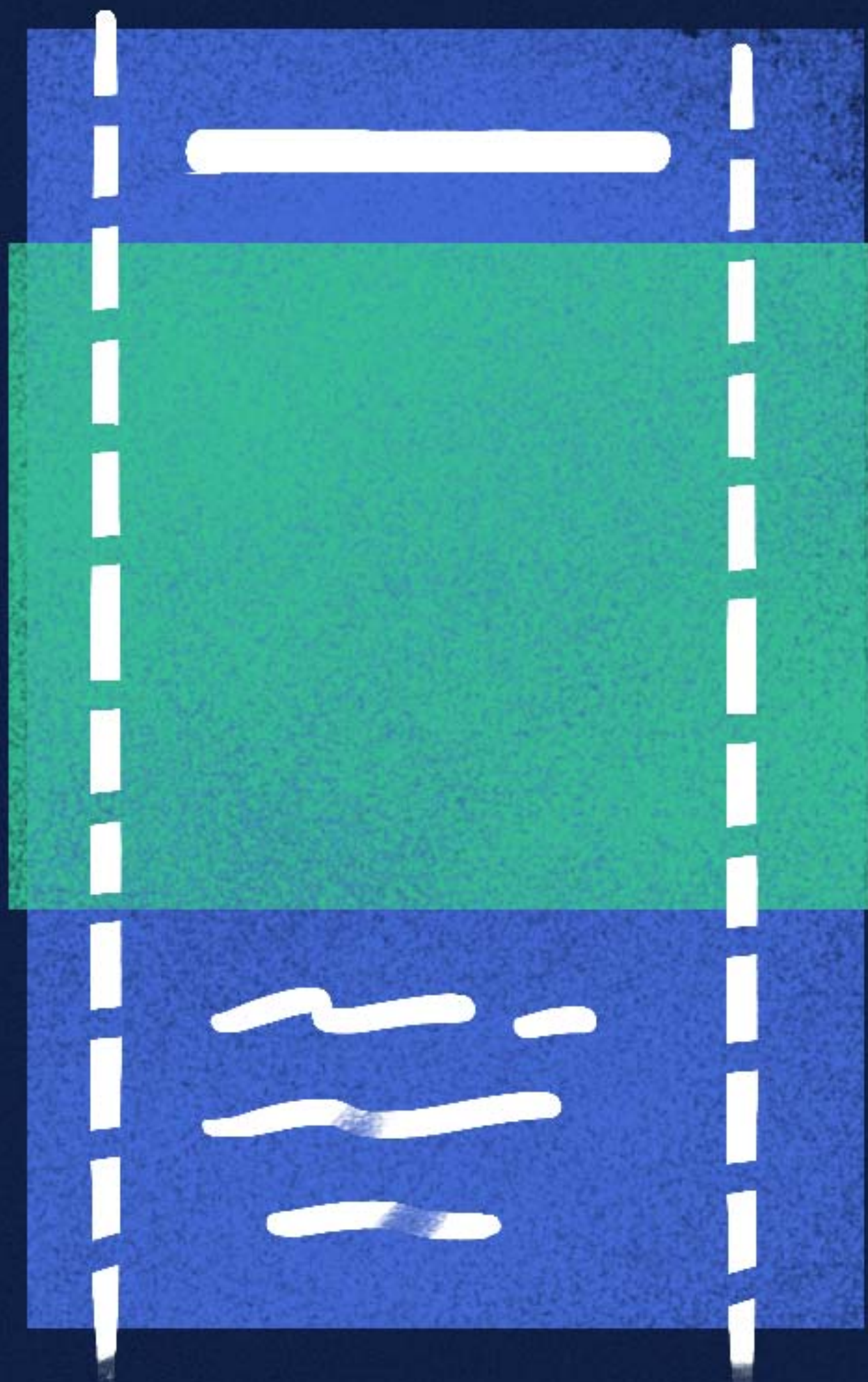
Breaking Out With Viewport Units and Calc

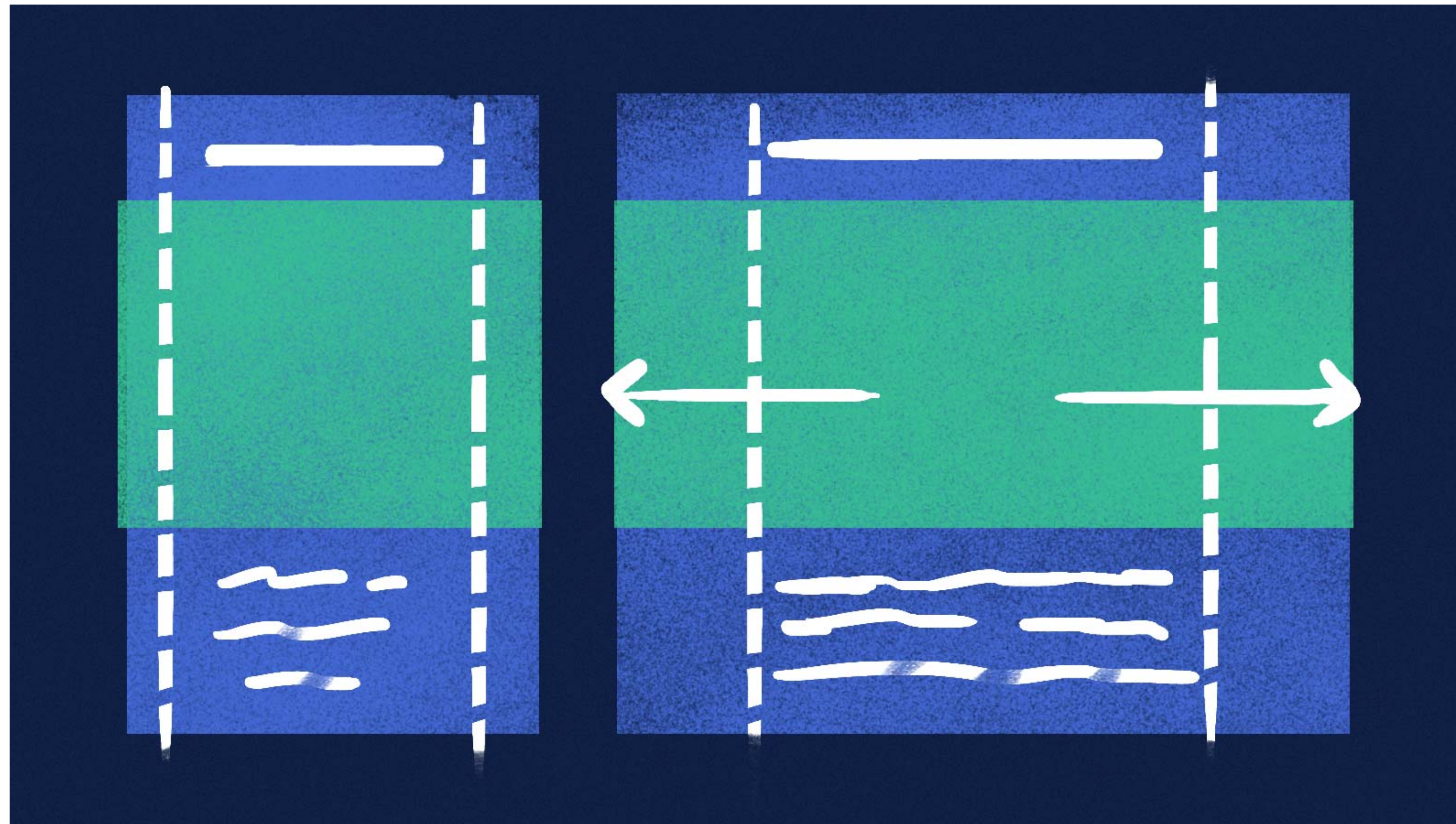
Written by [Tyler Sticka](#) on May 26, 2016

While iterating on [a new article layout](#) for [the impending Cloud Four redesign](#), I encountered an old CSS layout problem.

For long-form content, it's usually a good idea to [limit line lengths](#) for readability. The most straightforward way to do that is to wrap the post content in a containing element:

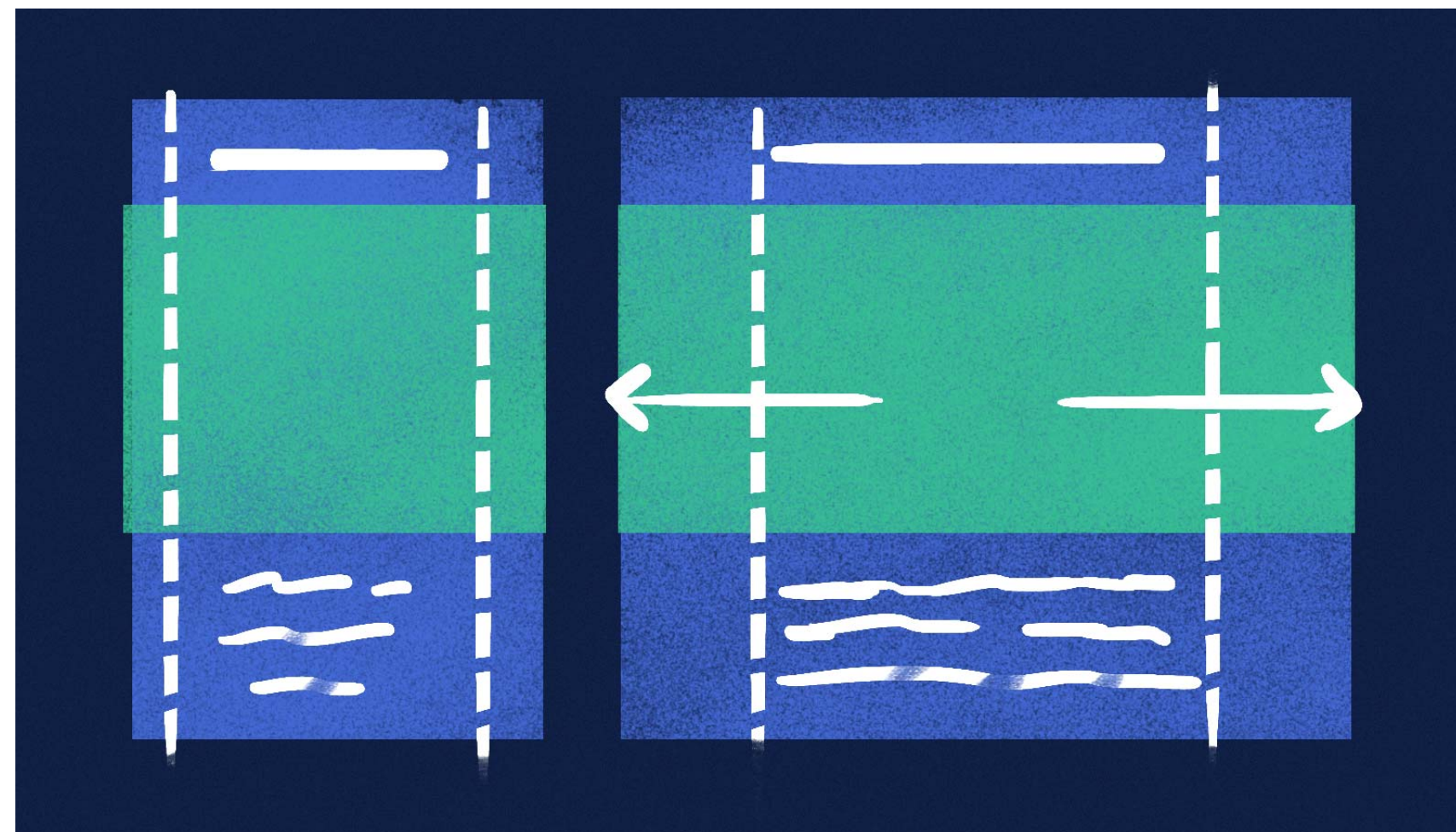
```
.u-containProse {  
  max-width: 40em;  
  margin-left: auto;  
  margin-right: auto;  
}
```





- CSS:

```
@supports (display: grid) {  
  .u-container { display: grid; }  
}
```



- CSS:

```
@supports (display: grid) {  
  .u-container {  
    display: grid;  
    grid-template-columns:  
      [full-start] minmax(1em, 1fr)  
      [main-start] minmax(0, 40em) [main-end]  
      minmax(1em, 1fr) [full-end];  
  }  
}
```



`minmax(1em, 1fr)`

`minmax(0, 40em)`

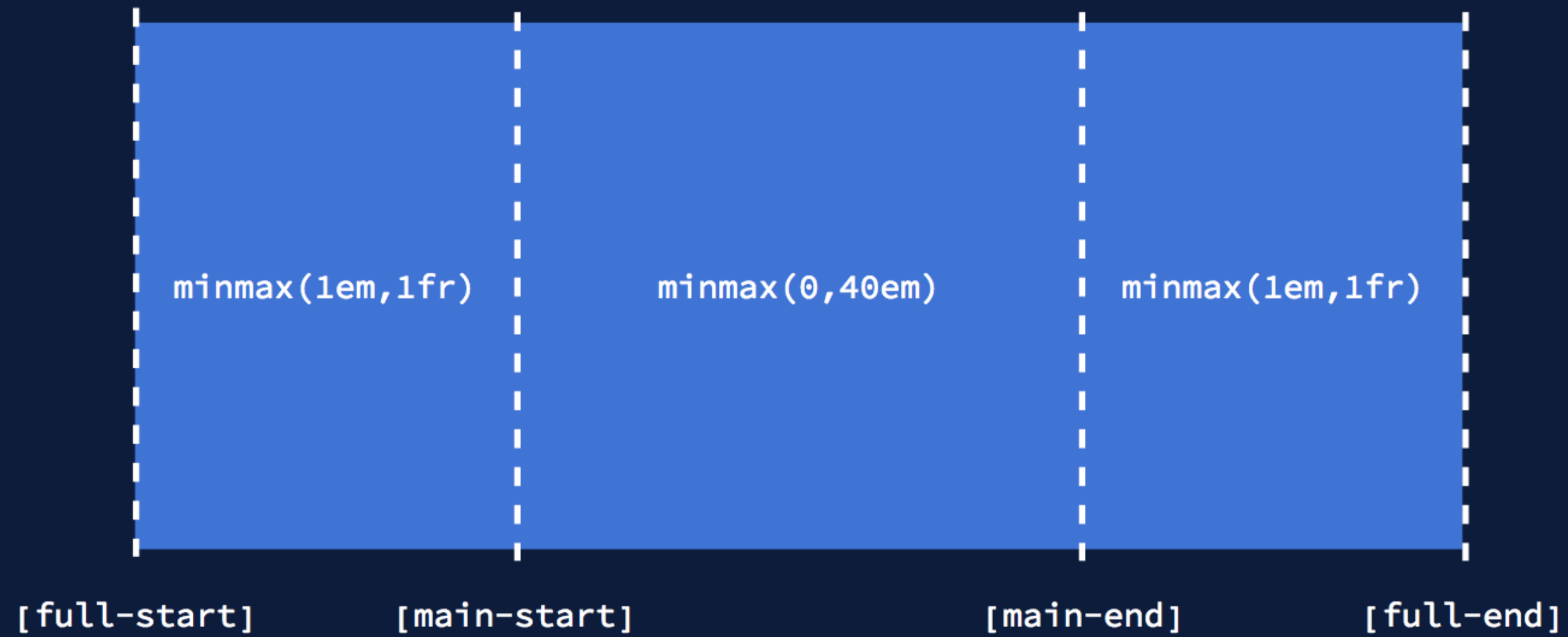
`minmax(1em, 1fr)`

`[full-start]`

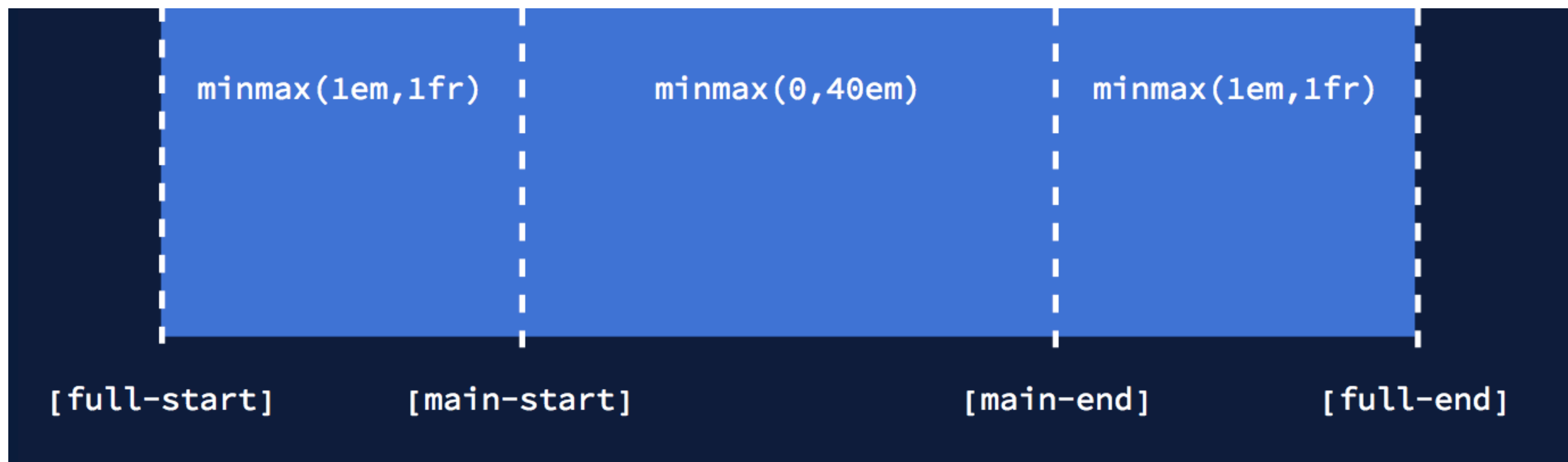
`[main-start]`

`[main-end]`

`[full-end]`



```
.u-container {  
  display: grid;  
  grid-template-columns:  
    [full-start] minmax(1em, 1fr)  
    [main-start] minmax(0, 40em) [main-end]  
    minmax(1em, 1fr) [full-end];  
}
```

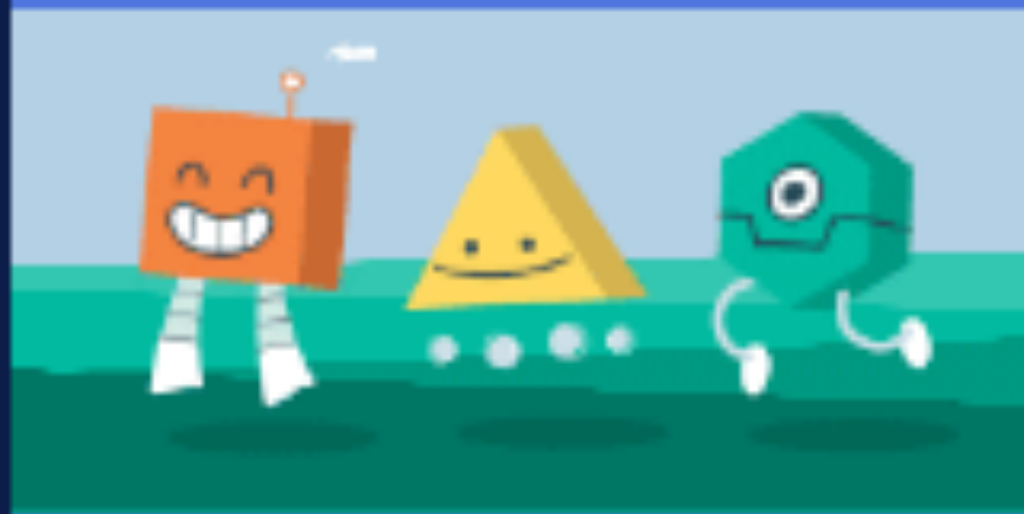


- CSS:

```
@supports (display: grid) {
  .u-container {
    display: grid;
    grid-template-columns:
      [full-start] minmax(1em, 1fr)
      [main-start] minmax(0, 40em)
      [main-end] minmax(1em, 1fr)
      [full-end];
  }
}
```

```
@supports (display: grid) {
  .u-container > * {
    grid-column: main;
  }
  .u-release {
    grid-column: full;
  }
}
```

[Redacted text block]



[Redacted text block]

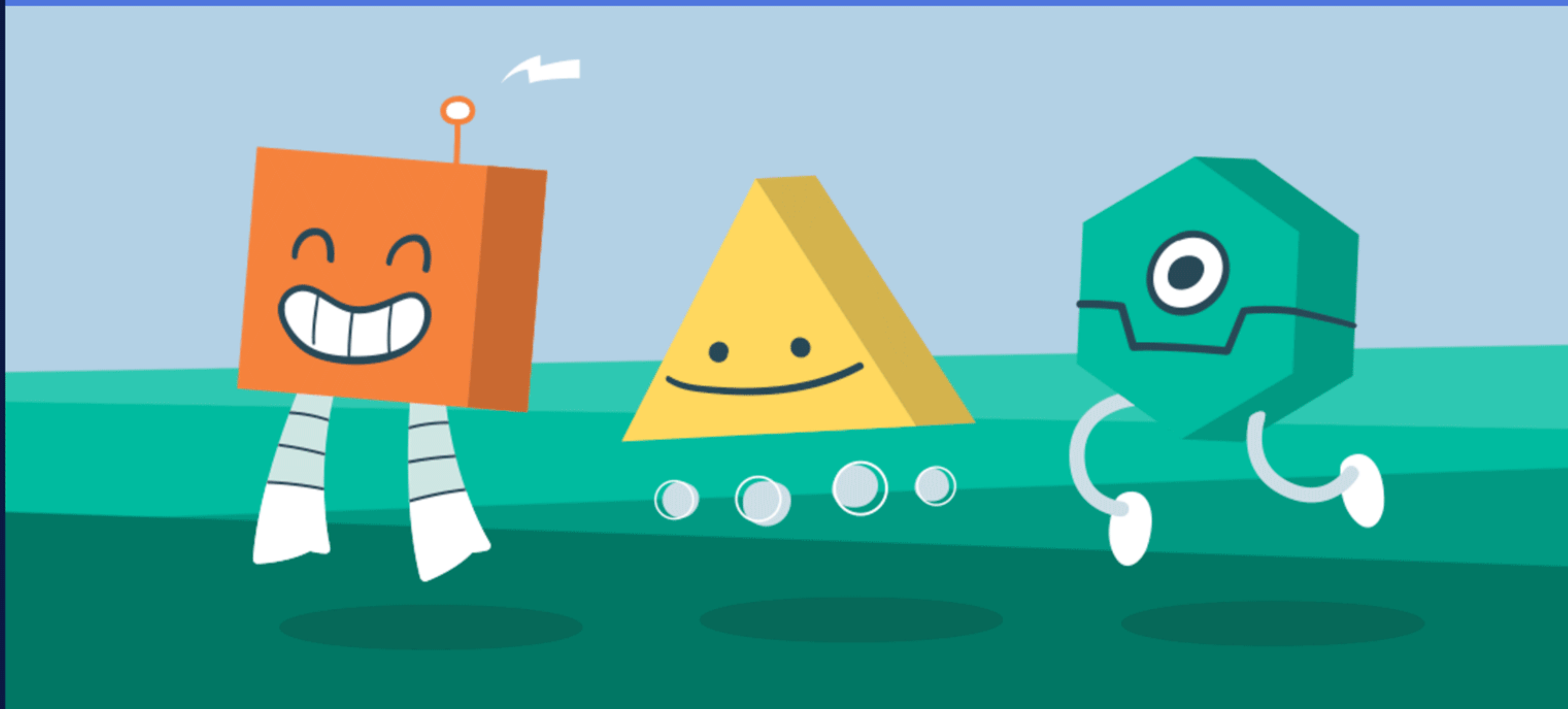
[Redacted text block]

# Demo

First Item

Second Item

Third Item



[Redacted text block]

[Redacted text block]

```
var demo = true;  
console.log('Hello world!');
```



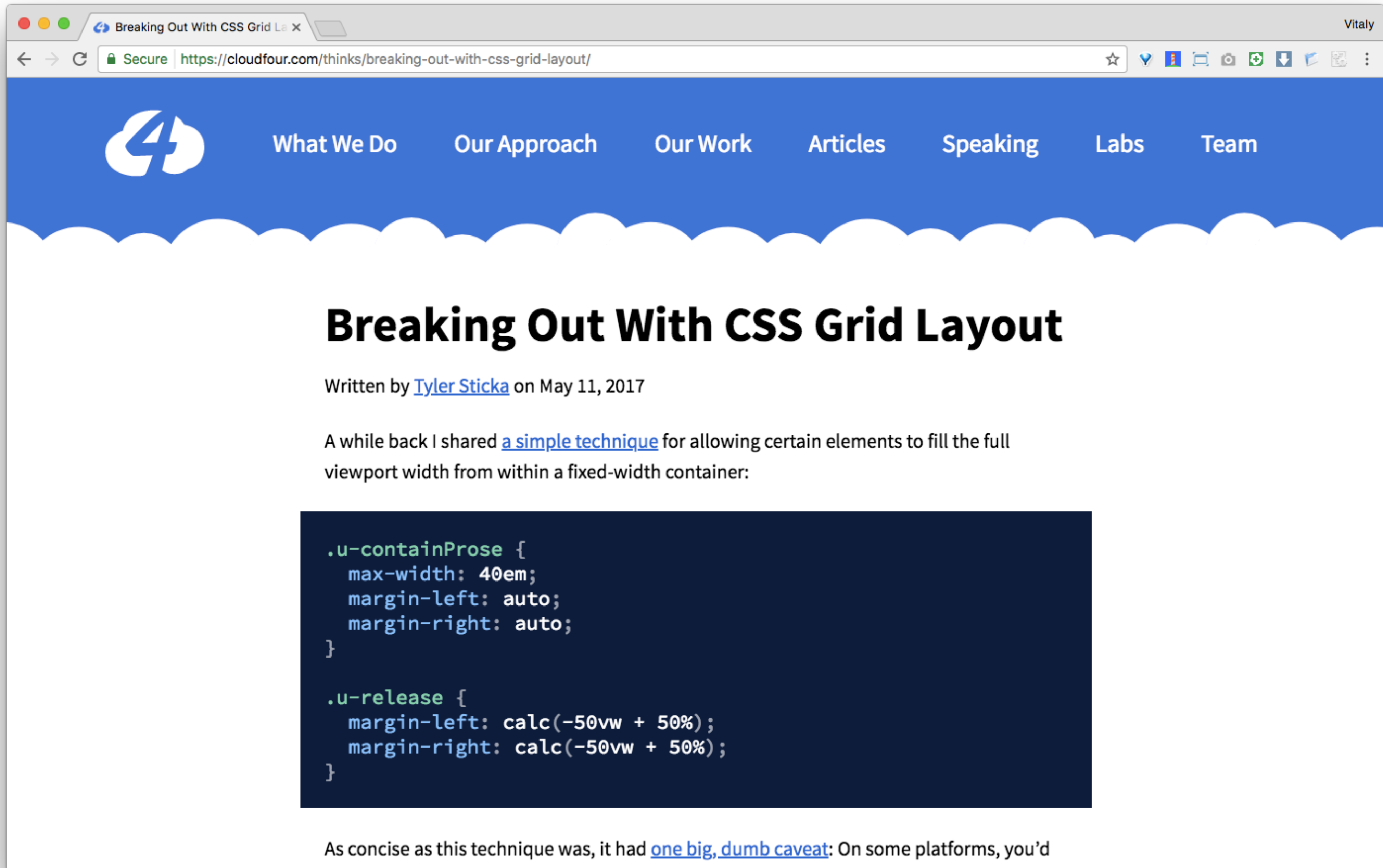
© Win Goodbody

Jason conducts a panel discussion with Sophie Shepherd, Val Head and Brad Frost at Responsive Field Day.



*Downsides:* You can't *float* immediate children of an element with *display: grid*. Plus, you'll need to use other techniques as fallback for browsers not supporting CSS Grid.





What We Do

Our Approach

Our Work

Articles

Speaking

Labs

Team

# Breaking Out With CSS Grid Layout

Written by [Tyler Sticka](#) on May 11, 2017

A while back I shared [a simple technique](#) for allowing certain elements to fill the full viewport width from within a fixed-width container:

```
.u-containProse {  
  max-width: 40em;  
  margin-left: auto;  
  margin-right: auto;  
}  
  
.u-release {  
  margin-left: calc(-50vw + 50%);  
  margin-right: calc(-50vw + 50%);  
}
```

As concise as this technique was, it had [one big, dumb caveat](#): On some platforms, you'd

- Content is positioned against *grid lines*, not grid columns. They can have multiple *names*.

`grid-template-columns:`

```
[form-start input-start] minmax(200px, 3fr)
```

```
[input-end button-start] 1fr [button-end form-end];
```

- Use *Grid* for 2-dimensional problems. If you can draw a grid over a component, consider Grid. Need items to expand within a row/col? *Flexbox*.

Flexbox Froggy - A game for le X Vitaly

Secure | <https://flexboxfroggy.com>

# FLEXBOX FROGGY

Level 1 of 24


Welcome to Flexbox Froggy, a game where you help Froggy and friends by writing CSS code! Guide this frog to the lilypad on the right by using the `justify-content` property, which aligns items horizontally and accepts the following values:

- `flex-start`: Items align to the left side of the container.
- `flex-end`: Items align to the right side of the container.
- `center`: Items align at the center of the container.
- `space-between`: Items display with equal spacing between them.
- `space-around`: Items display with equal spacing around them.

For example, `justify-content: flex-end;` will move the frog to the right.

```
1 #pond {
2   display: flex;
3   _____
4 }
5
6
7
8
9
10
```

Next



Flexbox Froggy is created by [Thomas Park](#) • [GitHub](#) • [Twitter](#) • [English](#)

<http://blogs.igalia.com/mrego/2016/02/01/deep-dive-into-grid-layout-placement/>

Chapter 1 | geddski x Vitaly

flexboxzombies.com/courses/139425/lectures/2547577

0% COMPLETE

- Wake Up
- Aiming East (flex-direction: row)
- Aiming West (flex-direction: row-reverse)
- Aiming South (flex-direction: column)
- Aiming North (flex-direction: column-reverse)
- Creator of the Crossbow

**Chapter 2: The Justify Laser (justify-content)**

- Chapter 2
- Rise and Shine
- First Kill
- The Justify Laser (justify-

# Chapter One: I See You Found my Crossbow

(flex-direction)

Begin

<http://blogs.igalia.com/mrego/2016/02/01/deep-dive-into-grid-layout-placement/>

Aiming West (flex-direction: row-reverse) X

Vitaly


flexboxzombies.com/courses/139425/lectures/2547650

0% COMPLETE

- Aiming West (flex-direction: row-reverse)
- Aiming South (flex-direction: column)
- Aiming North (flex-direction: column-reverse)
- Creator of the Crossbow

### Chapter 2: The Justify Laser (justify-content)

- Chapter 2
- Rise and Shine
- First Kill
- The Justify Laser (justify-content)
- East Distance Shot (justify-content: flex-end)



But we can aim the crossbow in any direction we want, using the `flex-direction` setting.

```
1 crossbow {  
2   display: flex;  
3   |  
4 }
```

Grid Garden - A game for learn X

cssgridgarden.com

# GRID GARDEN


Level 1 of 28

Welcome to Grid Garden, where you write CSS code to grow your carrot garden!  
Water only the areas that have carrots by using the `grid-column-start` property.

For example, `grid-column-start: 3;` will water the area starting at the 3rd vertical grid line, which is another way of saying the 3rd vertical border from the left in the grid.

```
1 #garden {
2   display: grid;
3   grid-template-columns: 20% 20% 20% 20% 20%;
4   grid-template-rows: 20% 20% 20% 20% 20%;
5 }
6
7 #water {
8   
9 }
10
11
12
13
14
```

Next



Grid Garden is created by [Thomas Park](#) • [GitHub](#) • [Twitter](#) • [English](#)

http://blogs.igalia.com/mrego/2016/02/01/deep-dive-into-grid-layout-placement/

# Grid by Example

A collection of usage examples for the CSS Grid Layout specification.

[What is Grid Layout?](#)

[Learn Grid Layout](#)

[Browser Support](#)

[Resources](#)

[Blog](#)

## CSS Grid Layout

The CSS Grid Layout specification is one of a few new specifications that are redefining how we approach layout for the web. Alongside Flexbox and the Box Alignment Module it will become part of a modern layout system for websites and web applications.

This site is growing collection of [examples](#) and [video](#), with the aim of helping people understand how Grid Layout works.

Grid is starting to ship in browsers. If your browser doesn't have support you may need to

### Get Started with Grid

#### A simple grid



The simplest example. Create a three column grid. Grid Layout will auto place items one in each cell.

**Logic Fold.**



“ With *CSS Custom Properties*, we now can separate logic from design, effectively separating variable declarations from property declarations. Because logic lives above design then, I like to call this separation *logic fold*.

— *Mike Riethmueller*

<https://vimeo.com/235428198>

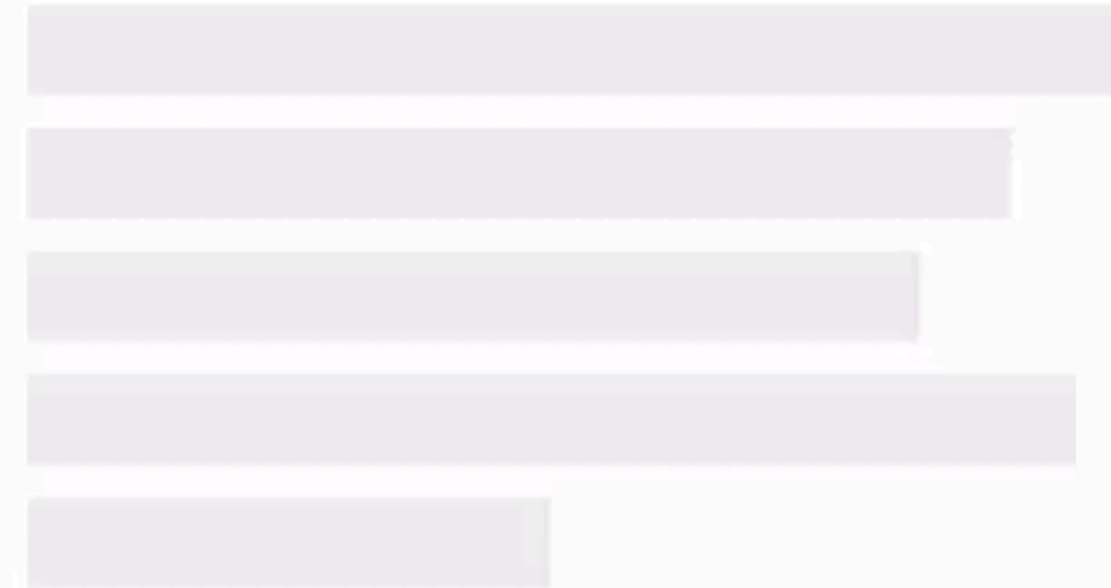
# Coming Up Next in Membership



*With the Membership, there is a goldfish to catch every month.*

WED, NOV 1, 2:00PM CET **SMASHING**

## Super-Early-Bird Tickets Release



WED, NOV 15 **SUPPORTER**

## Webinar: Debugging in DevTools



FRI, NOV 24 **MEMBER**

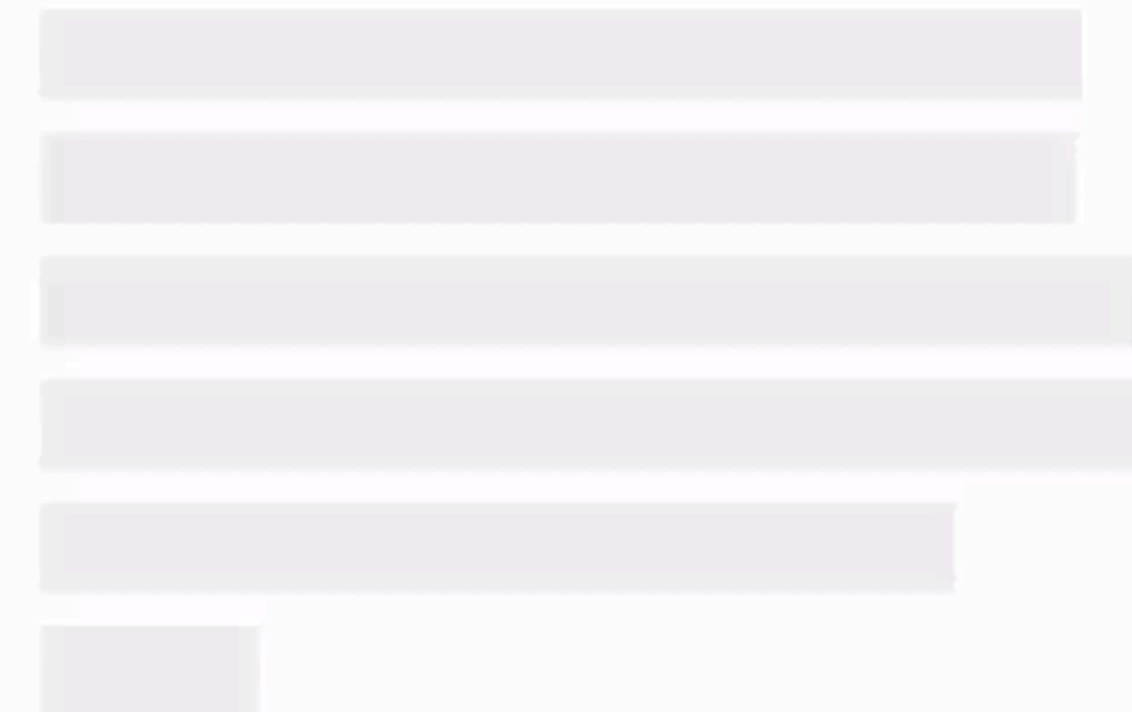
TUE, NOV 7

## [Smashing TV Live @ BTConf, Berlin](#)

3h live stream with interviews behind the scenes, incl. Paula Scher, Dave Rupert, Elliot Jay Stocks. Start: 10:00 CET. [Check the schedule.](#)

MON, NOV 20 **MEMBER**

## New eBook: Design Systems



TUE, NOV 28 **SMASHING**



```
<ul class="promo-boxes promo-boxes__coming-up">
  <li class="for-members">
    <a href="design-systems.html">
      <time>...</time>
      <h4>...</h4>
      <p>...</p>
    </a>
  </li>

  <li class="for-supporters">
    <a href="new-webinars.html">
      <time>...</time>
      <h4>...</h4>
      <p>...</p>
    </a>
  </li>
  ...
</ul>
```

# Defining The Fold

```
.promo-boxes {  
  --box-color: $dark-grey;  
  --box-bg: #fff;  
  
  .high-contrast & {  
    --box-color: $black;  
  }  
}  
  
.promo-boxes__box.for-members:not(.for-supporters) {  
  --box-bg: lighten($green, 49%);  
}  
  
.promo-boxes__box.for-supporters:not(.for-free) {  
  --box-bg: lighten($blue, 49%);  
}
```

```
.promo-boxes {
  --box-color: $dark-grey;
  --box-bg: #fff;

  .high-contrast & {
    --box-color: $black;
  }
}

.promo-boxes__box.for-members:not(.for-supporters) {
  --box-bg: lighten($green, 49%);
}

.promo-boxes__box.for-supporters:not(.for-free) {
  --box-bg: lighten($blue, 49%);
}

.promo-boxes__box > .label {
  background-color: var(--box-bg, #fff);
  color: var(--box-color, $dark-grey);
}
```

```
.high-contrast & {
  --box-color: $black;
}
}

.promo-boxes__box.for-members:not(.for-supporters) {
  --box-bg: lighten($green, 49%);
}

.promo-boxes__box.for-supporters:not(.for-free) {
  --box-bg: lighten($blue, 49%);
}

.promo-boxes__box > .label {
  background-color: var(--box-bg, #fff);
  color: var(--box-color, $dark-grey);
}

.promo-boxes__box {
  background-color: rgba(var(--box-bg), .77);
  color: currentColor;
}
```

```
.high-contrast & {
  --box-color: $black;
}
}

.promo-boxes__box.for-members:not(.for-supporters) {
  --box-bg: lighten($green, 49%);
}

.promo-boxes__box.for-supporters:not(.for-free) {
  --box-bg: lighten($blue, 49%);
}

.promo-boxes__box > .label {
  background-color: var(--box-bg, #fff);
  color: var(--box-color, $dark-grey);
}

.promo-boxes__box {
  background-color: #fff;
  background-color: rgba(var(--box-bg), .77);
  color: currentColor;
}
```

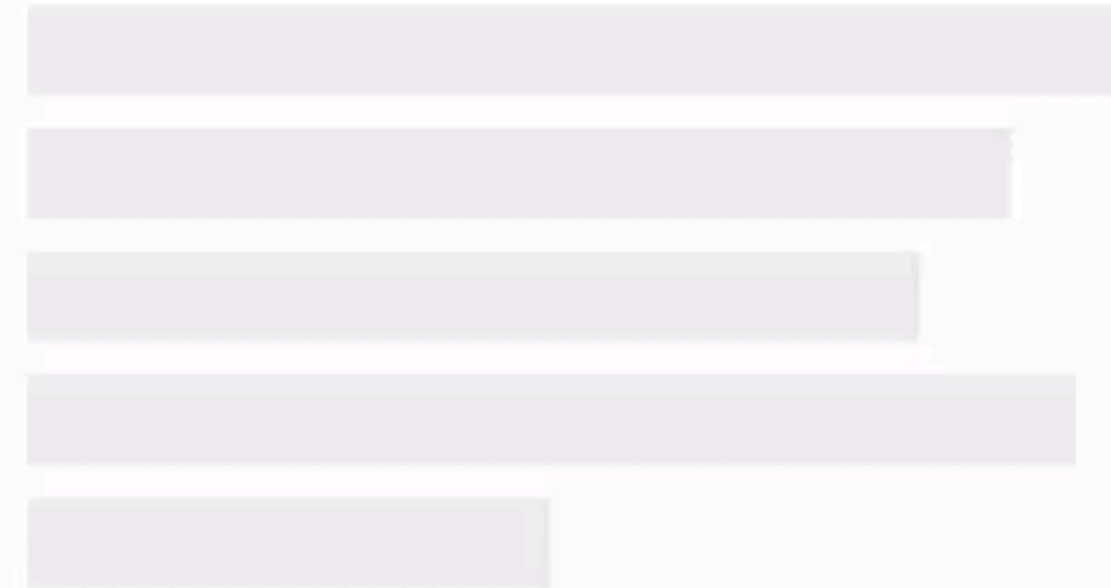
# Coming Up Next in Membership



*With the Membership, there is a goldfish to catch every month.*

WED, NOV 1, 2:00PM CET **SMASHING**

## Super-Early-Bird Tickets Release



WED, NOV 15 **SUPPORTER**

## Webinar: Debugging in DevTools



FRI, NOV 24 **MEMBER**

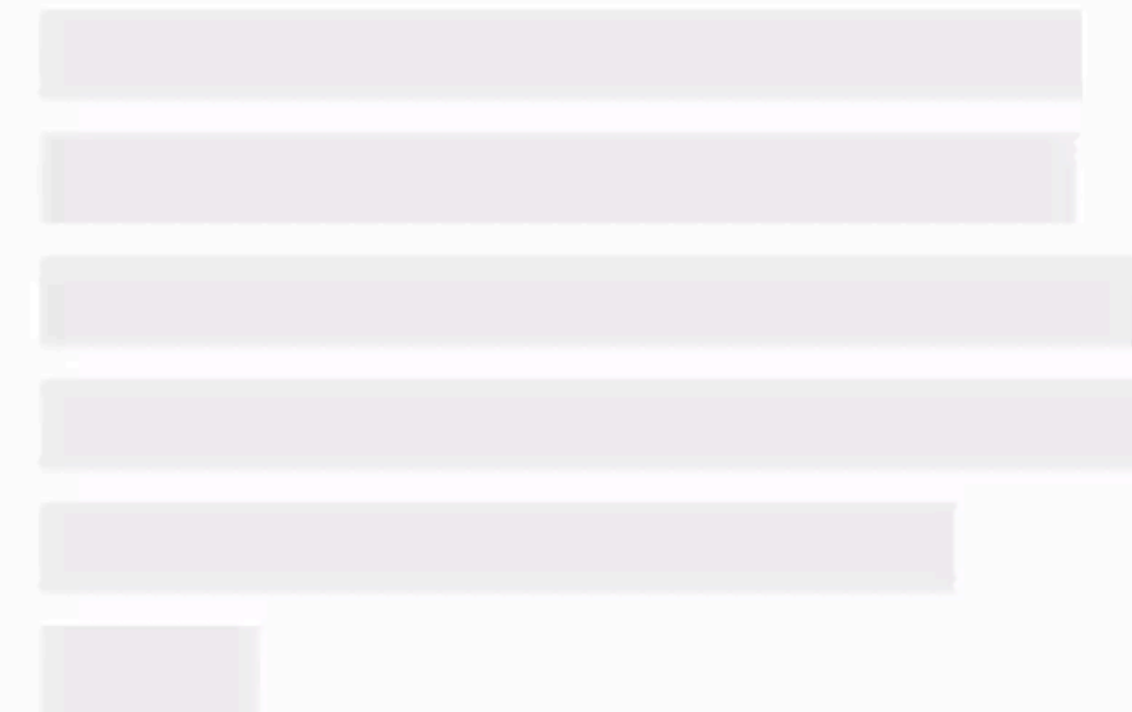
TUE, NOV 7

## [Smashing TV Live @ BTConf, Berlin](#)

3h live stream with interviews behind the scenes, incl. Paula Scher, Dave Rupert, Elliot Jay Stocks. Start: 10:00 CET. [Check the schedule.](#)

MON, NOV 20 **MEMBER**

## New eBook: Design Systems



TUE, NOV 28 **SMASHING**





WED, NOV 1, 2:00PM CET

SMASHING

## Super-Early-Bird Tickets Release

[Redacted]

[Redacted]

[Redacted]

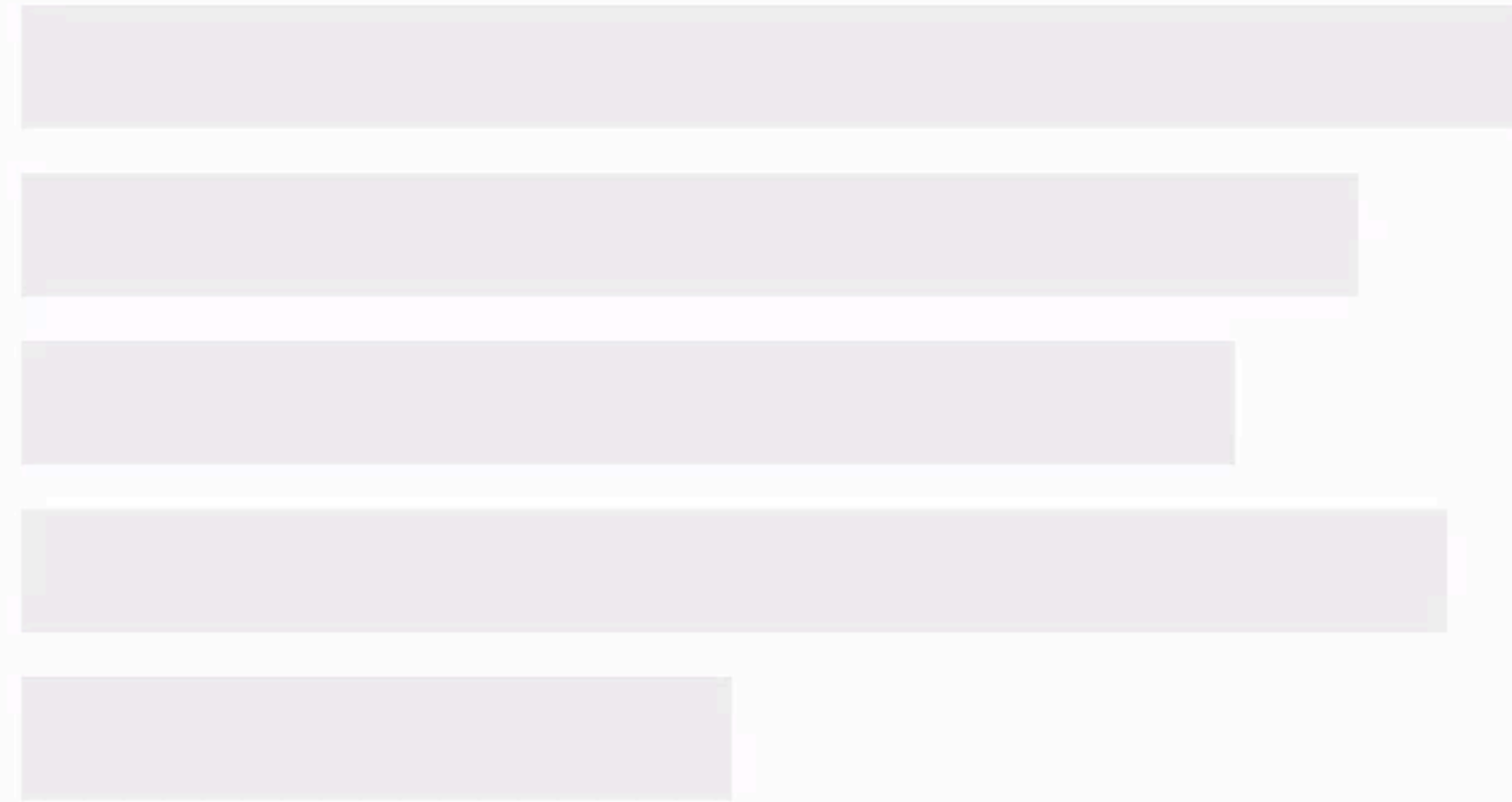
[Redacted]

[Redacted]

WED, NOV 1, 2:00PM CET

SMASHING

## Super-Early-Bird Tickets Release



```
.promo-boxes__box {  
  background-image: linear-gradient(to right,  
    #ccc 50%, var(--box-bg) 50%);  
  background-position: 0;  
  background-size: 200%;  
  opacity: 0;  
  transition: all .3s ease-in-out;  
}  
  
.promo-boxes__box:hover {  
  background-position: -100%;  
  opacity: 1;  
}
```

# # CSS Variables (Custom Properties) - CR

Global

76.6% + 1.52% = 78.11%

Permits the declaration and usage of cascading variables in stylesheets.

Current aligned	Usage relative	Date relative	Show all							
IE	Edge *	Firefox	Chrome	Safari	Opera	iOS Safari *	Opera Mini *	Android Browser *	Chrome for Android	
			49			10.2				
		55	60	10.1	47	10.3		4.4		
11	<sup>2</sup> 15	56	61	11	48	11	all	56	61	
	16	57	62	TP	49					
		58	63		50					
		59	64							

Notes Known issues (3) Resources (8) Feedback

- In Edge 15, nested calculations with css variables are not computed and are ignored [see bug](#)
- In Edge 15 animations with css variables may cause the webpage to crash [see bug](#)
- In Edge 15 is not possible to use css variables in pseudo elements [see bug](#)



WES  
BOS

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YouTube 30K

**ES6** FOR EVERYONE  
 I just launched a new course on ES6! Use the code *WESBOS* for \$10 off.  
 Strengthen your core JavaScript skills and master all that ES6 has to offer.  
[Start Now →](#)

# CSS Highlight on Hover Animation

JAN 20 2016

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CHECK OUT REACT FOR BEGINNERS

ARE YOU A SUBLIME TEXT POWER USER?

I LOVE TO LEARN!

I SURE DO LOVE

**Vertical rhythm.**

“ So you want to implement *baseline rhythm in CSS*. Insert two differently formatted elements next to each other and they'll seem out of phase. How do we bring them under control?

## Quote of the day

Success usually comes to those who are too busy to be looking for it. —J.H. Thoreau

Change

Last updated: yesterday

MISAPPLIED CONCEPT

## Quote of the day

Success usually comes to those who are too busy to be looking for it. —J.H. Thoreau

Change

Last updated: yesterday

JUST RIGHT

Often we define a common *line height* value (or its multiple) that's used for all elements, including their *padding*s and *margins*, occasionally taking *border widths* into the equation.



What if we *align the baseline* instead?  
So that all type—regardless of its size—  
lies on the same *grid line*? We just need  
to calculate the *offset* and then shift the  
content by that offset.

## Quote of the day

Success usually comes to those who are too busy to be looking for it. —J.H. Thoreau

Change

Last updated: yesterday

MISAPPLIED CONCEPT

## Quote of the day

Success usually comes to those who are too busy to be looking for it. —J.H. Thoreau

Change

Last updated: yesterday

JUST RIGHT

By default, browsers *center the cap height* between grid lines (the height of a capital letter above the baseline). So we shift it by *half* the difference between line height and cap height.

To determine the *cap height*, we fiddle with *offset values* until the type is properly aligned with the grid.

- vertical-rhythm.scss:

```
$line-height: 24px;
```

```
$font-stacks: (  
    s: $font-stack-text,  
    m: $font-stack-text,  
    l: $font-stack-display,  
    xl: $font-stack-display  
);
```

```
$font-sizes: (s: 13px, m: 15px, l: 19px, xl: 27px);
```

```
$cap-heights: (s: 0.8, m: 0.8, l: 0.68, xl: 0.68);
```

```
$line-height: 24px;
```

```
$font-stacks: (  
    s: $font-stack-text,  
    m: $font-stack-text,  
    l: $font-stack-display,  
    xl: $font-stack-display  
);
```

```
$font-sizes: (s: 13px, m: 15px, l: 19px, xl: 27px);
```

```
$cap-heights: (s: 0.8, m: 0.8, l: 0.68, xl: 0.68);
```

```
@function rhythm-shift($size-name) {  
    $font-size: map-get($font-sizes, $size-name);  
    $cap-height: map-get($cap-heights, $size-name);  
    $offset: ($line-height - $cap-height * $font-size) / 2;  
    return round($offset);  
}
```

Now we just need to *apply the offset*,  
and do so reliably. We can combine  
*positive* top margin and *negative*  
bottom margin to make it work.

```
$offset: rhythm-shift(m);  
  
.rhythm-m {  
    margin-top: $offset;  
    margin-bottom: -1 * $offset;  
}
```



- *Collapsing* works differently with positive and negative margins:
  - *Two positive margins*  
The bigger one wins.
  - *Two negative margins*  
The lower (i.e. the *more negative*) wins.
  - *One positive, one negative margin*  
The margins *sum up*.

If an element doesn't have a *border* nor *padding*, and its first child has a margin, that margin will *flow out* of the parent. Use *overflow: hidden*.




Implementing baseline rhythm x

https://pilot.co/blog/implementing-baseline-rhythm-in-css/

Pilot Blog Pilot Guides

# Implementing baseline rhythm in CSS

WRITTEN BY JAN DUDEK






15 JUNE 2016

**V**ertical rhythm is a typographic concept that's so often misunderstood by front-end engineers.

---

By aligning type to a vertical grid, designers can make their work look harmonious and clean. And by having the same visual rhythm implemented correctly, front-end architects can achieve consistent, good-looking results more easily and in shorter time. All that without the need for designers' input in the process.



```
<article>
```

```
<h2>Vertical Rhythm With Holy.js</h2>
```

```
<p>Imagine that you're tasked with building or managing  
a website containing a real-estate agency's portfolio.</p>
```

```
<h3>Example</h3>
```

```
<p>Let's look at a standard admin overview screen for  
custom post types.</p>
```

```
<figure class="break-out">
```

```
<a href="/"></a>
```

```
<figcaption>Image description</figcaption>
```

```
</figure>
```

```
<p>Let's look at a standard admin overview screen for  
custom post types.</p>
```

```
</article>
```

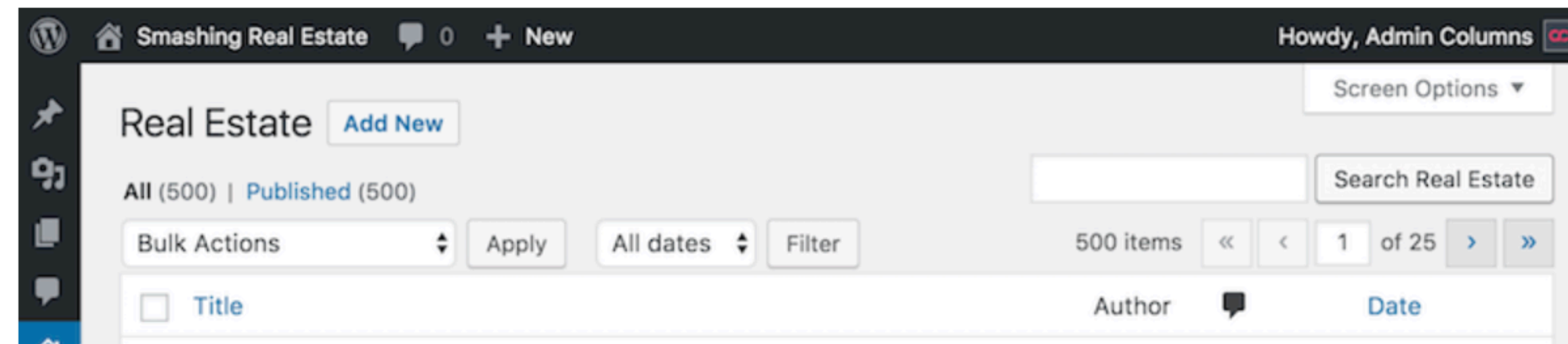
# Vertical Rhythm With CSS Grid

Imagine that you're tasked with building or managing a website containing a real-estate agency's portfolio. On the website, you display pictures, house addresses, locations, number of rooms and other attributes. On the admin screen, you manage the portfolio, adding, removing and editing existing real estate.

The columns WordPress shows by default (title, author, publication date, number of comments) are hardly relevant for your real-estate website, and you'd be more interested in seeing the existing pictures and information about the real-estate listings as a whole.

## Example

Let's look at a standard admin overview screen for custom post types:



# Defining The Fold

```
html {  
  font-size: 100%;  
}  
  
body {  
  font-size: calc(1rem + .75vmin);  
  line-height: calc(1.35rem + 1.5vmin);  
}  
  
:root {  
  --gutter: 1rem + 2vmin;  
}
```

```
html {
  font-size: 100%;
}

body {
  font-size: calc(1rem + .75vmin);
  line-height: calc(1.35rem + 1.5vmin);
}

:root {
  --gutter: 1rem + 2vmin;
}

@supports (display: grid) {
  article {
    display: grid;
    grid-template-columns:
      [full-width-start] 1fr
      [content-start] repeat(12, minmax(0, 4.85ch))
      [content-end] 1fr
      [full-width-end];
    grid-row-gap: calc(var(--gutter), 1.5em);
  }
}
```



*ch (character unit)* represents the width of the character 0 in the current font, of particular use in combination with monospace fonts.

# Vertical Rhythm With CSS Grid

Imagine that you're tasked with building or managing a website containing a real-estate agency's portfolio. On the website, you display pictures, house addresses, locations, number of rooms and other attributes. On the admin screen, you manage the portfolio, adding, removing and editing existing real estate.

The columns WordPress shows by default (title, author, publication date, number of comments) are hardly relevant for your real-estate website, and you'd be more interested in seeing the existing pictures and information about the real-estate listings as a whole.

## Example

Let's look at a standard admin overview screen for custom post types:

# Vertical Rhythm With CSS Grid

Imagine that you're tasked with building or managing a website containing a real-estate agency's portfolio. On the website, you display pictures, house addresses, locations, number of rooms and other attributes. On the admin screen, you manage the portfolio, adding, removing and editing existing real estate.

The columns WordPress shows by default (title, author, publication date, number of comments) are hardly relevant for your real-estate website, and you'd be more interested in seeing the existing pictures and information about the real-estate listings as a whole.

## Example

Let's look at a standard admin overview screen for custom post types:



# ch (character) unit - CR

Global

90.49% + 3.65% = 94.13%

Unit representing the width of the character "0" in the current font, of particular use in combination with monospace fonts.

Current aligned | Usage relative | Date relative | Show all

IE	Edge *	Firefox	Chrome	Safari	iOS Safari *	Opera Mini *	Chrome for Android	UC Browser for Android	Samsung Internet
			49						
			61		10.2				4
	15	56	62	10.1	10.3				5
<sup>1</sup> 11	16	57	63	11	11.2	all	62	11.4	6.2
	17	58	64	TP					
		59	65						
		60	66						

Notes

Known issues (0)

Resources (3)

Feedback

<sup>1</sup> IE supports the `ch` unit, but unlike other browsers its width is that specifically of the "0" glyph, not its surrounding space. As a result, `3ch` for example is shorter than the width of the string "000" in IE.

```
html {
  font-size: 100%;
}

body {
  font-size: calc(1rem + .75vmin);
  line-height: calc(1.35rem + 1.5vmin);
}

:root {
  --gutter: 1rem + 2vmin;
}

@supports (display: grid) {
  article {
    display: grid;
    grid-template-columns:
      [full-width-start] 1fr
      [content-start] repeat(12, minmax(0, 4.85ch))
      [content-end] 1fr
      [full-width-end];
    grid-row-gap: calc(var(--gutter), 1.5em);
  }
}
```

```
@supports (display: grid) {
  article {
    display: grid;
    grid-template-columns:
      [full-width-start] 1fr
      [content-start] repeat(12, minmax(0, 4.85ch))
      [content-end] 1fr
      [full-width-end];
    grid-row-gap: calc(var(--gutter, 1.5em));
  }

  article > * + * {
    margin: 0;
    grid-column: content;
  }

  article > .break-out {
    grid-column: full-width;
    justify-self: center;
    margin: calc(0.5 * var(--offset, 1.5em)) 0;
  }
}
```

```
<article>
```

```
<h2>Vertical Rhythm With Holy.js</h2>
```

```
<p>Imagine that you're tasked with building or managing  
a website containing a real-estate agency's portfolio.</p>
```

```
<h3>Example</h3>
```

```
<p>Let's look at a standard admin overview screen for  
custom post types.</p>
```

```
<figure class="break-out">
```

```
<a href="/"></a>
```

```
<figcaption>Image description</figcaption>
```

```
</figure>
```

```
<p>Let's look at a standard admin overview screen for  
custom post types.</p>
```

```
</article>
```

```
@supports (display: grid) {
  article {
    display: grid;
    grid-template-columns:
      [full-width-start] 1fr
      [content-start] repeat(12, minmax(0, 4.85ch))
      [content-end] 1fr
      [full-width-end];
    grid-row-gap: calc(var(--gutter, 1.5em));
  }

  article > * + * {
    margin: 0;
    grid-column: content;
  }

  article > .break-out {
    grid-column: full-width;
    justify-self: center;
    margin: calc(0.5 * var(--offset, 1.5em)) 0;
  }
}
```



```
article > * + * {  
  margin: 0;  
  grid-column: content;  
}
```

```
article > .break-out {  
  grid-column: full-width;  
  justify-self: center;  
  margin: calc(0.5 * var(--offset, 1.5em)) 0;  
}
```

```
}
```

```
h2 {  
  margin: calc(2 * var(--offset, 1.5em)) 0 0 0;  
  font-size: calc(1.5rem + 2.5vmin);  
  line-height: calc(2rem + 1vmin);  
}
```

```
h3 {  
  margin: calc(0.5 * var(--offset, 1.5em)) 0 0 0;  
  font-size: calc(1rem + 1.5vmin);  
}
```

# Vertical Rhythm With CSS Grid

Imagine that you're tasked with building or managing a website containing a real-estate agency's portfolio. On the website, you display pictures, house addresses, locations, number of rooms and other attributes. On the admin screen, you manage the portfolio, adding, removing and editing existing real estate.

The columns WordPress shows by default (title, author, publication date, number of comments) are hardly relevant for your real-estate website, and you'd be more interested in seeing the existing pictures and information about the real-estate listings as a whole.

## Example

Let's look at a standard admin overview screen for custom post types:



Articles

Design & development



Books

Physical & digital books



Events

Conferences & workshops



Jobs

Find work & employees



Membership

Webinars & early-birds



Topics



**You may have** heard quite a bit of talk about a CSS feature called “Grid” this year. If you are someone who cringes when you hear the words “CSS” and “grid” in the same sentence, then I highly suggest you check out this new CSS module called CSS Grid.



**ABOUT THE AUTHOR**

Chen Hui Jing is a self-taught designer and developer with an inordinate love for CSS. Reducing lines of code in her web projects makes her extremely happy. She ... [More about Huijing...](#)

DECEMBER 4, 2017 • [2 COMMENTS](#)

# Debugging CSS Grid Layouts With Firefox Grid Inspector

# [CSS](#) 231 # [CSS Grid](#) 9 # [Browsers](#) 26 # [Testing](#) 39



```
@supports (display: grid) {
  article {
    display: grid;
    grid-template-columns:
      [full-width-start] 1fr
      [content-start] repeat(12, minmax(0, 4.85ch))
      [content-end] 1fr
      [full-width-end];
    grid-row-gap: calc(var(--gutter, 1.5em));
  }

  article > * + * {
    margin: 0;
    grid-column: content;
  }

  article > .break-out {
    grid-column: full-width;
    justify-self: center;
    margin: calc(0.5 * var(--offset, 1.5em)) 0;
  }
}
```

Continue

reading



No need for silly advertising.

At this point we just



SWITCH

1243 x 601

📷 📄

⚙️ ❓

FEATURES

STOP

```
@supports (display: grid) {
  article {
    display: grid;
    grid-template-columns:
      [full-width-start] 1fr
      [content-start] repeat(12, minmax(0, 4.85ch))
      [content-end] 1fr
      [full-width-end];
    grid-row-gap: calc(var(--gutter, 1.5em));
  }

  article > * + * {
    margin: 0;
    grid-column: content;
  }

  article > .break-out {
    grid-column: full-width;
    justify-self: center;
    margin: calc(0.5 * var(--offset, 1.5em)) 0;
  }
}
```

```
@supports (grid-gap: 0) {
  article {
    display: grid;
    grid-template-columns:
      [full-width-start] 1fr
      [content-start] repeat(12, minmax(0, 4.85ch))
      [content-end] 1fr
      [full-width-end];
    grid-row-gap: calc(var(--gutter, 1.5em));
  }

  article > * + * {
    margin: 0;
    grid-column: content;
  }

  article > .break-out {
    grid-column: full-width;
    justify-self: center;
    margin: calc(0.5 * var(--offset, 1.5em)) 0;
  }
}
```

**Service Worker.**





**PWA**



# Progressive Web App Features



## Instant Loading

Service workers allow your apps to load nearly instantly and reliably, no matter what kind of network connection your user is on.



## Add to Home Screen

Web app install banners give you the ability to let your users quickly and seamlessly add your web app to their home screen, making it easy to launch and return to your app.



## Push Notifications

Web push notifications makes it easy to re-engage with users by showing relevant, timely, and contextual notifications, even when the browser is closed.



## Fast

Smooth animations, scrolling, and navigations keep the experience silky smooth.



## Secure

HTTPS secures the connection between you and your users, ensuring your users information is protected and isn't tampered with.



## Responsive

Modern users live on phones, tablets and laptops; your apps and websites should do the same. Learn how to structure and code your content to look great on screens of any size.

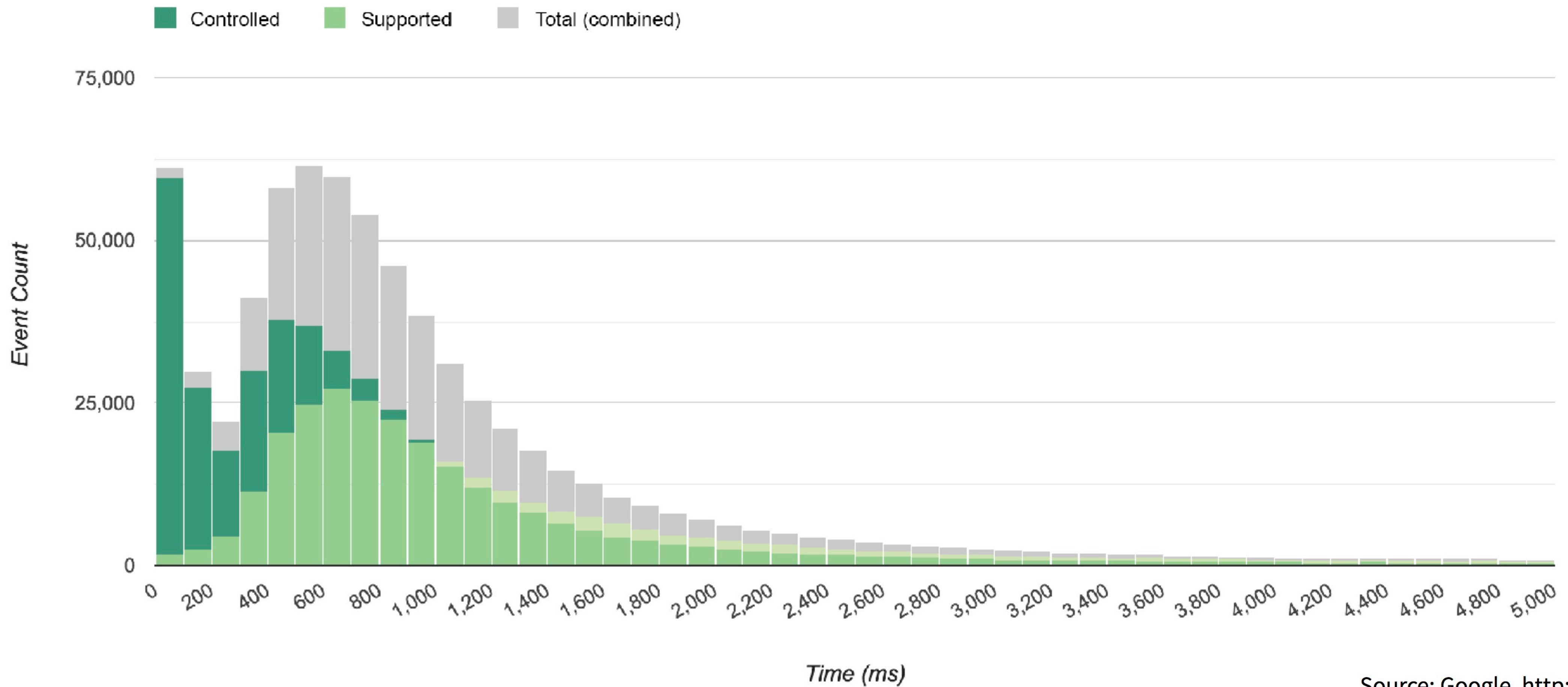
# Billions use browsers that support PWA features



Safari has hinted at supporting service workers which is the most critical feature.

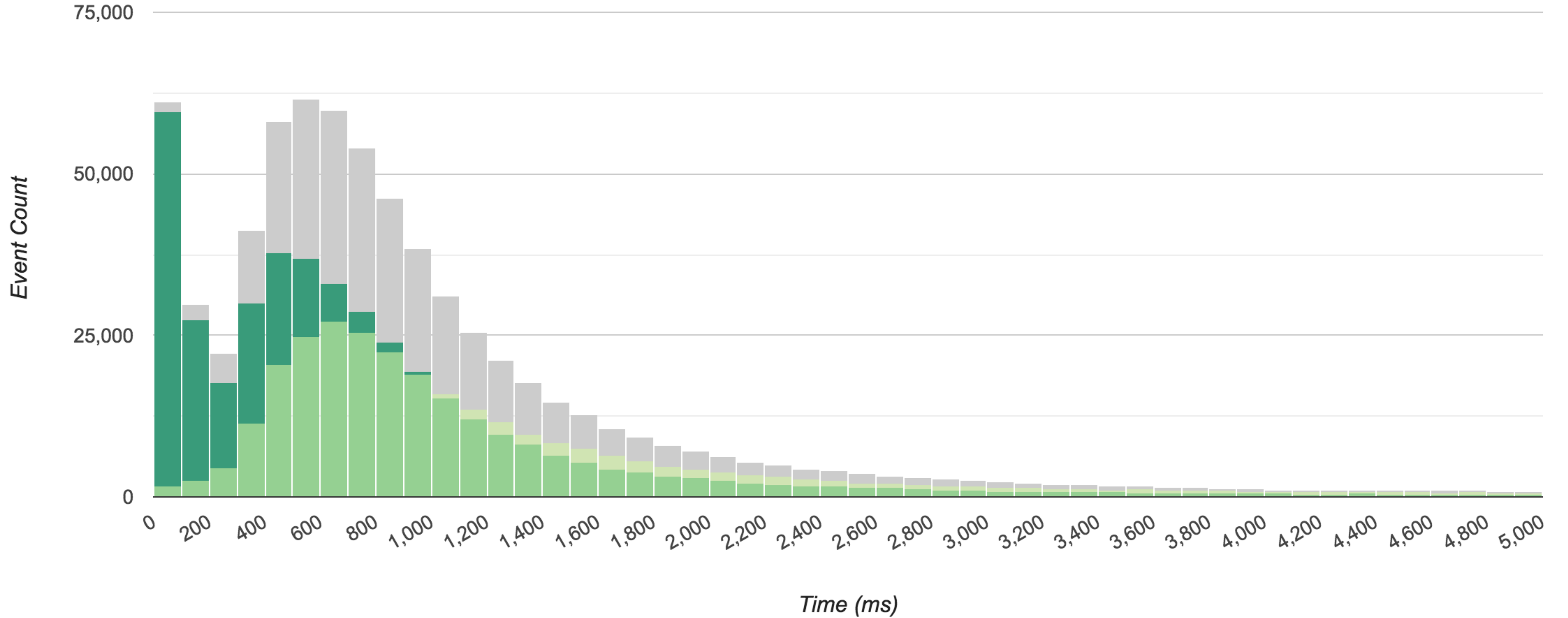
# Service workers key to performance boon

## First Paint Time Distribution (Desktop)



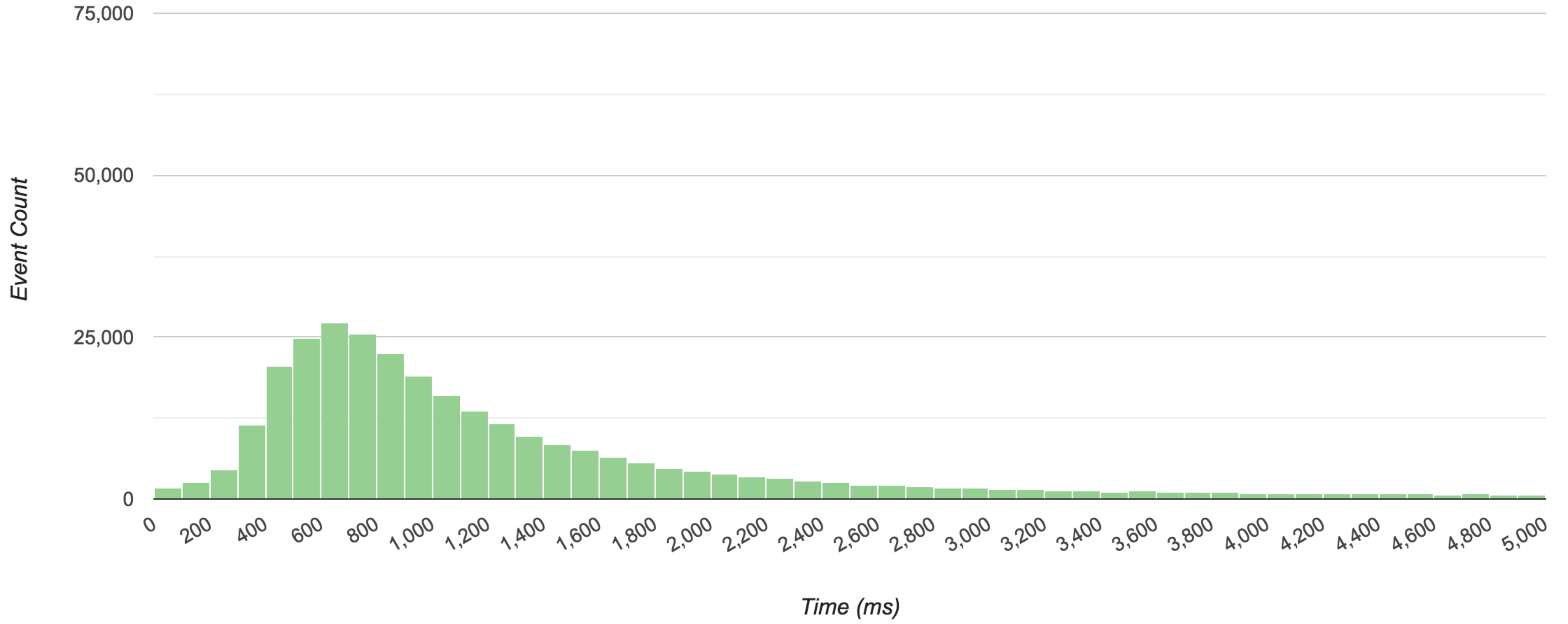
# First Paint Time Distribution (Desktop)

Controlled Supported Total (combined)



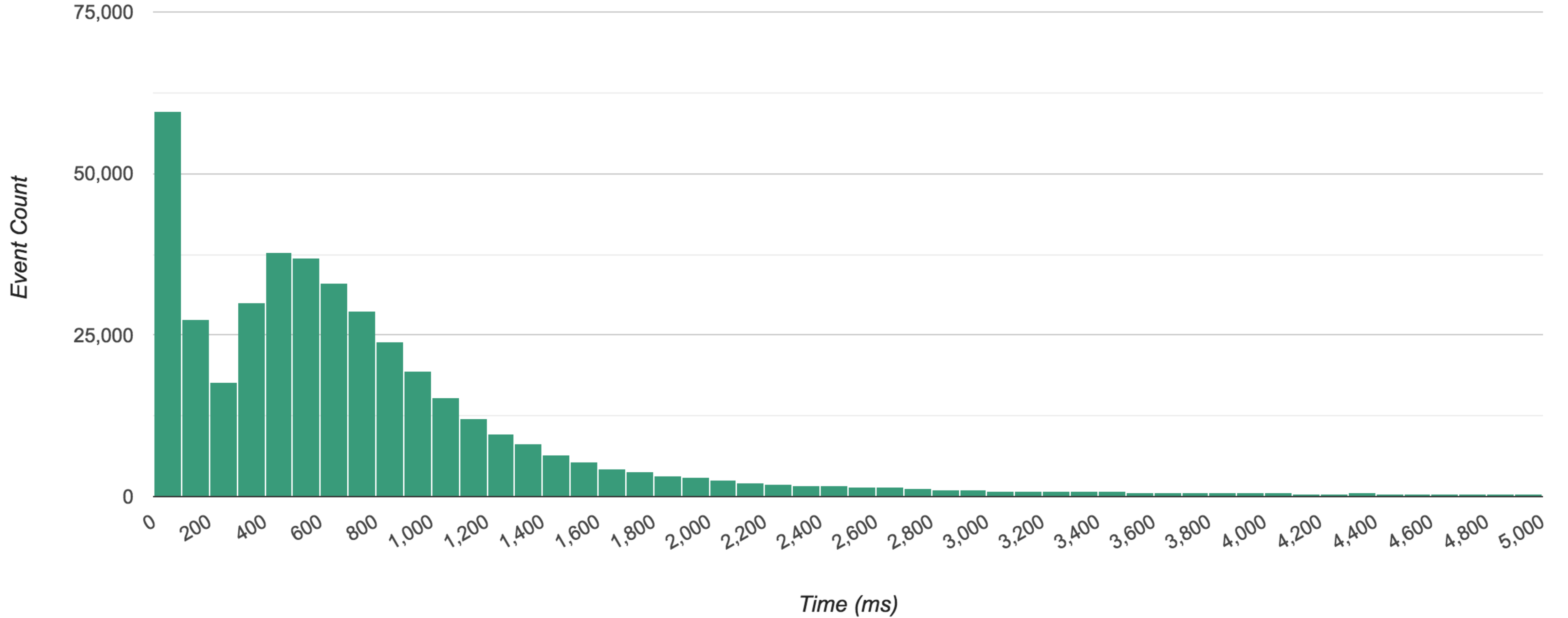
# First Paint Time Distribution (Desktop, without Service Worker)

Supported (not controlled)



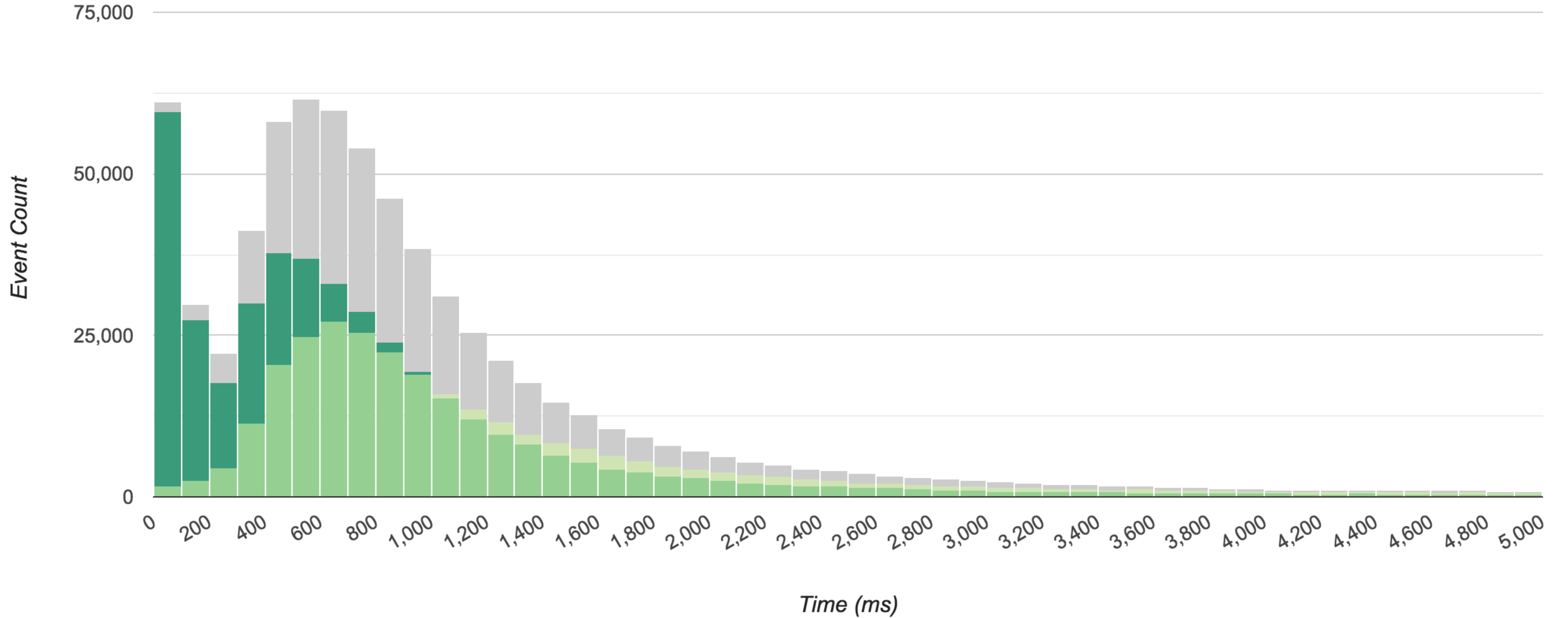
# First Paint Time Distribution (Desktop, with Service Worker)

Controlled



# First Paint Time Distribution (Desktop)

Controlled Supported Total (combined)

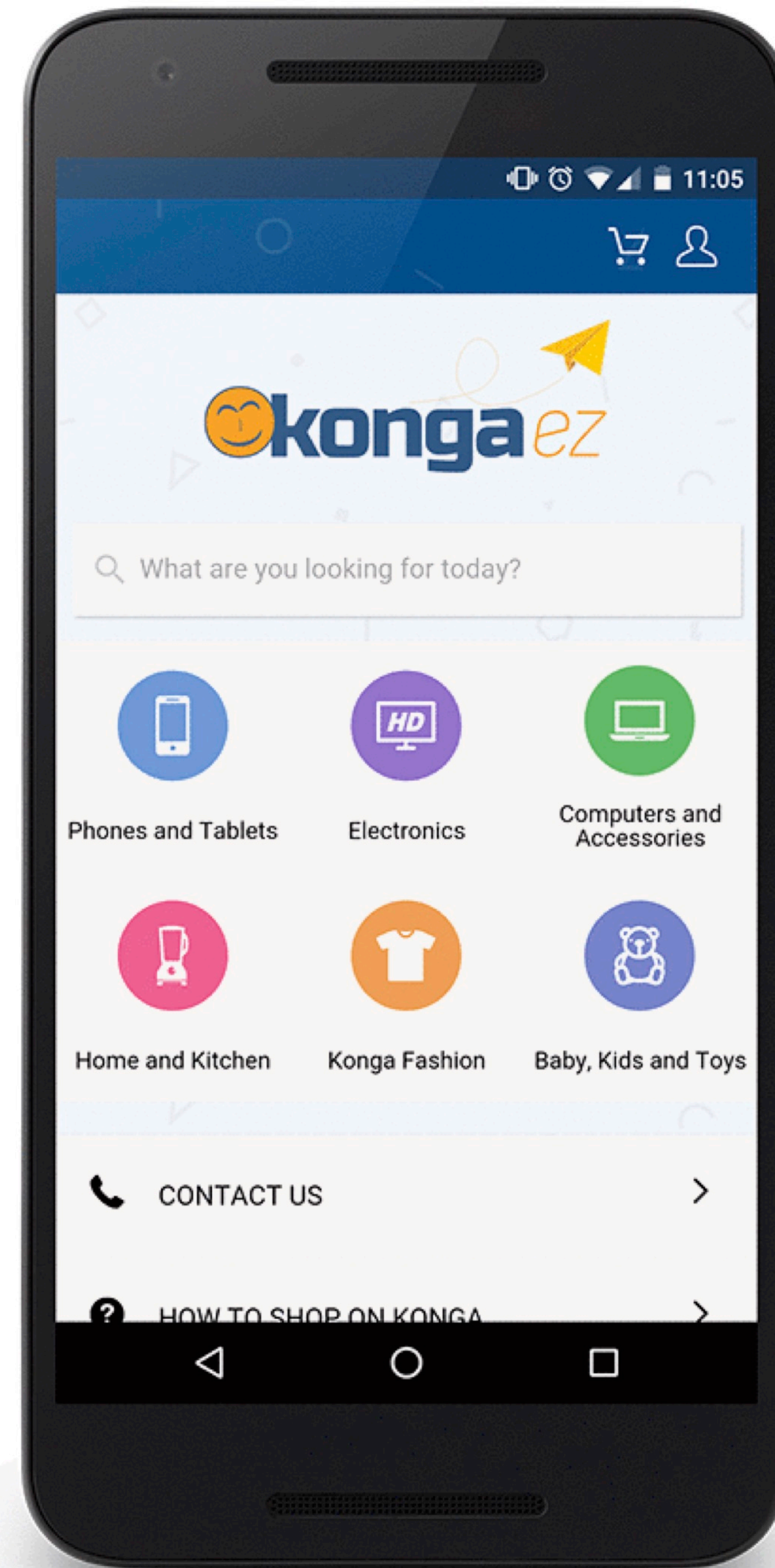




# Konga

- 92% less data for initial load, vs. native app
- 82% less data to complete first transaction, vs. native app
- 63% less data for initial load, vs. previous mobile web experience
- 84% less data to complete first transaction, vs. previous mobile web experience

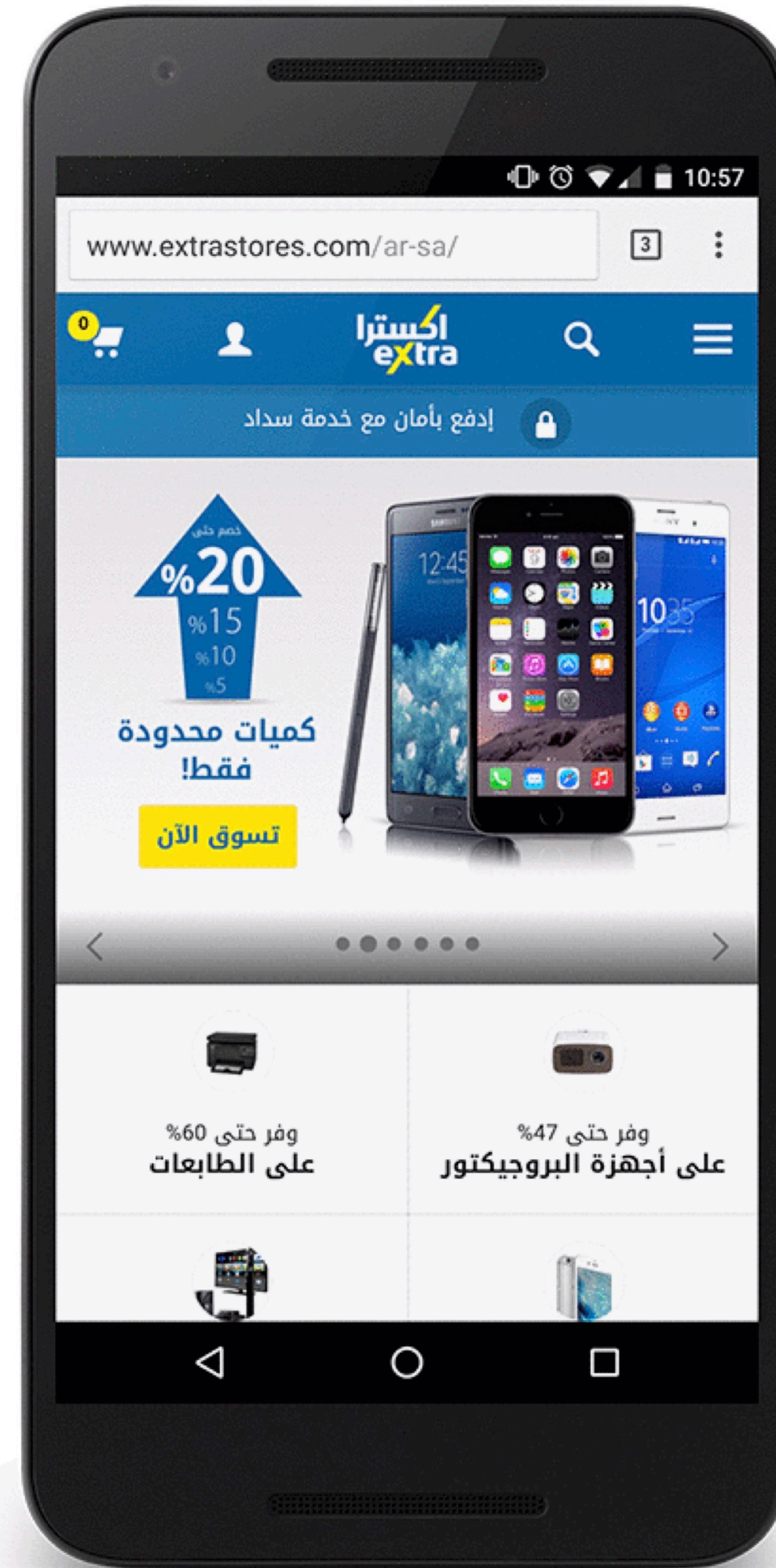
Source: Google, <http://bit.ly/2f64lRo>



# eXtra Electronics

- 12% click-through rate
- 100% more sales from users arriving via web push
- 4x increase in re-engagement

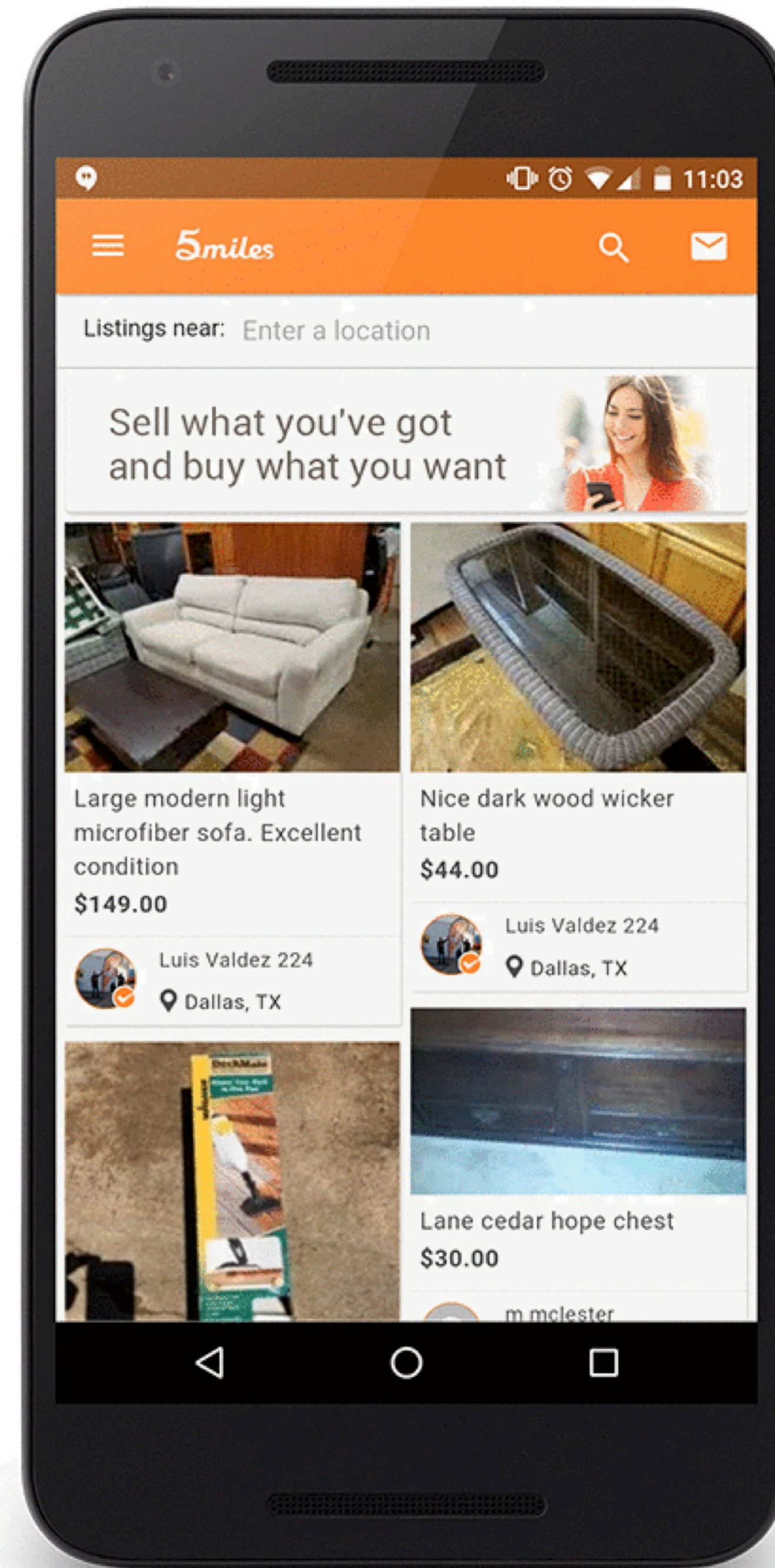
Source: Google, <http://bit.ly/2eqSf18>



# 5miles

- 50% decrease in bounce rates
- 30% increase in time spent on site
- 30% better conversion for users who arrived via Add to Home screen

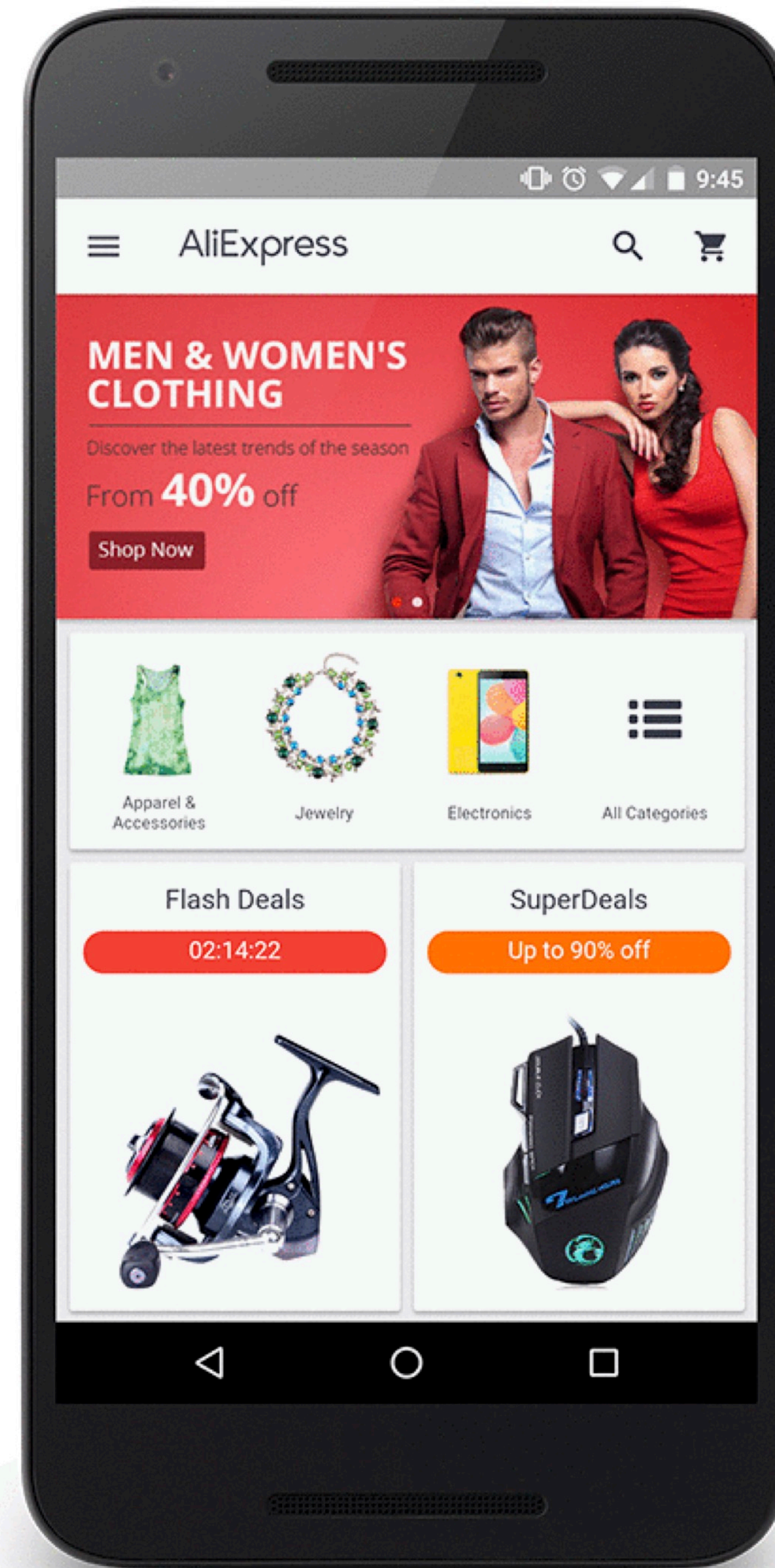
Source: Google, <http://bit.ly/2eqS5a6>



# AliExpress

- 104% for new users across all browsers in conversion
- 82% increase in iOS conversion

Source: Google, <http://bit.ly/2fq2ckc>



PWA Builder

preview.pwabuilder.com/generator

PWA BUILDER

PWA Builder Documentation PWA Image Generator Github

## Generate your Progressive Web App

PWA.tools takes data from your site and uses that to generate cross-platform Progressive Web Apps

- 1 Generate Manifest
- 2 Build Service Worker
- 3 Publish PWA

### Select the service worker functionality for your app.

Offline page  
This simple but elegant solution pulls a file from your web server called "offline.html" (make sure that file is actually there) and serves the file whenever a network connection can not be made.

Offline copy of pages  
This simple but elegant solution pulls a file from your web server called "offline.html" (make sure that file is actually there) and serves the file whenever a network connection can not be made.

[Download service worker](#)

You can also download the source code directly from [GitHub](#).

### Code for website

[Next step](#)

```
//This is the "Offline page" service worker

//Add this below content to your HTML page, or add the js
file to your page at the very top to register service
worker
if (navigator.serviceWorker.controller) {
  console.log('[Manifoldjs] active service worker found,
no need to register')
} else {
  //Register the ServiceWorker
  navigator.serviceWorker.register('manifoldjs-sw.js', {
    scope: './'
  }).then(function(reg) {
    console.log('Service worker has been registered for
scope:' + reg.scope);
```



# Service Workers - WD

Global

65.27% + 8.32% = 73.6%

Method that enables applications to take advantage of persistent background processing, including hooks to enable bootstrapping of web applications while offline.

Current aligned Usage relative Date relative Show all

IE	Edge *	Firefox	Chrome	Safari	Opera	iOS Safari *	Opera Mini *	Android Browser *	Chrome for Android
		<sup>3</sup> 52	49						
		55	60			10.2			
	<sup>2</sup> 15	56	61	10.1		10.3		4.4	
11	<sup>2</sup> 16	57	62	11	48	11	all	56	62
	<sup>2</sup> 17	58	63	<sup>4</sup> TP	49				
		59	64		50				
		60	65						

Notes Known issues (0) Resources (8) Feedback

Details on partial support can be found on [is ServiceWorker Ready?](#)

MS Edge status: [In Development](#)

WebKit status: [In Development](#)

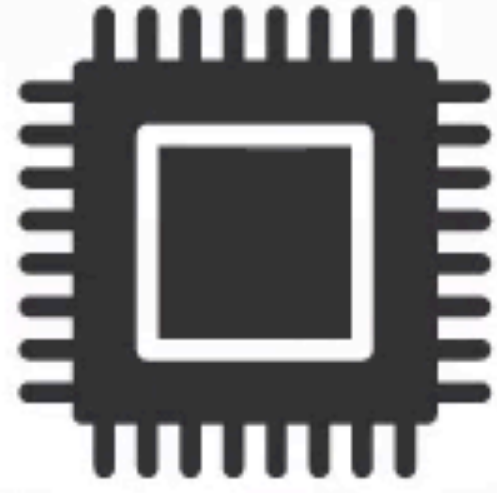
<sup>2</sup> Available behind the "Enable service workers" flag

<sup>3</sup> Disabled on Firefox ESR, but can be re-enabled with the `dom.serviceWorkers.enabled` flag

<sup>4</sup> Can be enabled via the "Experimental Features" developer menu

# Service Workers: Foundation

- *Service worker* is a background process running JS. It behaves like a proxy server on a user's device.
  - Websites can *register* a service worker in user's browser and intercept the website-browser traffic.
  - Once installed, browsers *dispatch events* to the service worker first, for each network request.
- *Goal*: a reliable “native” mechanism that can deliver content when users are both online and *offline*.



ServiceWorker



install



activate



Cache



Network

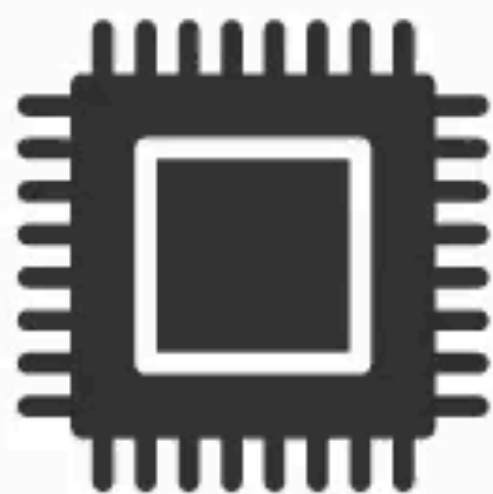




Page



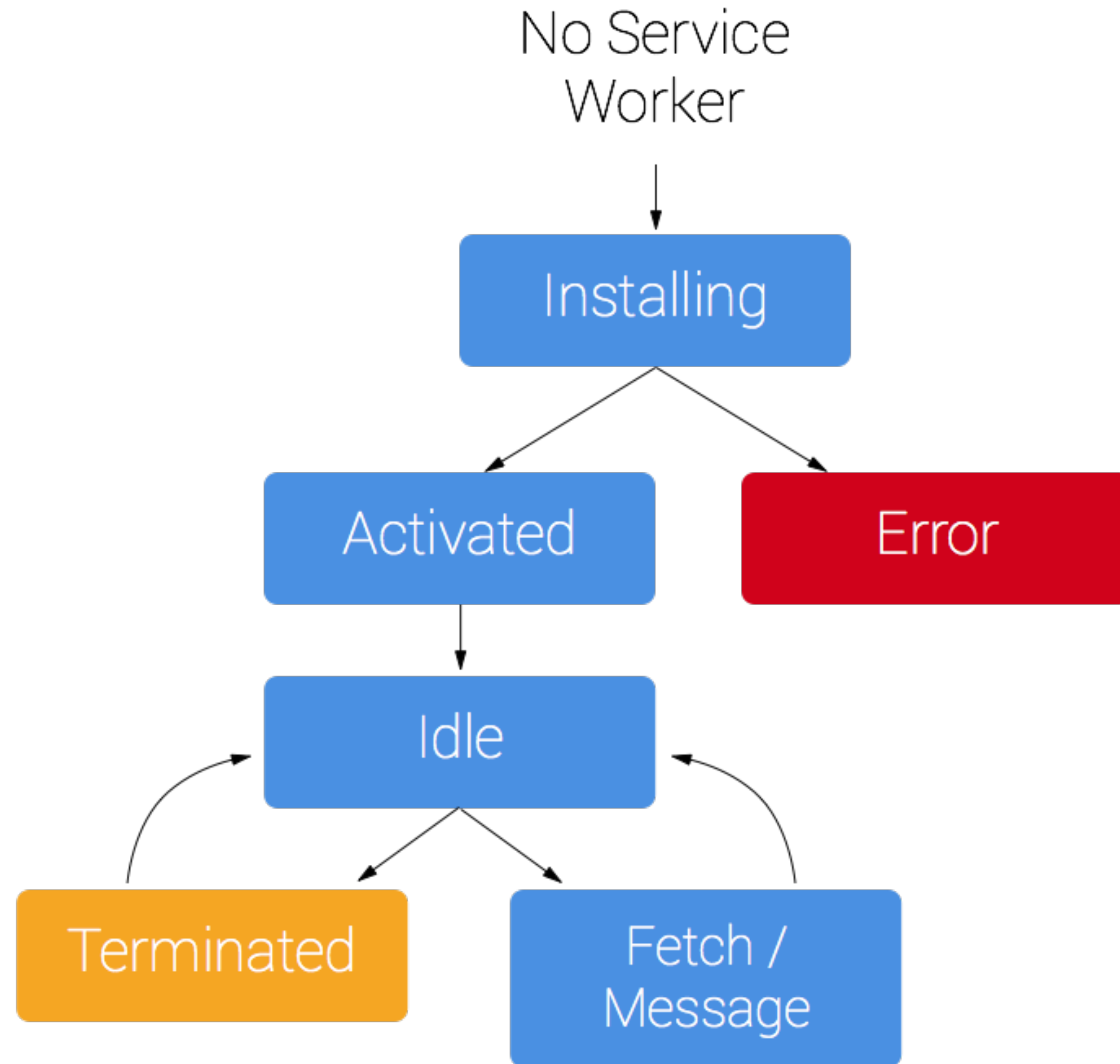
Network



ServiceWorker



Cache



# Offline Strategy

- Depending on *complexity*, we might use offline caching, background processes, push notifications...
- A common offline strategy is quite *simple*:
  - *Explicitly cache* resources like CSS, JS, fonts, images;
  - *Cache the homepage* to display it when network fails;
  - For other pages, have a “*fallback*” offline page.
- We need to *register a Service worker* first.

# Offline Strategy

- We need to *register a Service worker* first.

- JavaScript:

```
if (navigator.serviceWorker) {  
  navigator.serviceWorker.register(  
    '/sw.js', {  
      scope: '/'  
    });  
}
```

- *sw.js* sits in the root to act on *any* request; otherwise it acts on requests to a directory in which it resides.

# Offline Strategy

- JavaScript:

```
if (navigator.serviceWorker) {  
  navigator.serviceWorker.register(  
    '/sw.js', {  
      scope: '/'  
    });  
}
```

- *sw.js* sits in the root to act on *any* request; otherwise it acts on requests to a directory in which it resides.
- Caching of *sw.js* is capped for 24h via *Cache-Control*. Browsers will review the file when accessing the site.

# Offline Strategy

- *sw.js* sits in the root to act on *any* request; otherwise it acts on requests to a directory in which it resides.
- Next, we need to *install* the *registered service worker*.

```
self.addEventListener('install', function (event) {  
    event.waitUntil(updateStaticCache());  
});
```

```
// Update 'version' if you need to refresh the cache  
var staticCacheName='static';  
var version='v1::';
```

# Offline Strategy

- Next, we need to *install* the *registered service worker*.

```
self.addEventListener('install', function (event) {  
    event.waitUntil(updateStaticCache());  
});
```

```
// Update 'version' if you need to refresh the cache  
var staticCacheName='static';  
var version='v1::';
```

- By adding a *version number* (*version*), we can easily update the cache later just by updating the version number.

# Offline Strategy

- We'll populate *cache* with *updateStaticCache()*.

```
// Store core files in a cache (incl. 'offline' page)
function updateStaticCache() {
  return caches.open(version + staticCacheName)
    .then(function (cache) {
      return cache.addAll([
        'js/scripts.js',
        'css/styles.css',
        'images/logo.svg',
        'fonts/webfont.woff',
        '/',
        '/offline']);
    });
};
```



# Offline Strategy

- Now we can *activate* the service worker. We'll clean up any outdated caches (checking the version number).

```
self.addEventListener('activate', function (event) {
  event.waitUntil(
    caches.keys()
      .then(function (keys) {
        // Remove caches whose name is no longer valid
        return Promise.all(keys
          .filter(function (key) {
            return key.indexOf(version) !== 0; })
          .map(function (key) {
            return caches.delete(key); })
        );
      })
  );
});
```

# Offline Strategy

- The *fetch* event is fired every time the browser is going to *request* a file. We can intercept that request:

```
self.addEventListener('fetch', function (event) {
  var request = event.request;
  // Always fetch non-GET requests from network
  if (request.method !== 'GET') {
    event.respondWith(
      fetch(request)
        .catch(function () {
          return caches.match('offline.html');
        });
    );
  }
  return;
})
```

# Offline Strategy

- For *HTML requests*, try the *network* first. If it fails, try to fetch *cache*. If all fails, show the *offline* page.
- For *file requests*, try to fetch files from *cache* first. If it fails, make a *network* request. If it fails, use *fallback*.

```
if (request.headers.get('Accept').indexOf('text/html') !== -1) {
  event.respondWith(
    fetch(request)
      .then(function (response) {
        // Put a copy of this page in the cache
        var copy = response.clone();
        caches.open(version + staticCacheName)
          .then(function (cache) {
            cache.put(request, copy);
          });
        return response;
      })
      .catch(function () {
        return caches.match(request)
          .then(function (response) {
            return response || caches.match('/offline.html');
          });
      })
  );
  return;
}
```

```
if (request.headers.get('Accept').indexOf('text/html') !== -1) {
    event.respondWith(
        fetch(request)
            .then(function (response) {
                // Put a copy of this page in the cache
                var copy = response.clone();
                caches.open(version + staticCacheName)
                    .then(function (cache) {
                        cache.put(request, copy);
                    });
                return response;
            })
            .catch(function () {
                return caches.match(request)
                    .then(function (response) {
                        return response || caches.match('/offline.html');
                    });
            })
    );
    return;
}
```

# Offline Strategy

- For *HTML requests*, try the *network* first. If it fails, try to fetch *cache*. If all fails, show the *offline* page.
- For *file requests*, try to fetch files from *cache* first. If it fails, make a *network* request. If it fails, use *fallback*.

```
// For non-HTML, try cache first, then fall back to the network
event.respondWith(
  caches.match(request)
    .then(function (response) {
      return response || fetch(request)
        .catch(function () {
          // If request is img, show offline placeholder
          if (request.headers.get('Accept').
            indexOf('image') !== -1) {
            return new Response(
              '<svg.. />', { headers: { 'Content-
                Type': 'image/svg+xml' }}
            );
          }
        });
    });
});
```

# Offline Strategy

- *Register* a service worker ✓
- *Install* a service worker ✓
- *Versioning* setup for a service worker ✓
- *Cache population* setup for a service worker ✓
- *Activate* a service worker ✓
- *Managing cache* for a service worker ✓
- *Intercepting requests* with a service worker ✓

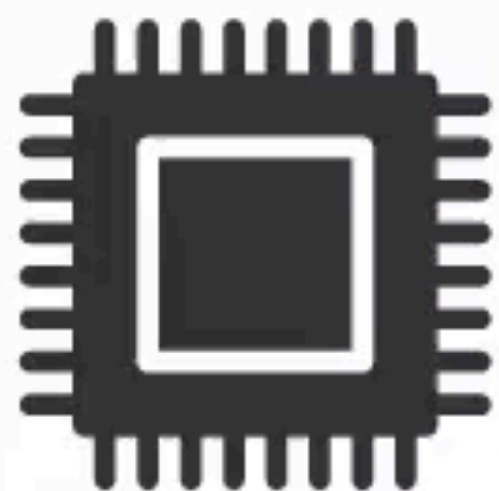




Page



Cache



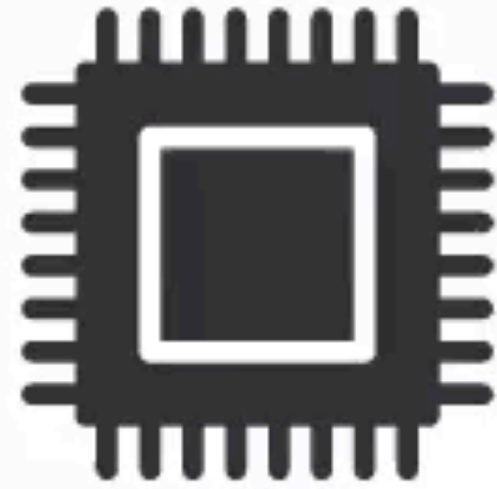
ServiceWorker



Network



Page



ServiceWorker



Templating Engine



Cache

# Service Workers Gotchas

- Service workers *require* a secure connection (HTTPS) and are based on ES6 Promises.
- *Cache API* is completely separate from HTTP cache. *Response* is a stream; to cache it, you need to copy it first.
- A service worker can have *multiple caches* and can be *registered* many times; the browser will figure it out.

1  
Design

2  
Front-End

3  
Back-End

4  
To-Dos

3

Back-End

3

JAM Stack

Serverless.

**WordPress.**





+



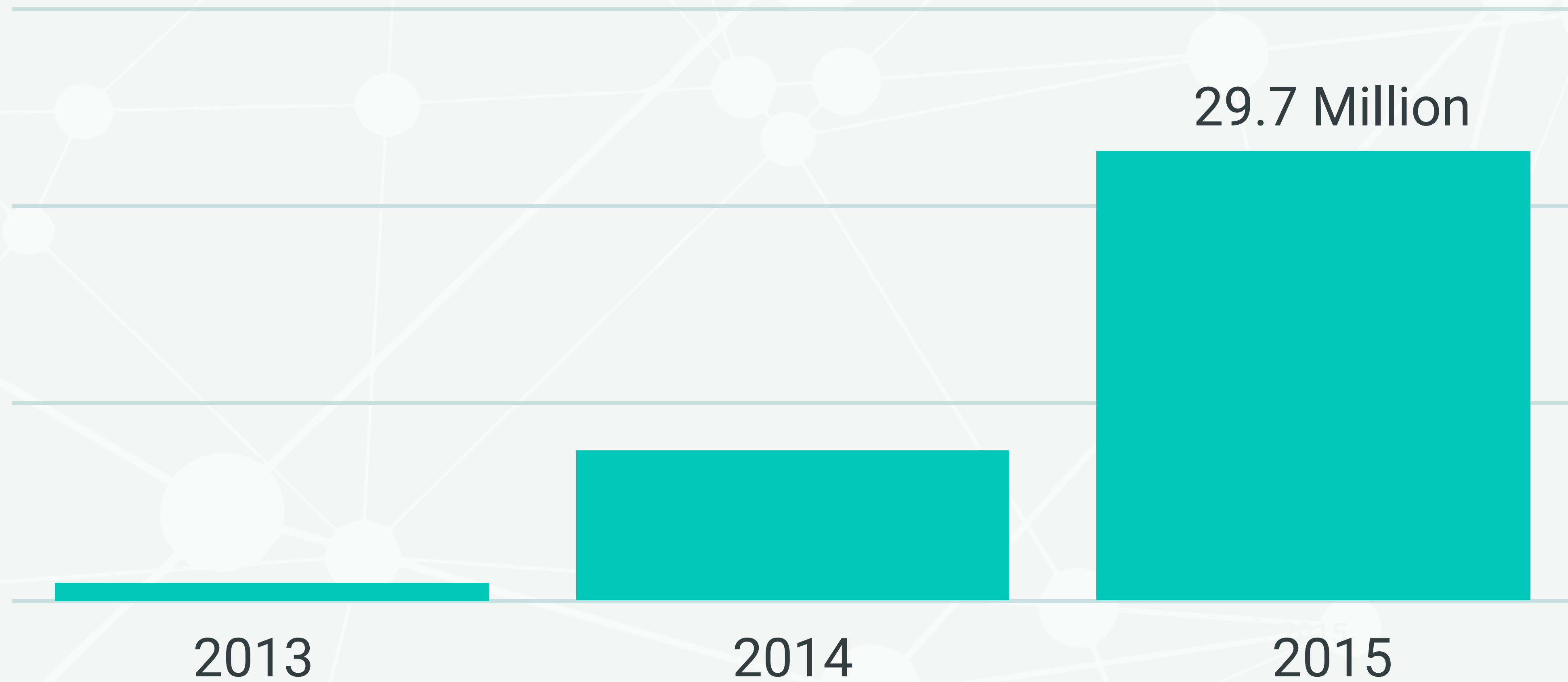


# JavaScript, APIs and Markup

# Google Trends, Interest Over Time



# Downloads of Gulp and Grunt



# API Economy



A diagram illustrating the connection between a browser and a server. On the left, a white browser window with a teal header and three dots in the top-left corner contains the word "Browser" in teal. On the right, a teal rounded rectangle contains the word "Server" in white. The background is a light gray network of white circles and lines.

**Browser**

**Server**

## World Wide Web

The WorldWideWeb (W3) is a wide-area [hypermedia](#) information retrieval initiative aiming to give universal access to a large universe of documents.

Everything there is online about W3 is linked directly or indirectly to this document, including an [executive summary](#) of the project, [Mailing lists](#), [Policy](#), November's [W3 news](#), [Frequently Asked Questions](#).

### [What's out there?](#)

Pointers to the world's online information, [subjects](#), [W3 servers](#), etc.

### [Help](#)

on the browser you are using

### [Software Products](#)

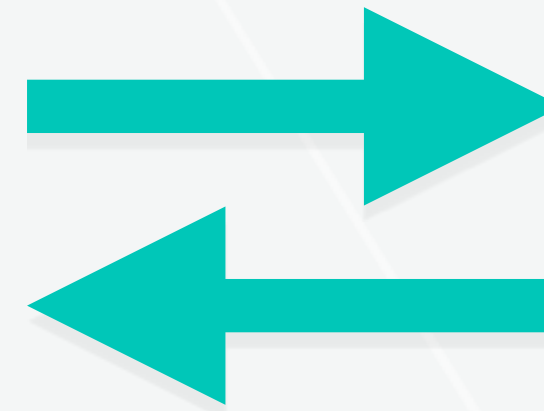
A list of W3 project components and their current state. (e.g. [Line Mode](#), [X11 Viola](#), [NeXTStep](#), [Servers](#), [Tools](#), [Mail robot](#), [Library](#))

### [Technical](#)

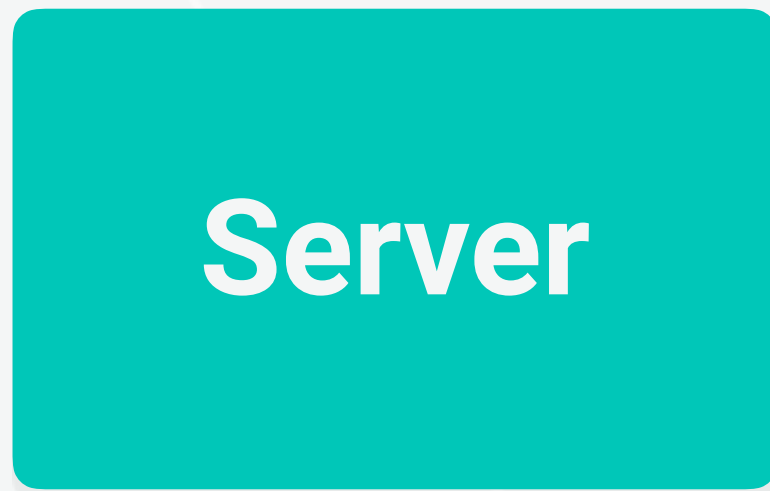
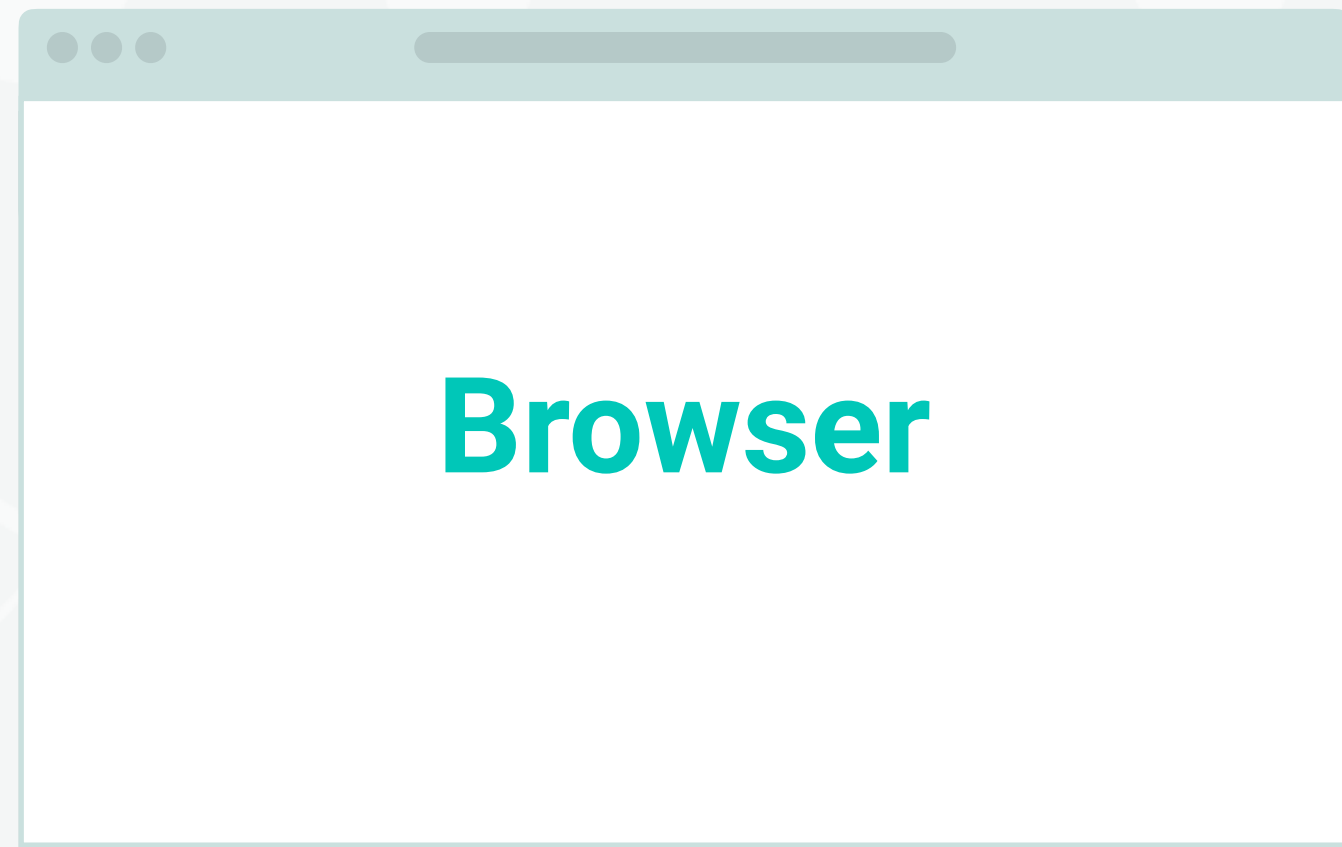
Details of protocols, formats, program internals etc

### [Bibliography](#)

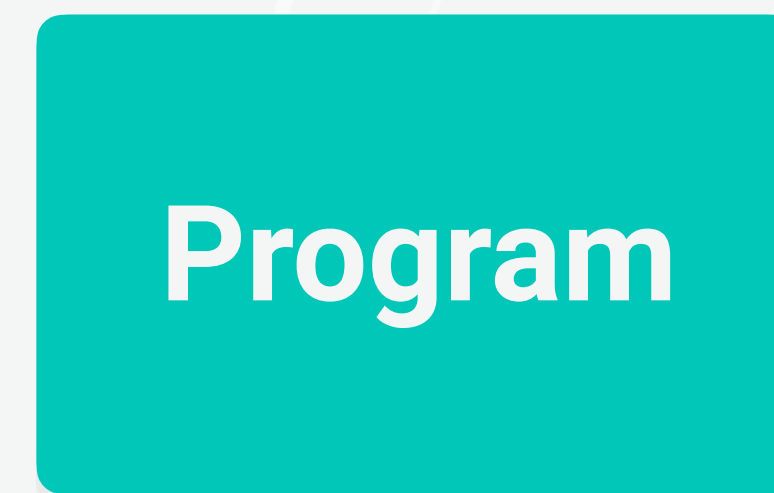
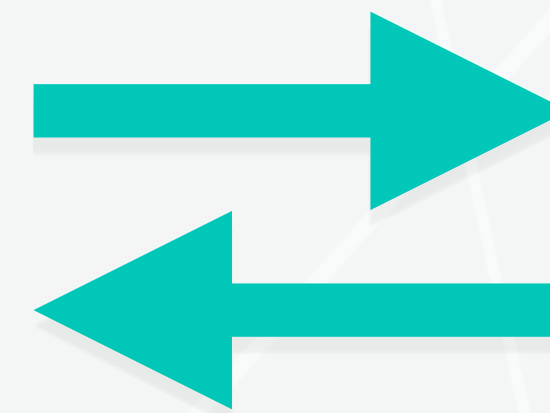
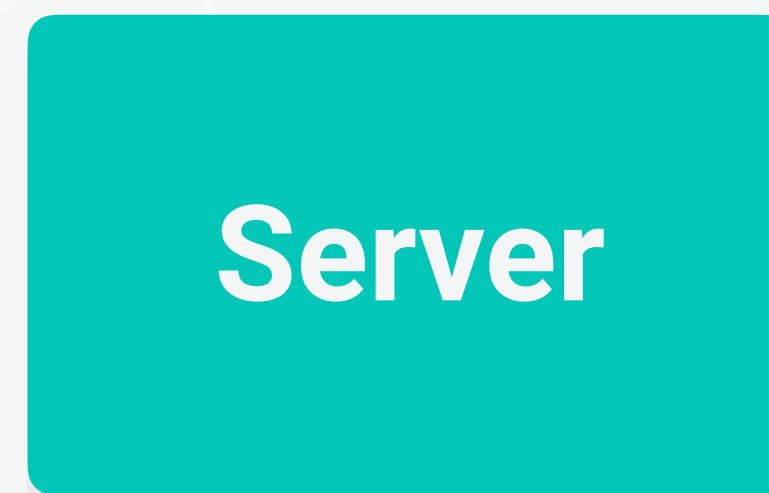
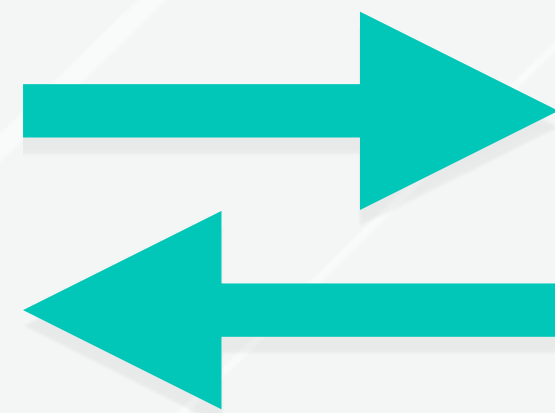
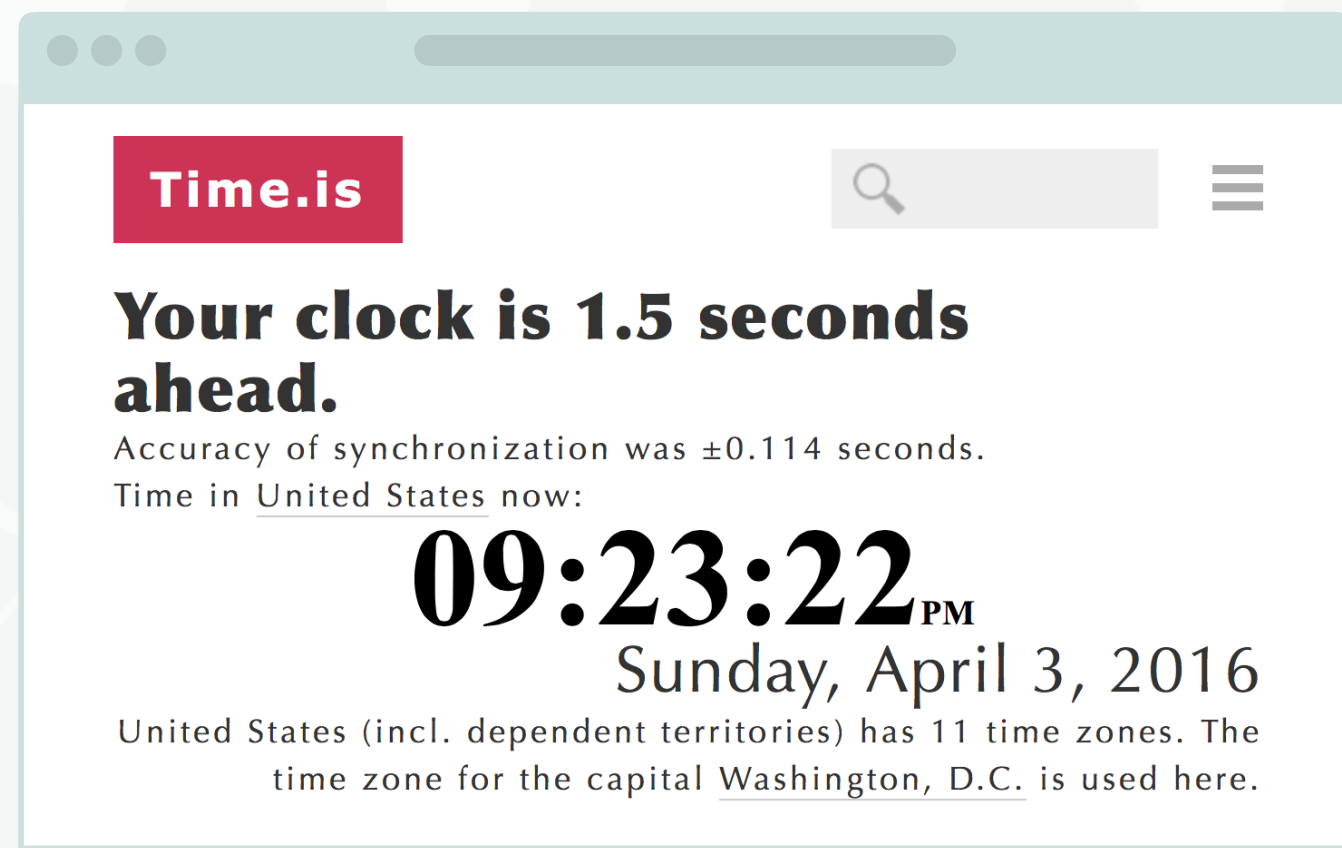
Paper documentation on W3 and references.

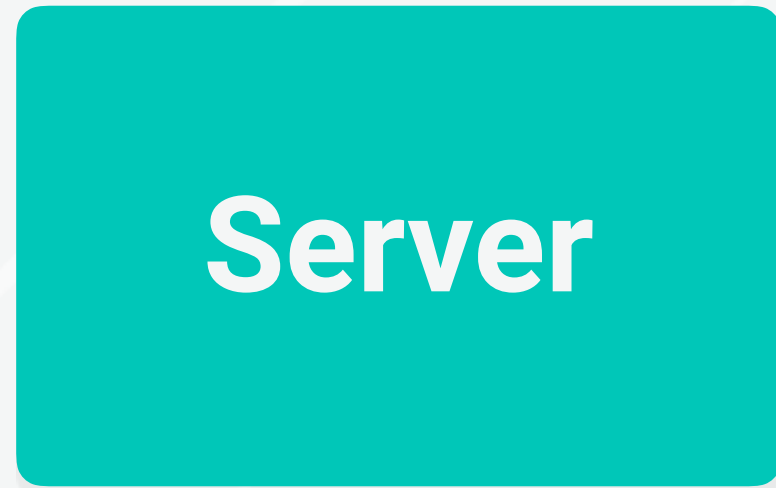


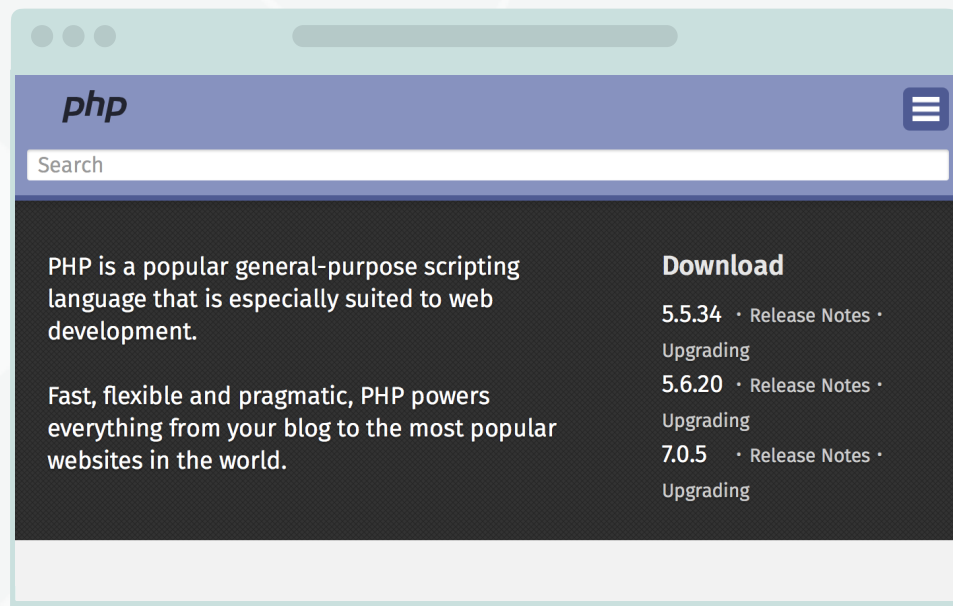
Server











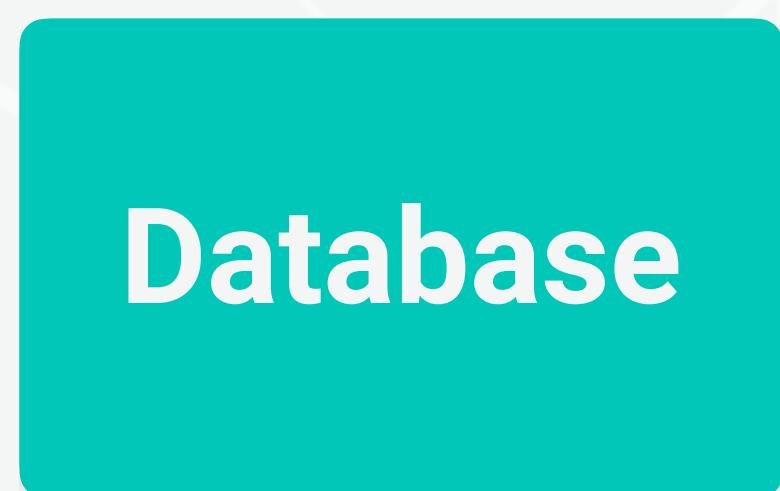
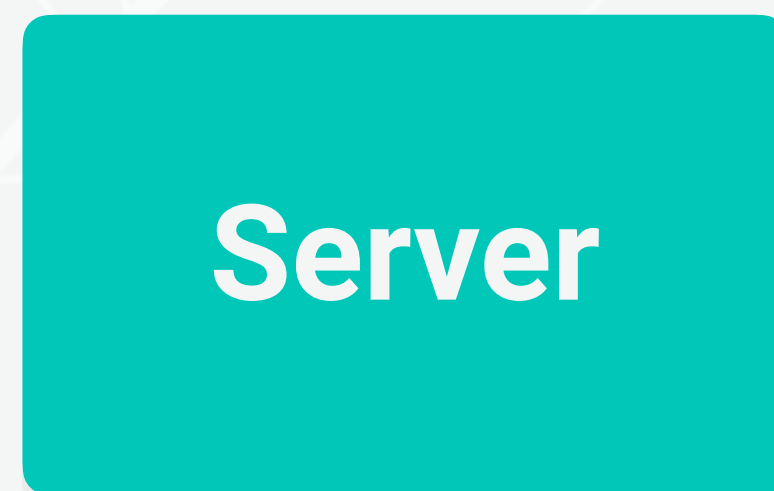
**Server**

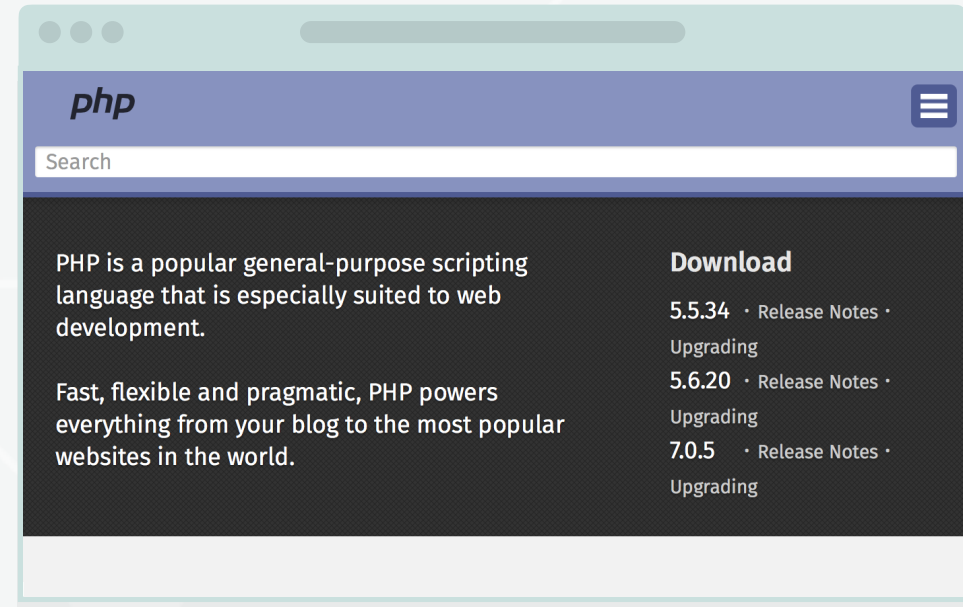


**Program**

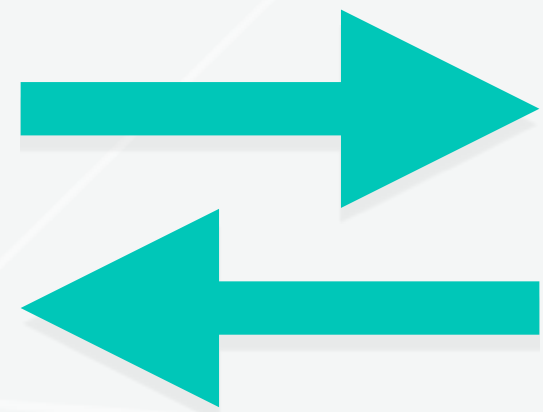


**Database**

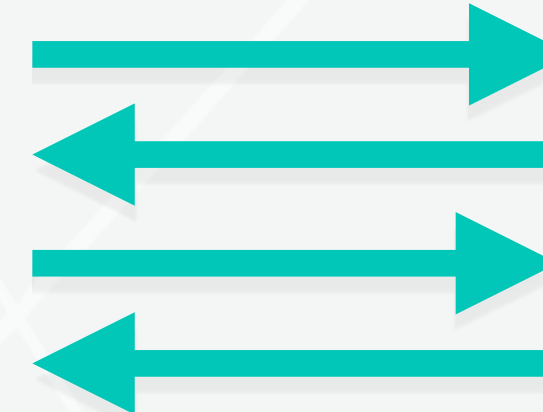




**Database**



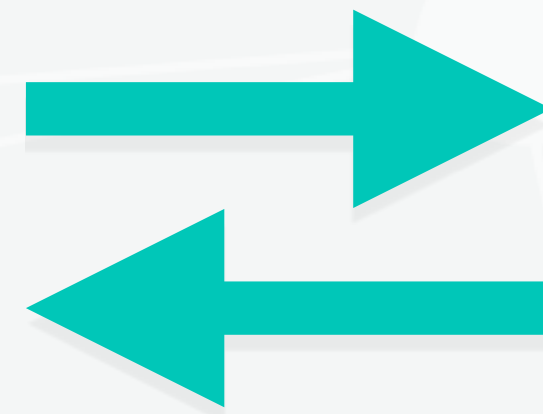
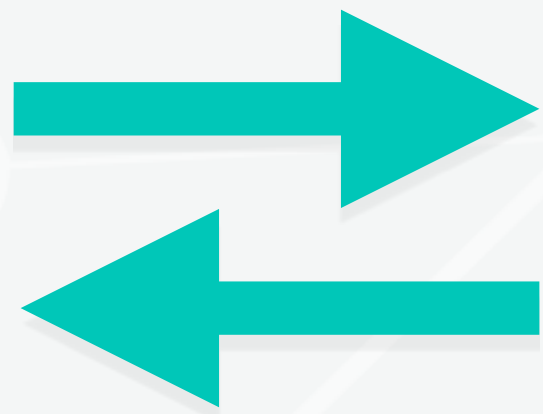
**Cache**



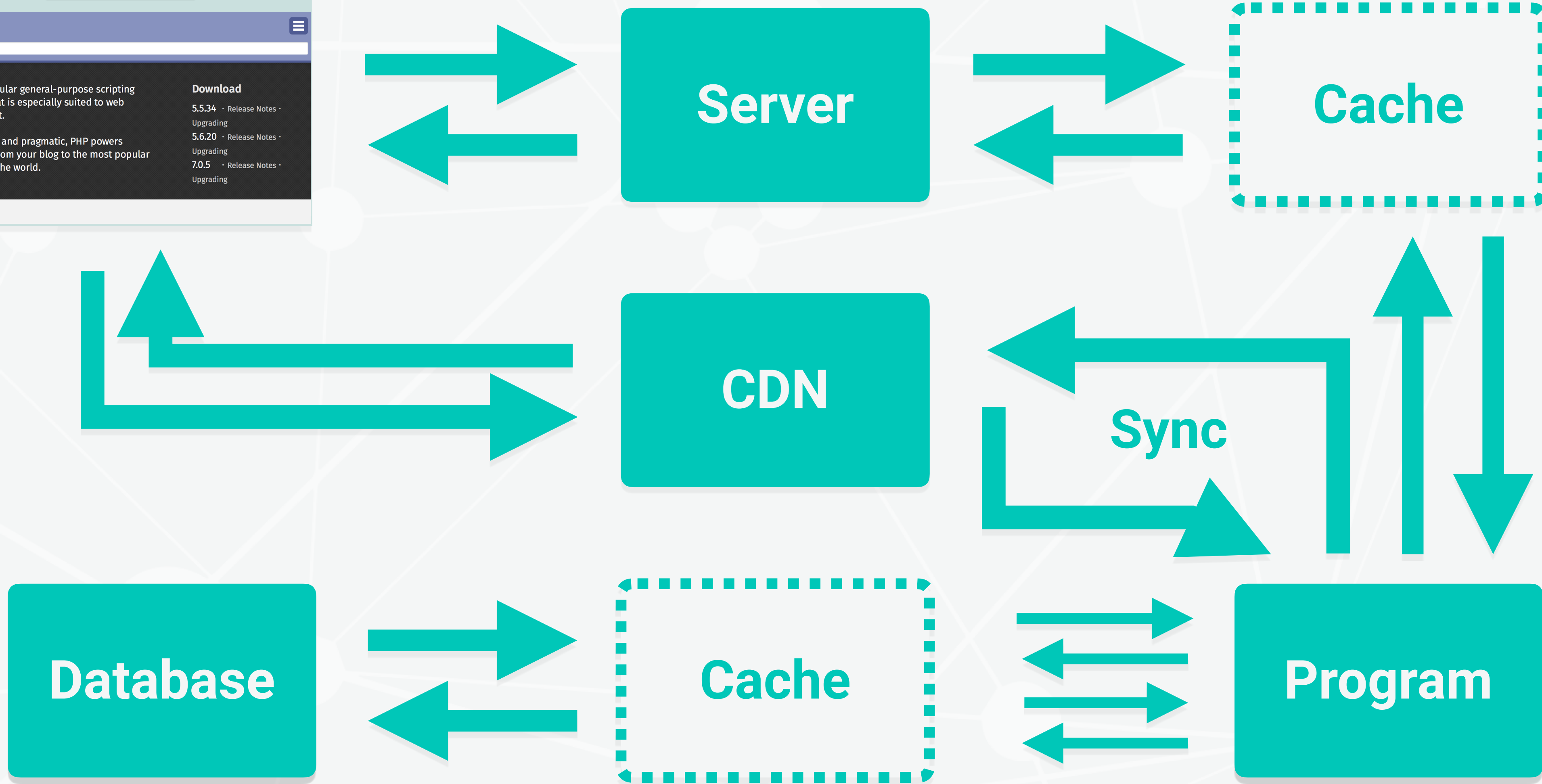
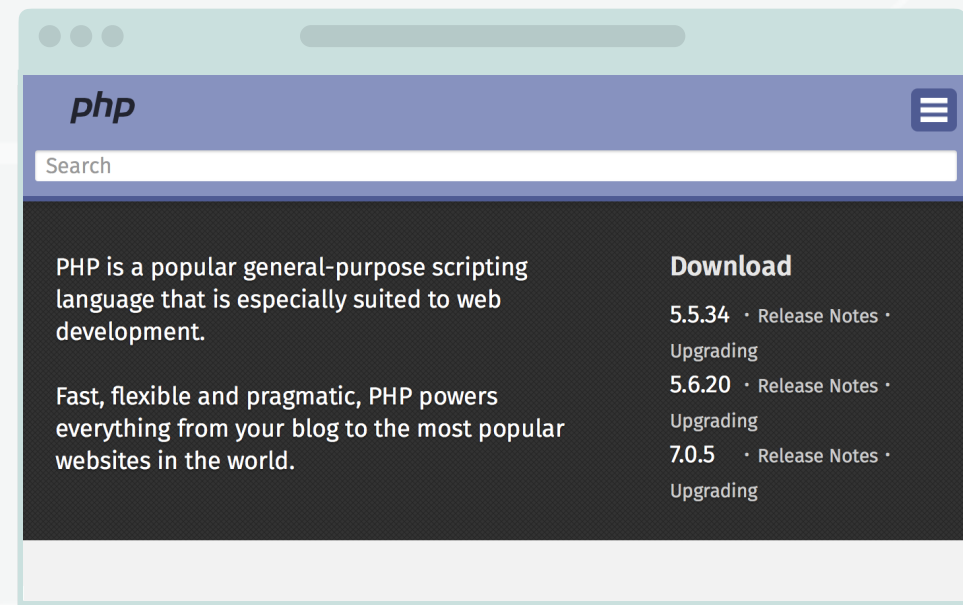
**Program**

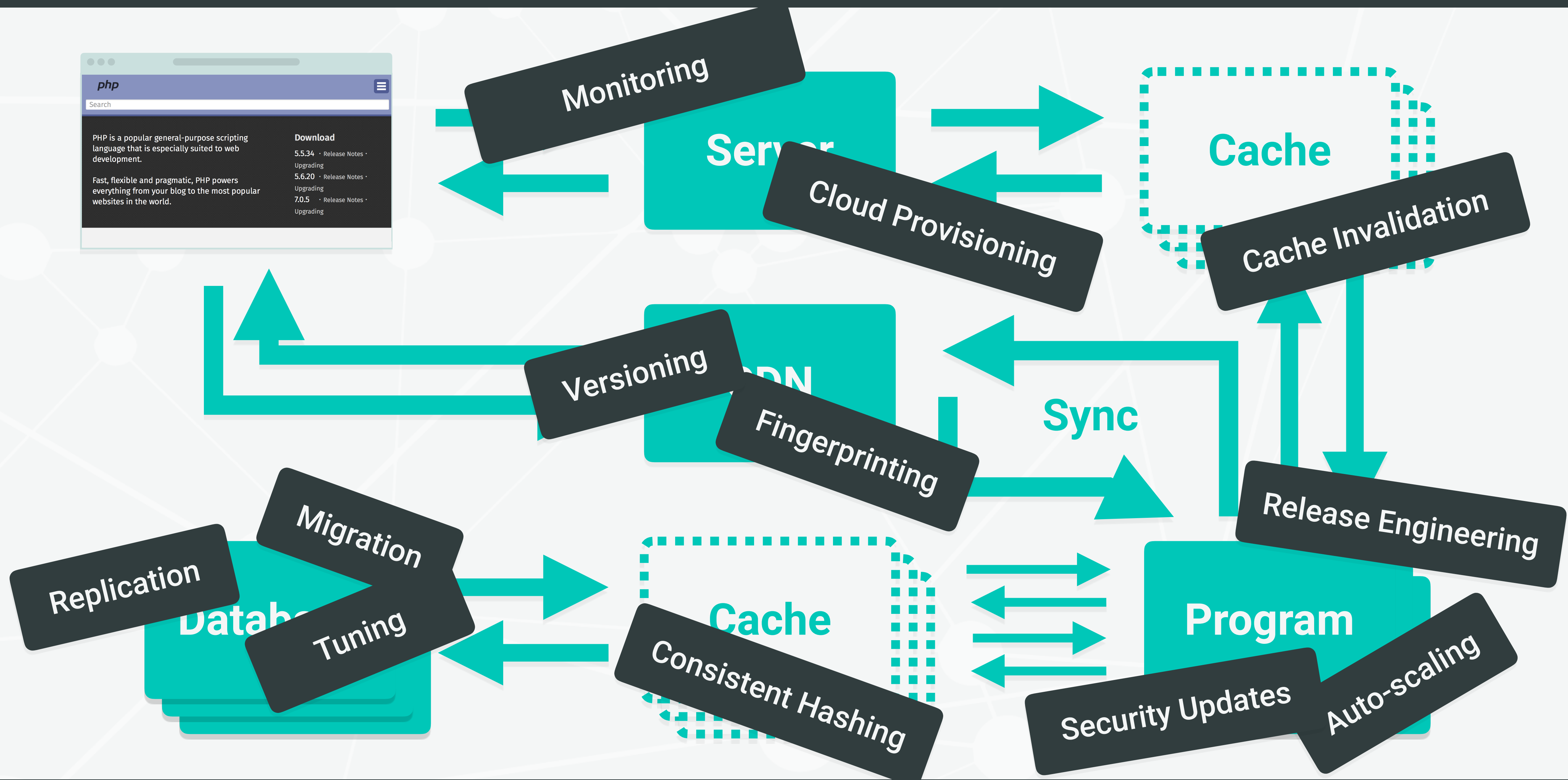
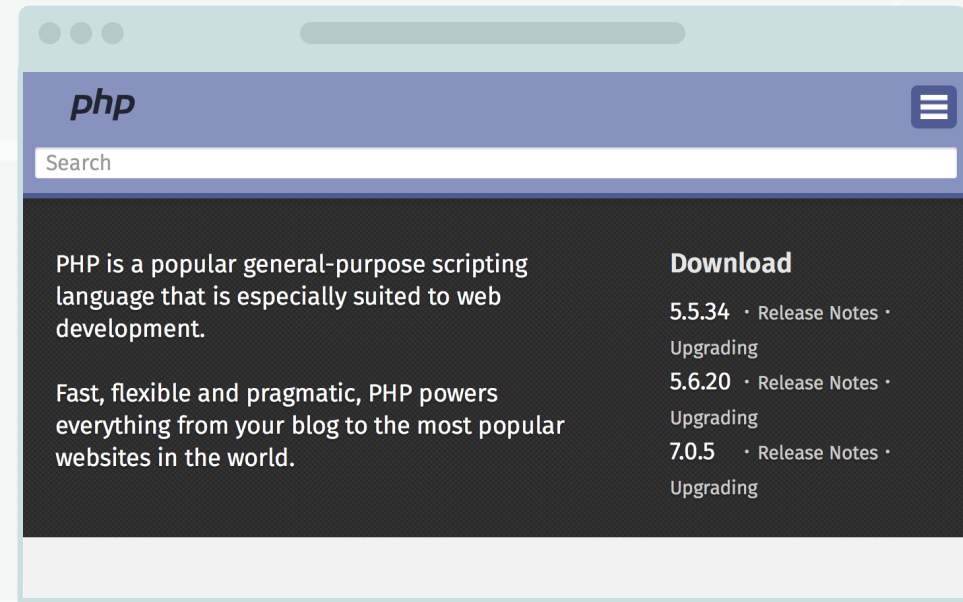


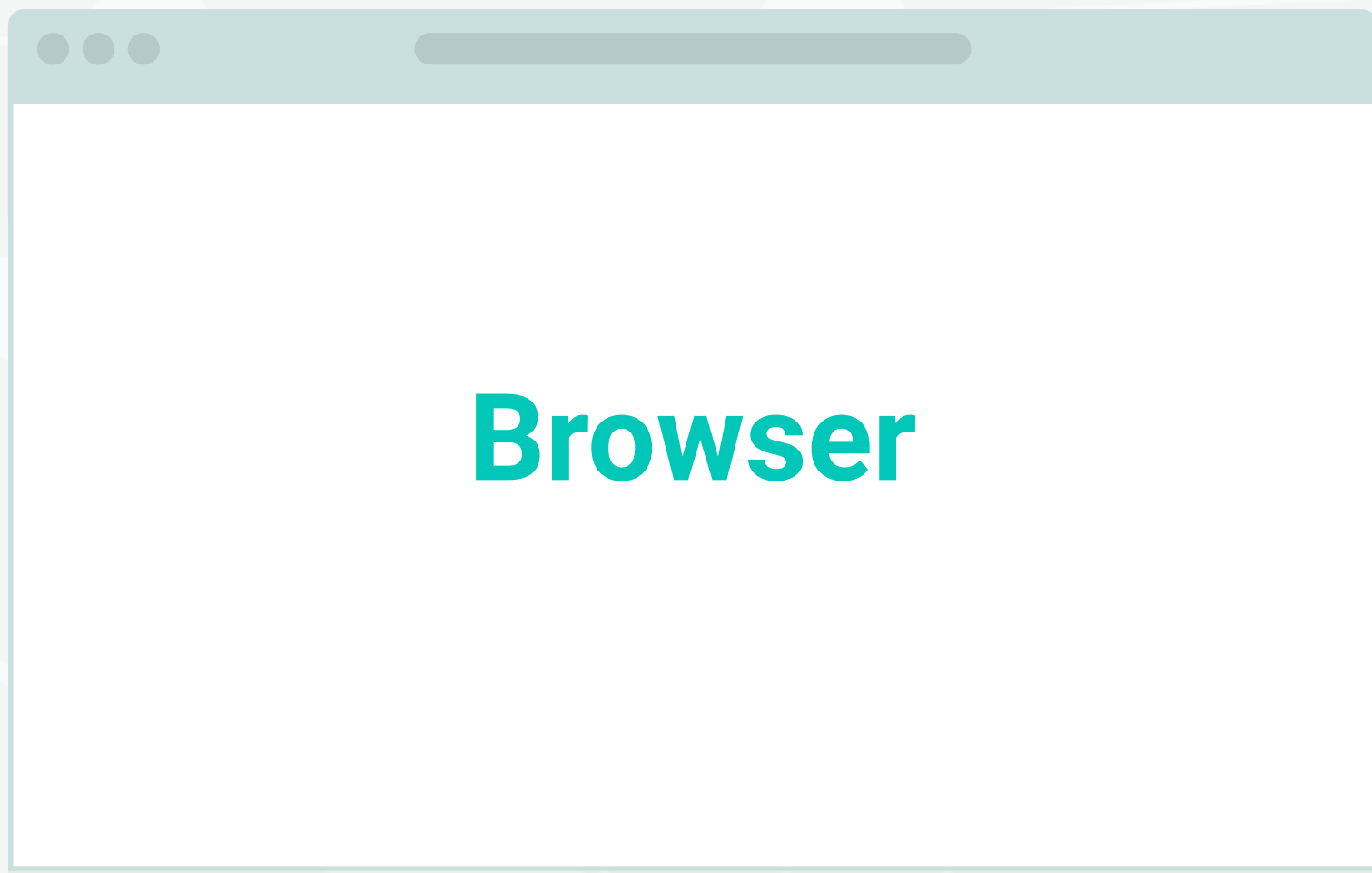
**Server**



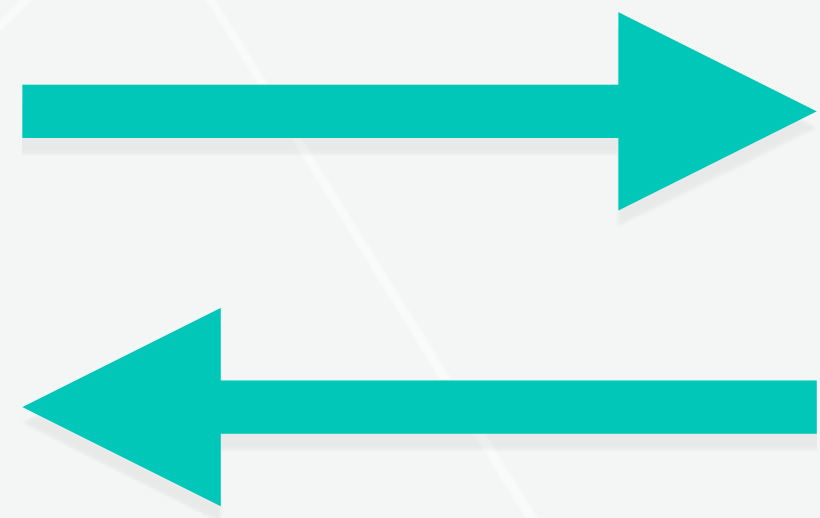
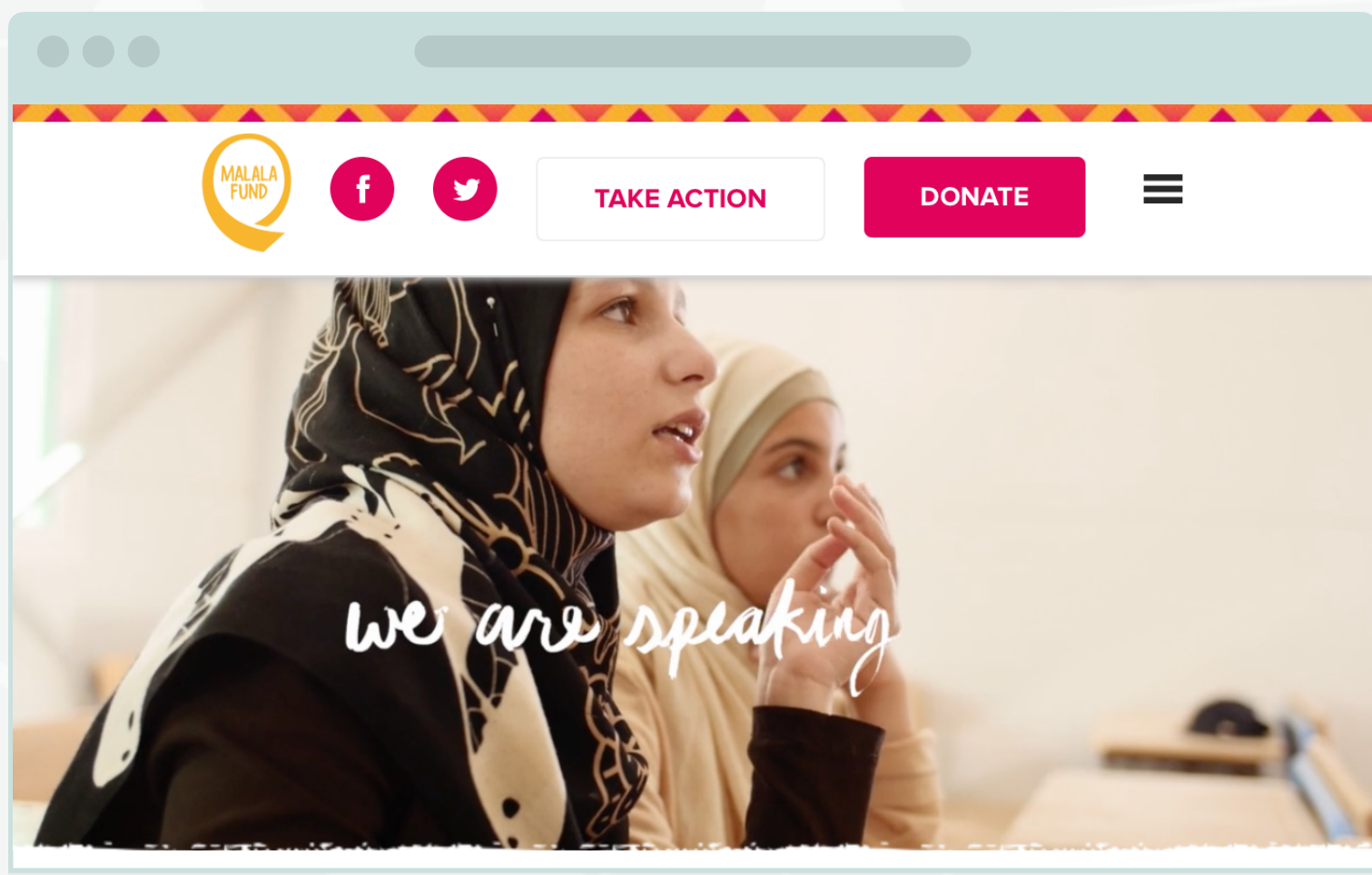
**Cache**



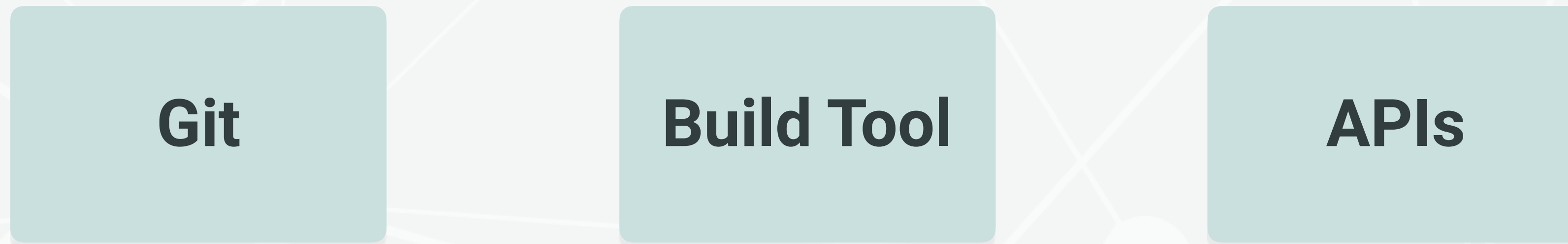
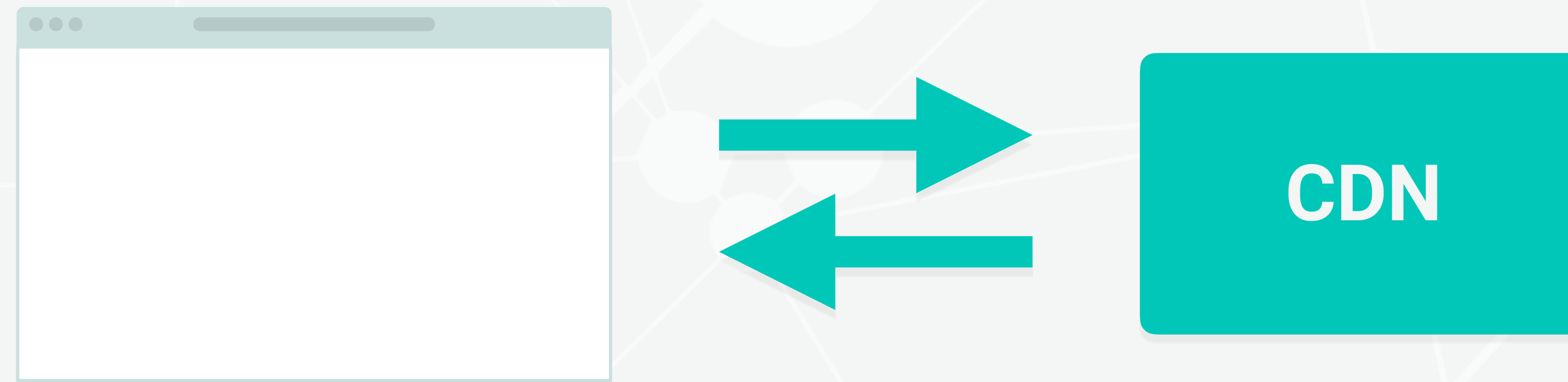






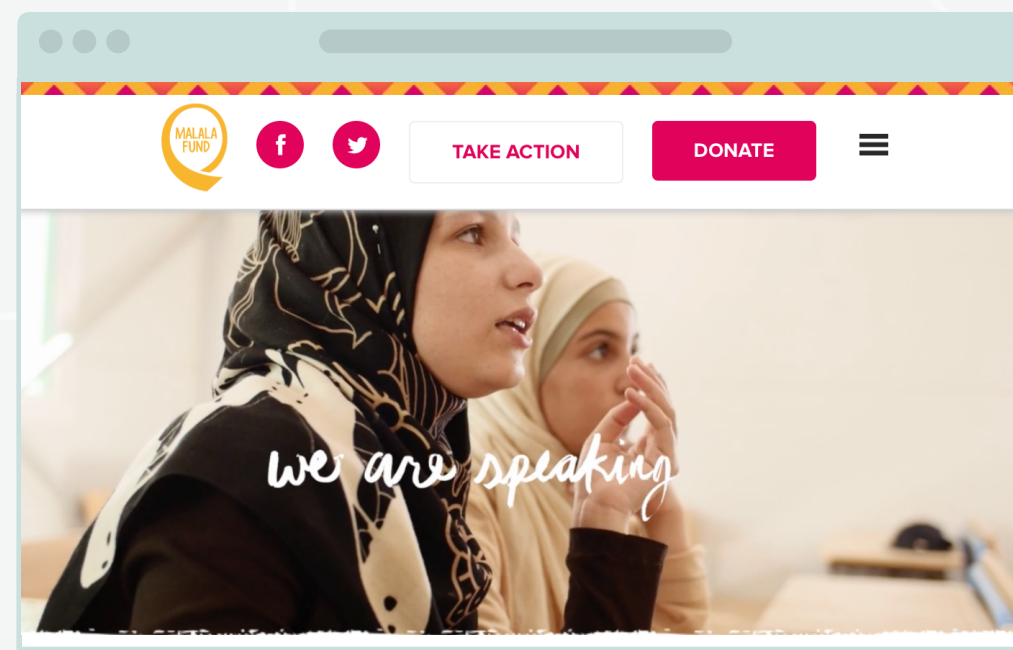


When a user requests a page



When you push your code

When a user requests a page



When you push your code

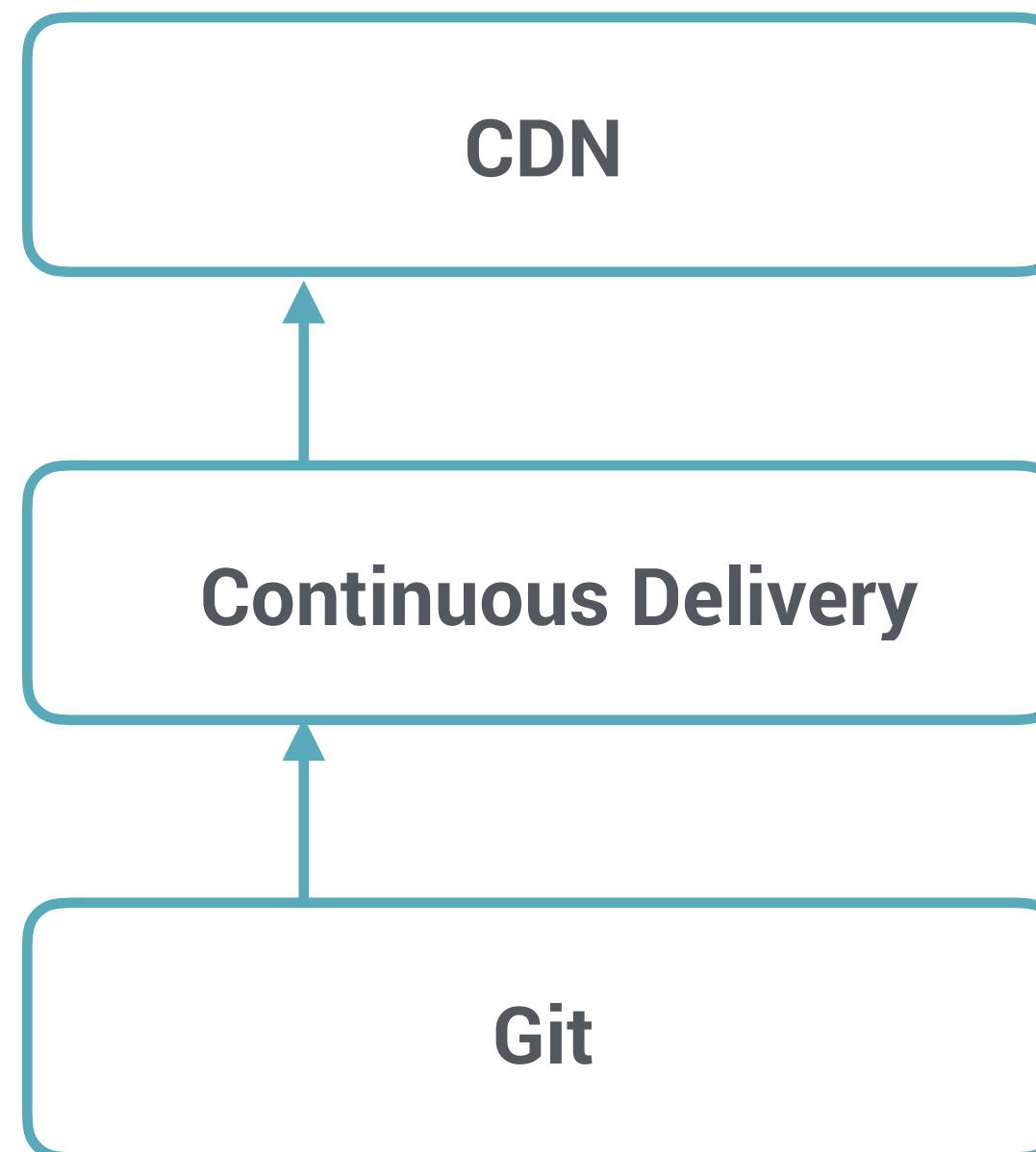
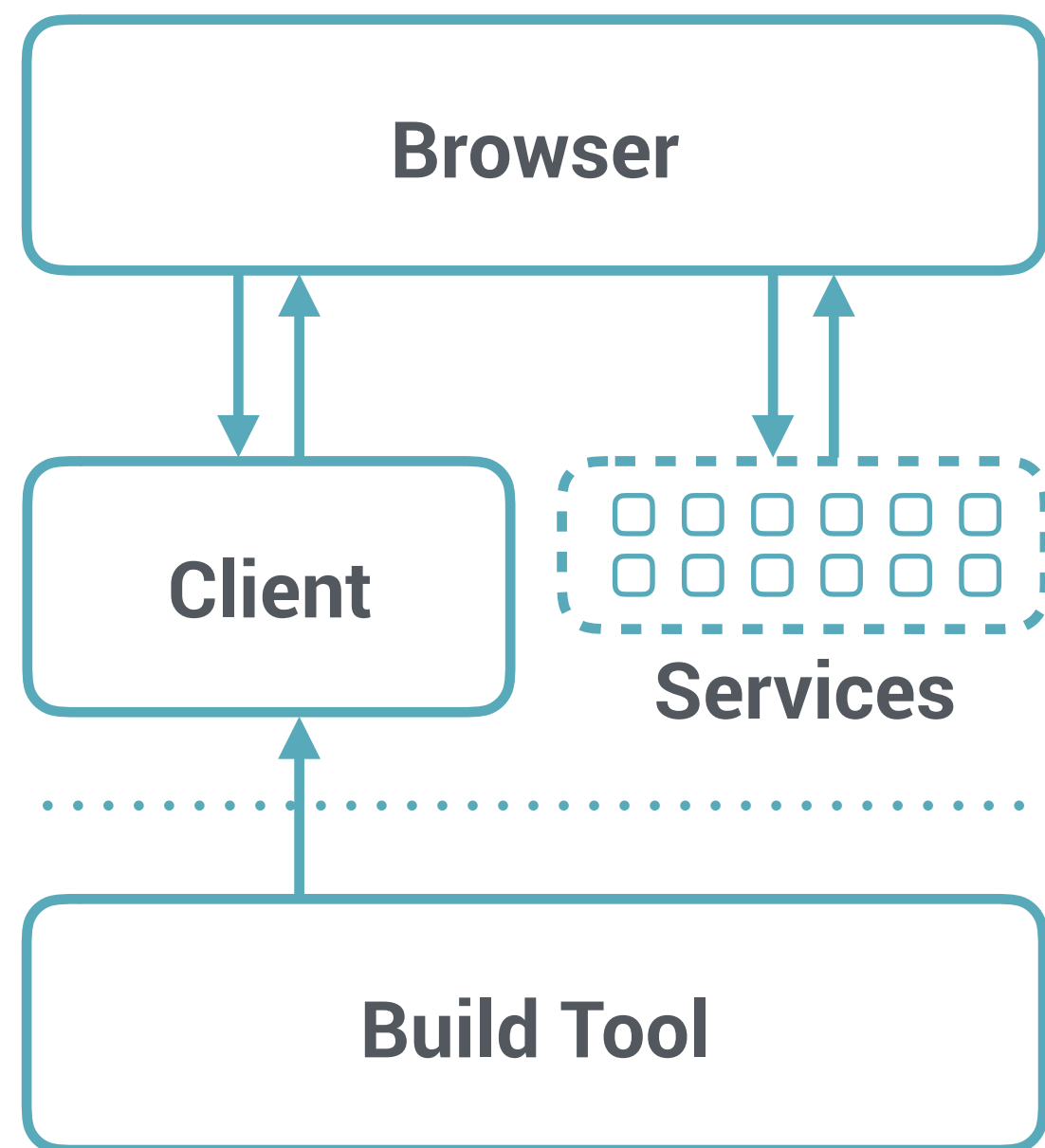
**Single Page App.**

**Bundle of SPAs.**

# A New Stack

---

**Decoupled Architecture + Git Centric Workflow = A Better Web**



**10x Faster**



**No more malware**



**Infinitely scalable**



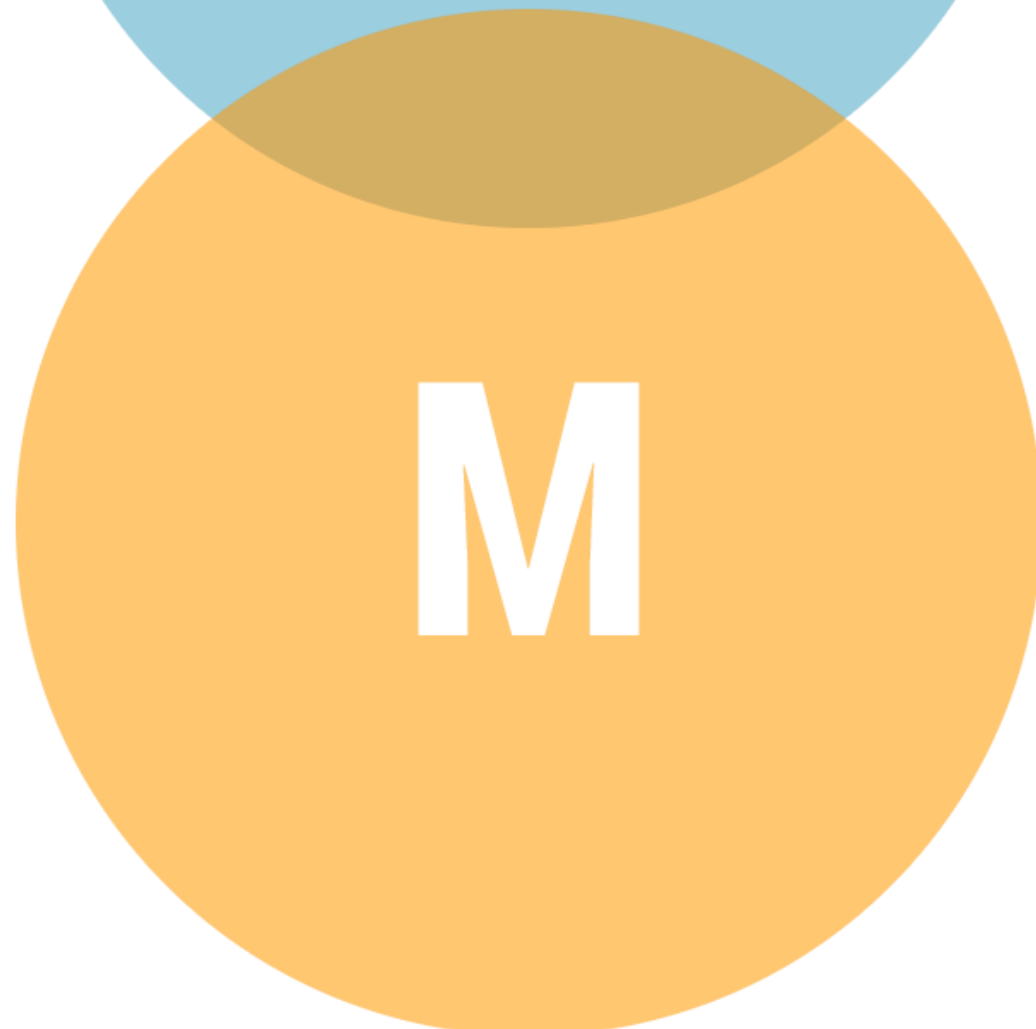
## JavaScript

Any dynamic programming during the request/response cycle is handled by JavaScript, running entirely on the client. This could be any frontend framework, library, or even vanilla JavaScript.



## APIs

All server-side processes or database actions are abstracted into reusable APIs, accessed over HTTP with JavaScript. These can be custom-built or leverage third-party services.

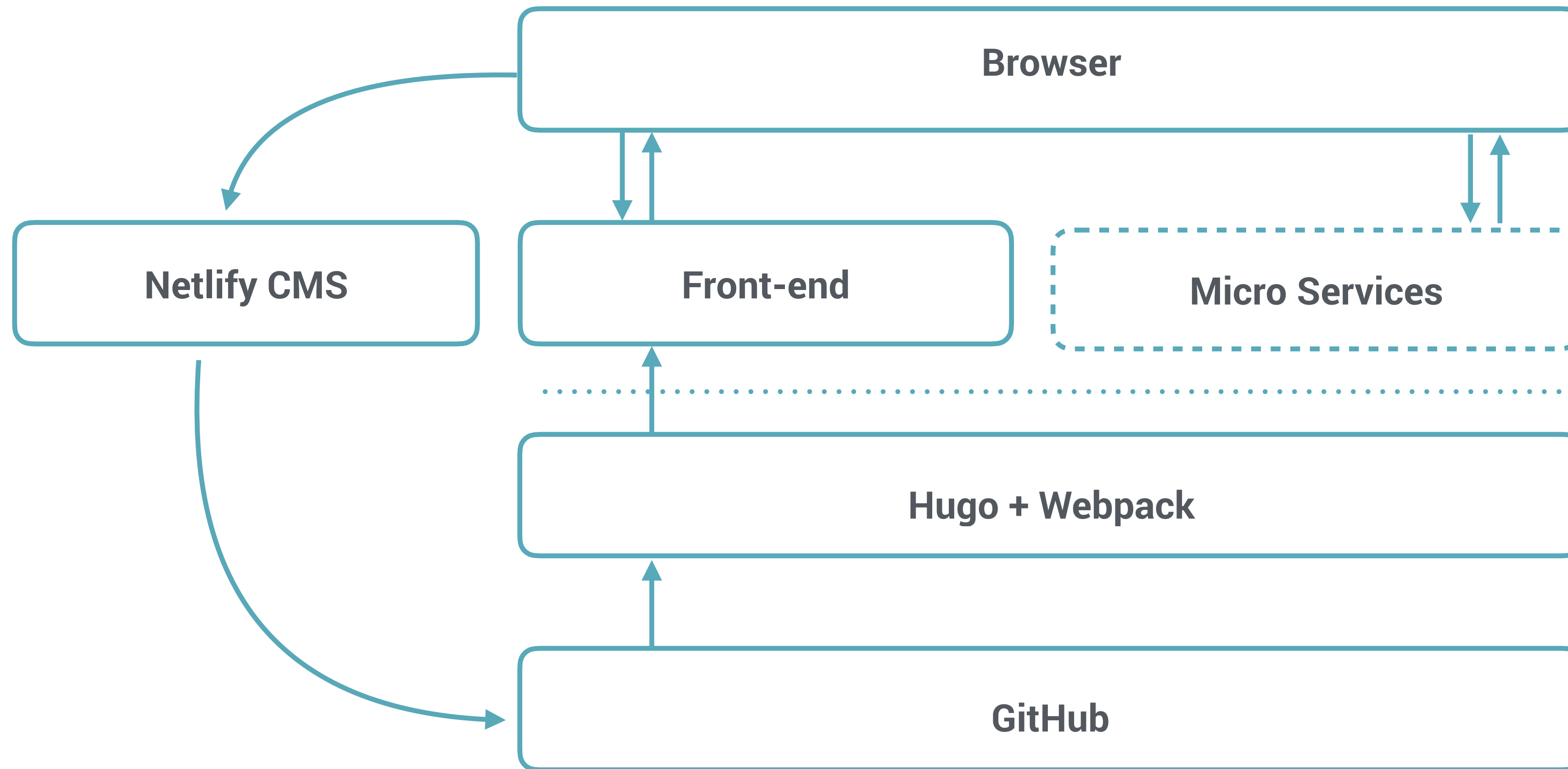


## Markup

Templated markup should be prebuilt at deploy time, usually using a site generator for content sites, or a build tool for web apps.

# A Smashing Architecture

---





# Building an Open-Source Eco-System

---

## NetlifyCMS

Netlify CMS is the first CMS for the new age of Git-centric web development. It is completely build tool agnostic and works with storing structured content in Git. A CMS for site generators. Netlify-CMS gives non-technical users a simple way to edit and add content to any site built with a site generator.

<https://www.netlifycms.org>

[Contribute on GitHub →](#)

## GoJoin

GoJoin is a tiny API that acts as a wrapper for Stripe's subscription API. It exposes simple call methods for single page apps and sites.

<https://github.com/netlify/gojoin>

[Contribute on GitHub →](#)

## GoTell

GoTell is an API and build tool for handling large amounts of comments.

<https://github.com/netlify/gotell>

[Contribute on GitHub →](#)

## GoCommerce

GoCommerce is a small Go based API for e-commerce sites that handles orders and payments. It integrates with Stripe for payments and will support international pricing and VAT verification.

<https://www.gocommerceapi.org>

[Contribute on GitHub →](#)

## GoTrue

GoTrue is a small open-source API written in golang that can act as a self-standing API service for handling user registration and authentication for projects. It's based on OAuth2 and JWT and will handle user signup, authentication and custom user data.

<https://www.gotrueapi.org>

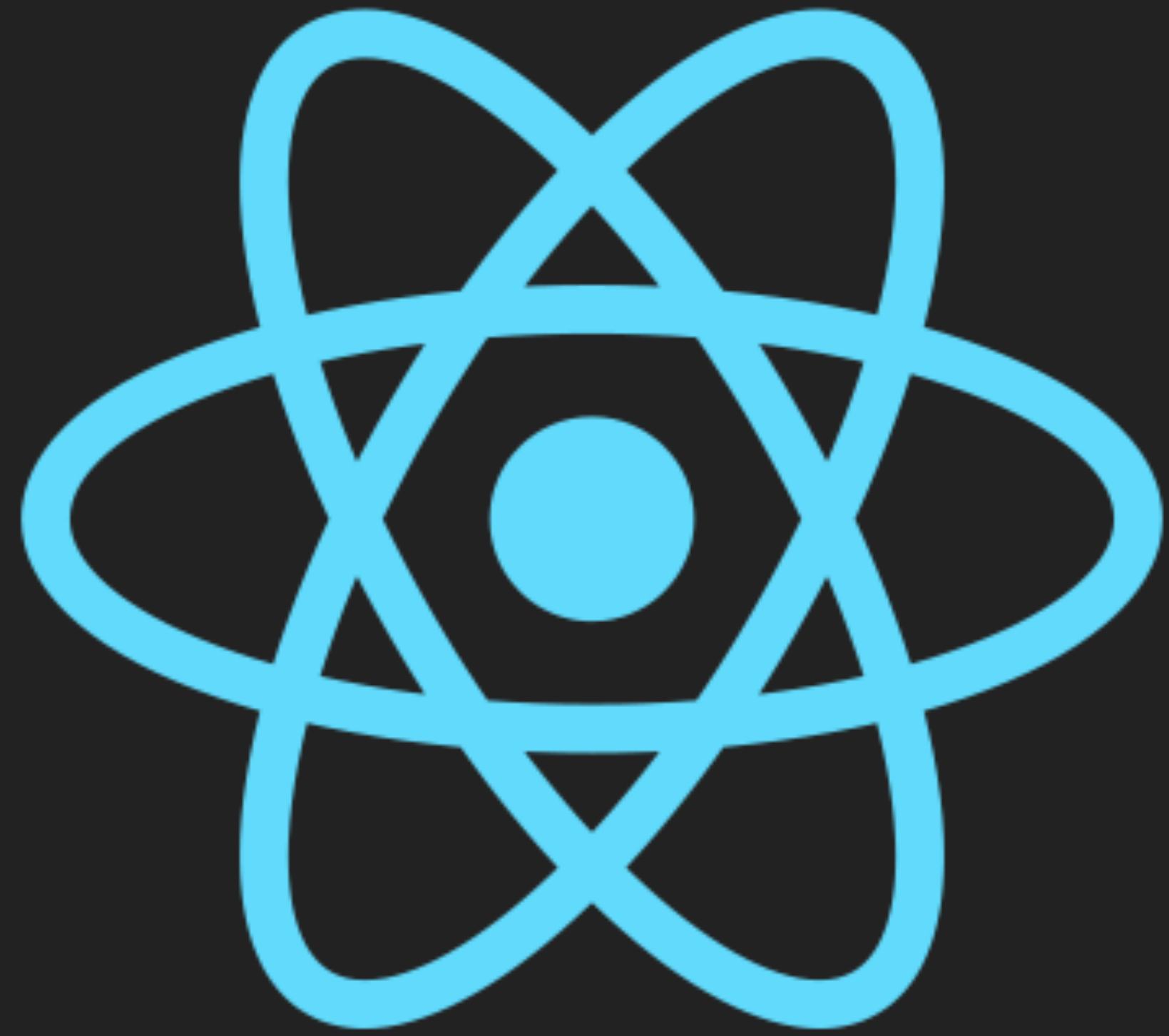
[Contribute on GitHub →](#)

## Gotiator

A tiny API Gateway based on JSON Web Tokens. Gotiator can handle simple API proxying with signing for single page apps that already use JWTs for authentication.

<https://github.com/netlify/gotiator>

[Contribute on GitHub →](#)





**Progressively  
Enhanced.**

# Fallbacks.

Live search	————	Google Search
Live comments	————	Caching
Network	————	Service Workers
Legacy browsers	————	Accessible experience
PDF Generation	————	Print stylesheet
Checkout	————	Nothing... ;-(

# Strategies.

<b>Performance</b>	————	<b>Service Workers</b>
<b>RWD Images</b>	————	<b>Clouinary</b>
<b>Font Loading</b>	————	<b>Preload, OS fonts</b>
<b>Compression</b>	————	<b>Zopfli/Brotli + gzip</b>
<b>Critical CSS</b>	————	<b>Server Push</b>
<b>Deployment</b>	————	<b>10× CSS/JS Bundles</b>

Content Manager x Vitaly

Secure | <https://smashing-magazine.netlify.com/admin/#/collections/articles/entries/2011-03-15-why-user-experience-cannot-be-designed>

Search entry titles...

M

Title  
Why User Experience Cannot Be Designed

Author  
helge-fredheim

Image  
<https://www.smashingmagaz...t-pictures/how-to-03.png>

Publish Date  
03/15/2011 3:32 PM

Quick Summary

Body  
A lot of designers seem to be talking about **user experience** (UX) these days. We're supposed to *delight* our users, even provide them with *magic*, so that they love our websites, apps and start-ups. User experience is a very blurry concept. Consequently, many people use the term incorrectly. Furthermore, many designers seem to have a firm (and often unrealistic) belief in how they can craft the user experience of their product. However, UX depends not only on how something is designed, but also other aspects. In this article, I will try to clarify why UX cannot be designed.

MARCH 15, 2011 · [0 Comments](#)

## Why User Experience Cannot Be Designed

[#UX Design](#)<sup>1</sup> [#Psychology](#)<sup>1</sup> [#Usability](#)<sup>1</sup> [#User Experience](#)<sup>1</sup>

A lot of designers seem to be talking about **user experience** (UX) these days. We're supposed to *delight* our users, even provide them with *magic*, so that they love our websites, apps and start-ups. User experience is a very blurry concept. Consequently, many people use the term incorrectly. Furthermore, many designers seem to have a firm (and often unrealistic) belief in how they can craft the user experience of their product. However, UX depends not only on how something is designed, but also other aspects. In this article, I will try to clarify why UX cannot be designed.

### Heterogeneous Interpretations of UX

I recently visited the elegant website of a design agency. The website looked great, and the agency has been showcased several times. I am sure it delivers high-quality products. But when it presents its UX work, the agency

SAVE CANCEL

Content Manager x Vitaly

Secure | <https://smashing-magazine.netlify.com/admin/#/collections/articles>

Search entry titles...


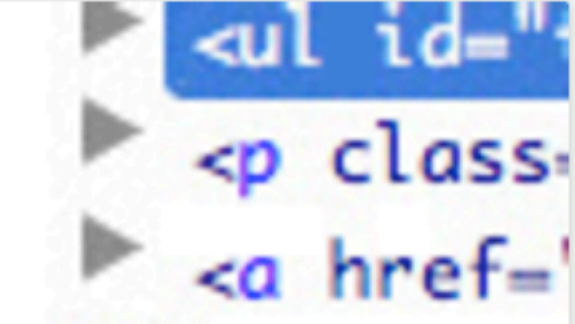






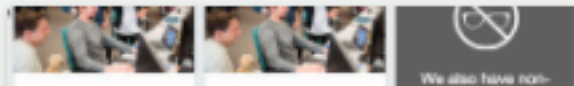


### Publishing

Editorial Workflow

### Collections

- Smashing Articles (+)
- Categories (+)
- Authors (+)
- Jobs (+)
- Events (+)
- Talks (+)
- Workshops (+)
- Speakers (+)
- Printed-books (+)
- Ebooks (+)
- Pages (+)
- Settings

### Smashing Articles

Free Zocial Button Set: Social CSS3 Buttons	Zen Coding: A Speedy Way To Write HTML/CSS Code	 Yummy! Free Food and Cakes Icon Set	 YQL: Using Web Content For Non-Programmers
You're Pricing It Wrong: Software Pricing Demystified	 So You Want To Write A Digital Strategy?	 You Are Not A Machine. You Are Not Alone.	Design Patterns: You Already Know How To Use It
 The Creative vs. The Marketing Team: Yin And Yang, Oil And Water	How I Work: Yahoo!'s Doug Crockford On JavaScript	 Writing WordPress Guides For The Advanced Beginner	 Writing Unit Tests For WordPress Plugins
			



**Build Speed.**

# APIs.

**GoTell.**

**API for handling comments.**

**GoCommerce.**

**API that handles orders/payments.**

# APIs.

**GoJoin.**

**Wraps Stripe subscriptions.**

**GoTrue.**

**Handles user registration and auth.**

# Tooling.

**Netlify CMS.**

**Open Source CMS. Work in progress.**

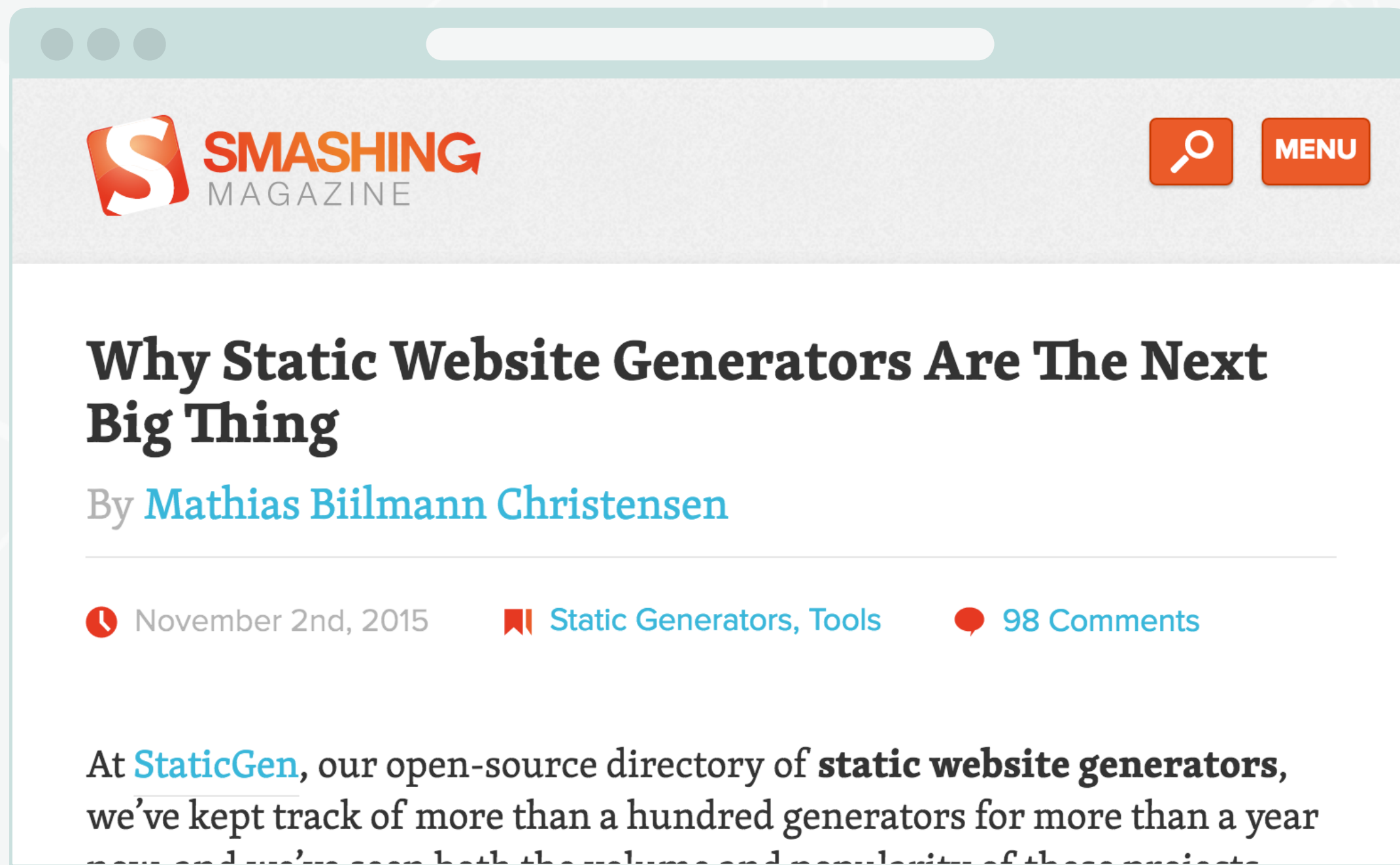
**Gulp + WebPack + Hugo.**

**Asset pipeline.**

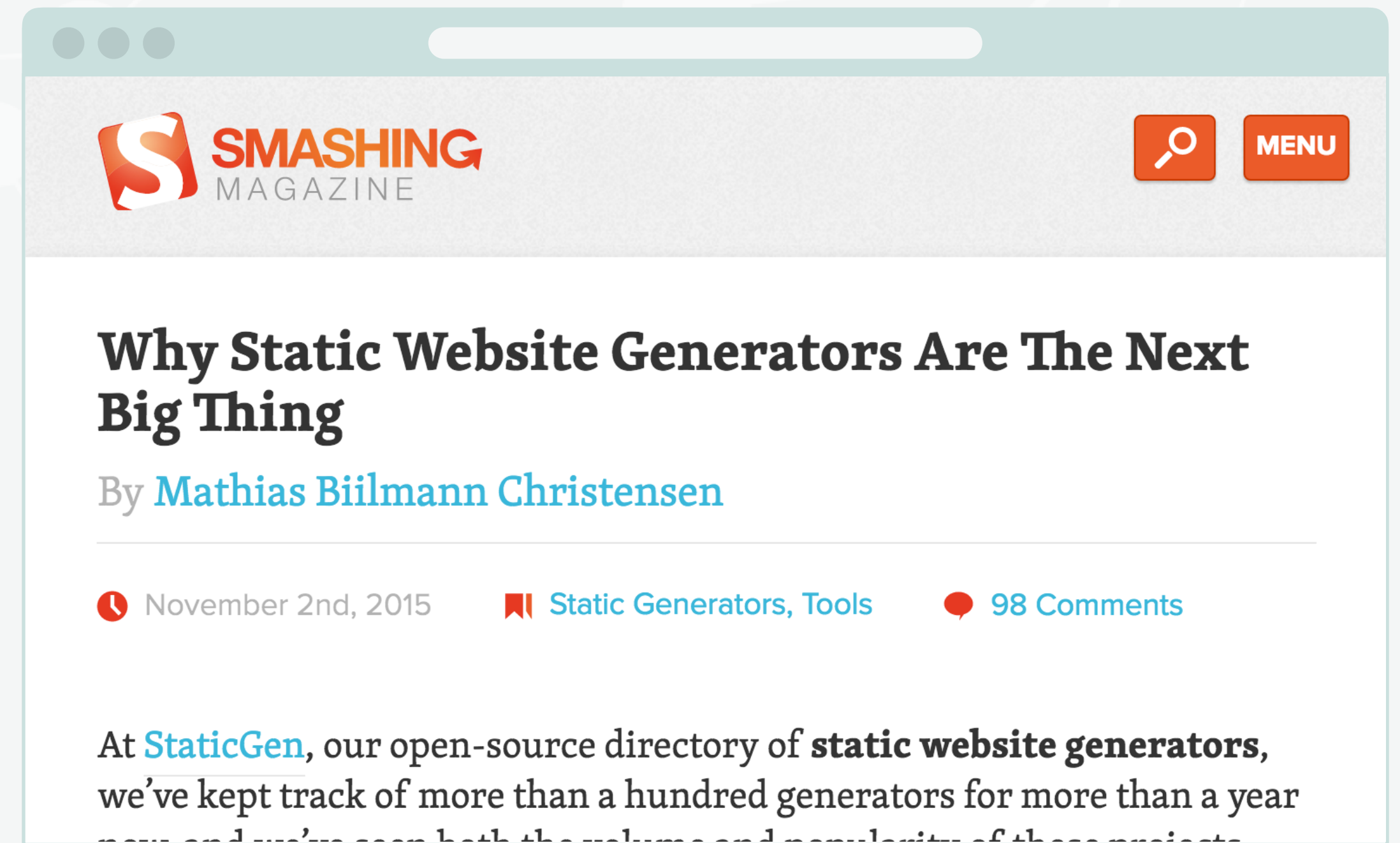
# Fallbacks.

Live search	————	Google Search
Live comments	————	Caching
Network	————	Service Workers
Legacy browsers	————	Accessible experience
PDF Generation	————	Print stylesheet
Checkout	————	Nothing... ;-(

# 6x faster



Hosted on [netlify.com](https://netlify.com)



[smashingmagazine.com](https://smashingmagazine.com)



# Web Page Performance Test for

<https://next.smashingmagazine.com>

From: New York, NY USA - Chrome - Cable  
8/31/2017, 1:41:05 AM

[Need help improving?](#)

First Byte Time	Keep-alive Enabled	Compress Transfer	Compress Images	Cache static content	Effective use of CDN

Tester: WEBPAGETESTER-66.111.3.74

Test runs: **9**

[Re-run the test](#)

[Raw page data](#) - [Raw object data](#)

[Export HTTP Archive \(.har\)](#)

[View Test Log](#)

## Performance Results (Median Run)

	Load Time	First Byte	Start Render	Speed Index	First Interactive (beta)	Document Complete			Fully Loaded				
						Time	Requests	Bytes In	Time	Requests	Bytes In	Certificates	Cost
First View ( <a href="#">Run 9</a> )	4.012s	0.227s	0.688s	1389	3.628s	4.012s	76	1,990 KB	11.526s	110	2,029 KB	34 KB	\$\$\$\$\$
Repeat View ( <a href="#">Run 7</a> )	3.809s	0.276s	0.812s	1365	3.358s	3.809s	26	56 KB	7.246s	57	93 KB	11 KB	

[Plot Full Results](#)

1  
Design

2  
Front-End

3  
Stack

4  
To-Dos



4

To-Dos

Live.

<https://www.smashingmagazine.com>

# To-Dos.

- 01 — Cleaning up stuff.
- 02 — Tweak performance.
- 03 — Nail functionality.
- 04 — Migration issues.
- 05 — Bugfixing!

**Wrapping up.**





**smashingcat (23).png**

Added by Ricardo G. on Aug 16 · 29 KB

12 comments

Label...



**smashingcat (22).png**

Added by Ricardo G. on Aug 16 · 40 KB

12 comments

Label...



**smashingcat (21).png**

Added by Ricardo G. on Aug 16 · 34 KB

12 comments

Label...



**smashingcat (20).png**

Added by Ricardo G. on Aug 16 · 34 KB

12 comments

Label...



**smashingcat (19).png**

Added by Ricardo G. on Aug 16 · 31 KB

12 comments

Label...



**smashingcat (18).png**

Added by Ricardo G. on Aug 16 · 40 KB

12 comments

Label...



**smashingcat (11).png**

Added by Ricardo G. on Aug 16 · 28 KB

12 comments

Label...



**smashingcat (10).png**

Added by Ricardo G. on Aug 16 · 19 KB

8 comments

Label...



**smashingcat (9).png**

Added by Ricardo G. on Aug 16 · 29 KB

10 comments

Label...



**smashingcat (8).png**

Added by Ricardo G. on Aug 16 · 41 KB

12 comments

Label...



**smashingcat (7).png**

Added by Ricardo G. on Aug 16 · 28 KB

12 comments

Label...



**smashingcat (6).png**

Added by Ricardo G. on Aug 16 · 31 KB

8 comments

Label...

Meow!  
@smashingmag

