

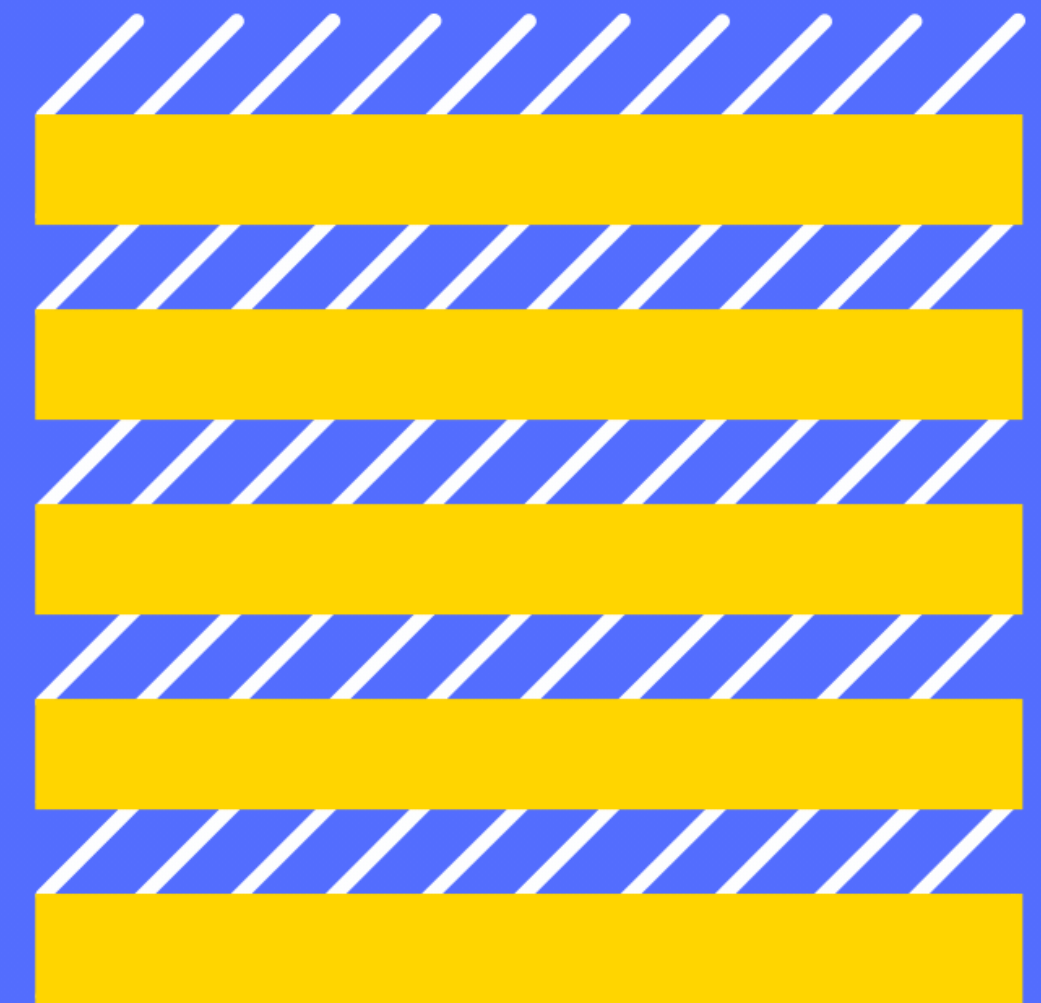
Make your WordPress Site Progressive



Alberto Medina
Google



Thierry Muller
XWP



Progressive Web Development

“Development of **user-first web experiences** using modern web capabilities, and coding and performance best practices”



User eXperience

“A person’s **emotions** and **attitudes** about using a particular product, system or service”

— User Experience, Wikipedia



Ultimate goal: an awesome web UX



Pillars of a delightful UX



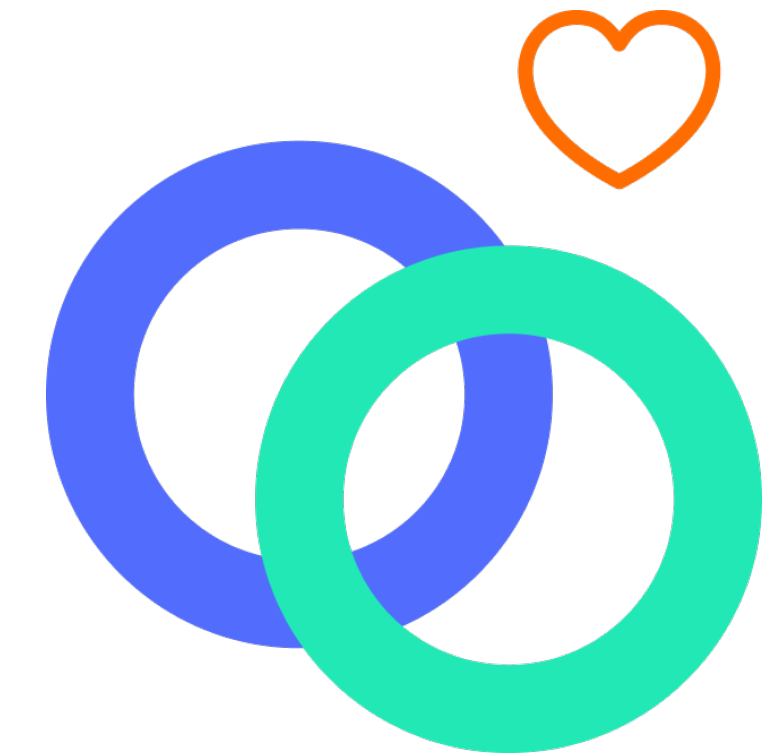
Fast, Reliable



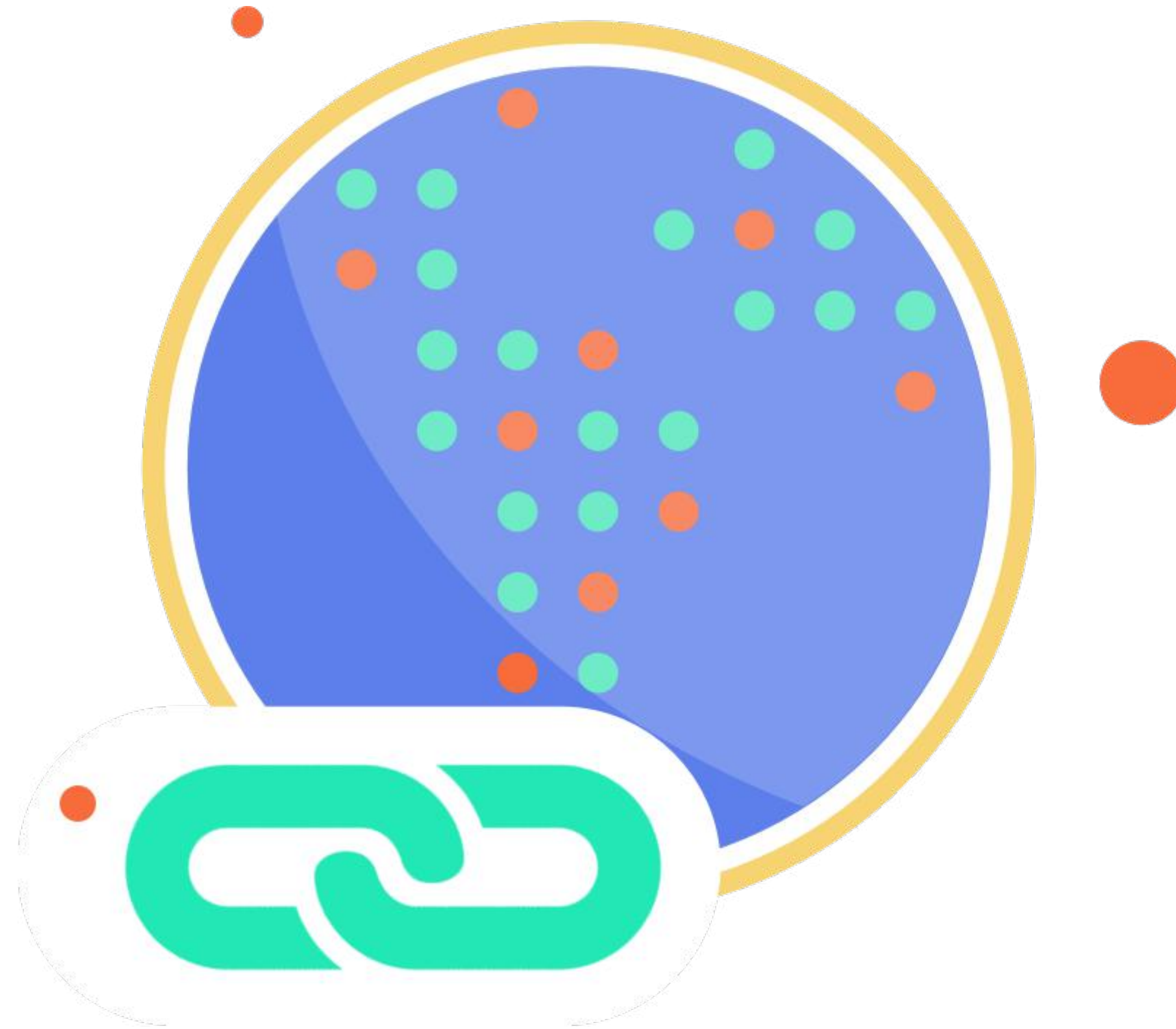
Secure



Integrated



Engaging



The web super powers





Modern dev workflows

- Gulp
- Webpack
- Babel

Javascript frameworks

- Angular
- React
- Ember
- Polymer

Camera & microphone

- Camera
- Media
- Record

Surroundings

- USB
- Bluetooth
- Notifications

Native behavior

- A2HS
- Push Notifications

Input methods

- Speech
- Pointers
- Touch

Device features

- Network type & speed
- Online state
- Vibration
- Battery

Integrated experience

- Payments
- Offline
- Credentials
- VR/AR

Screen & output

- Fullscreen
- Orientation

Operating system

- File access
- Offline storage

Location position

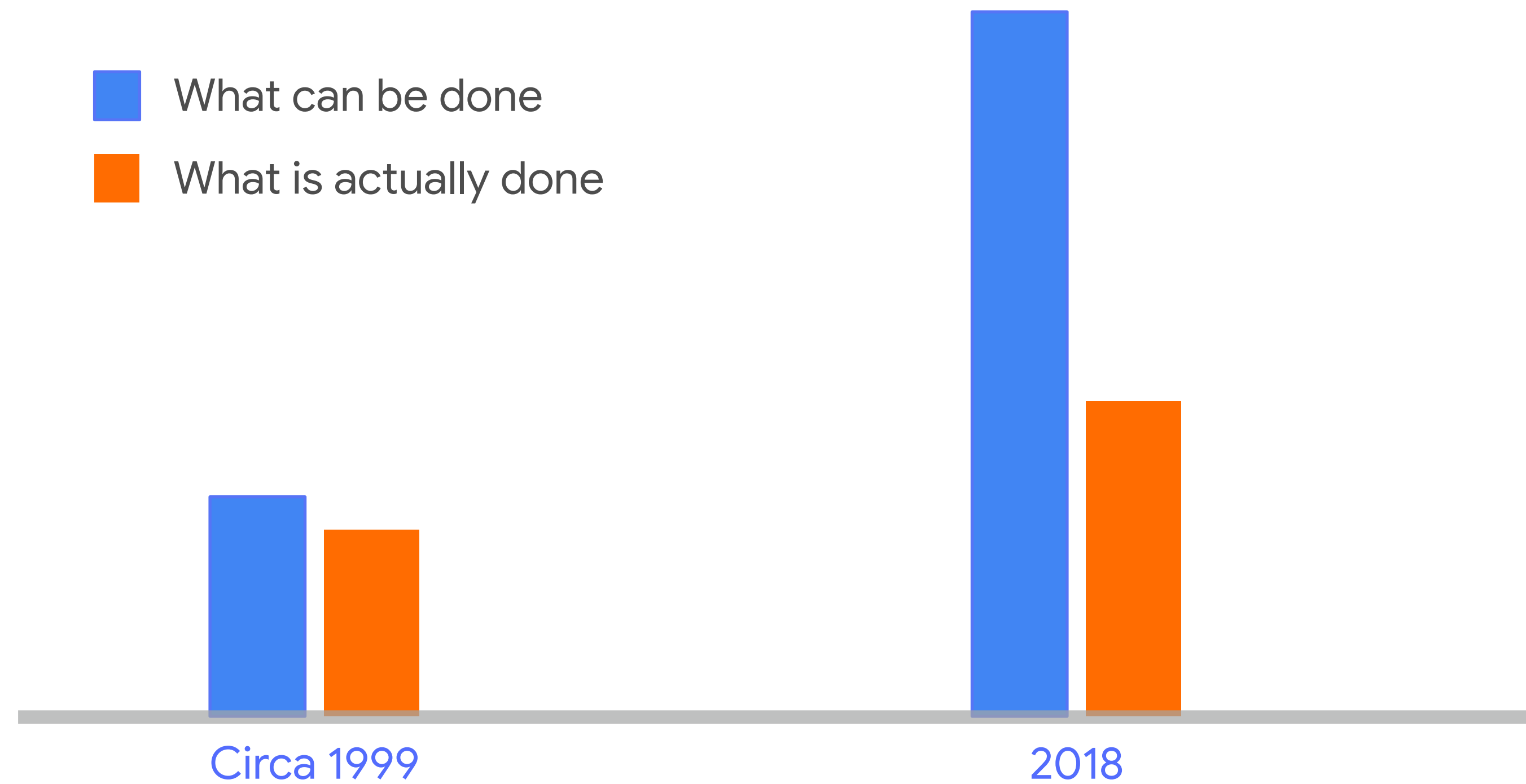
- Geo
- Device motion

The web super powers



The Capability/Usage gap

- What can be done
- What is actually done

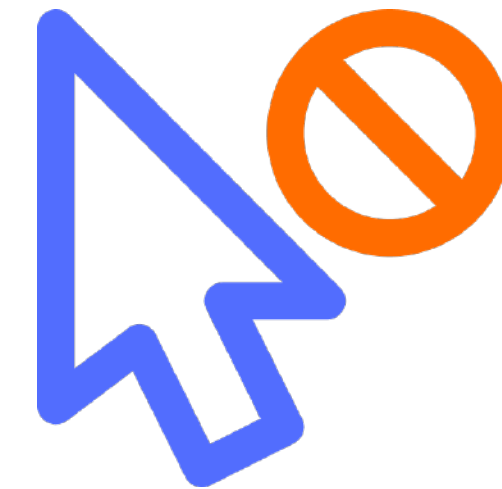




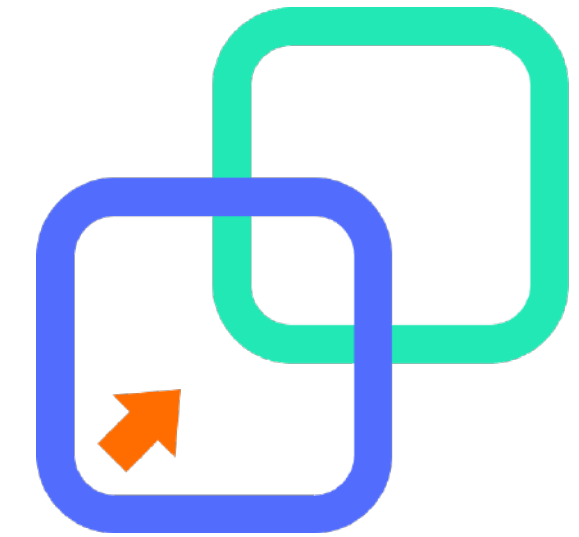
19 seconds to load
mobile on 3G



75% of mobile sites take
10+ seconds to load



Unresponsive
pages



Content
shifting

53%

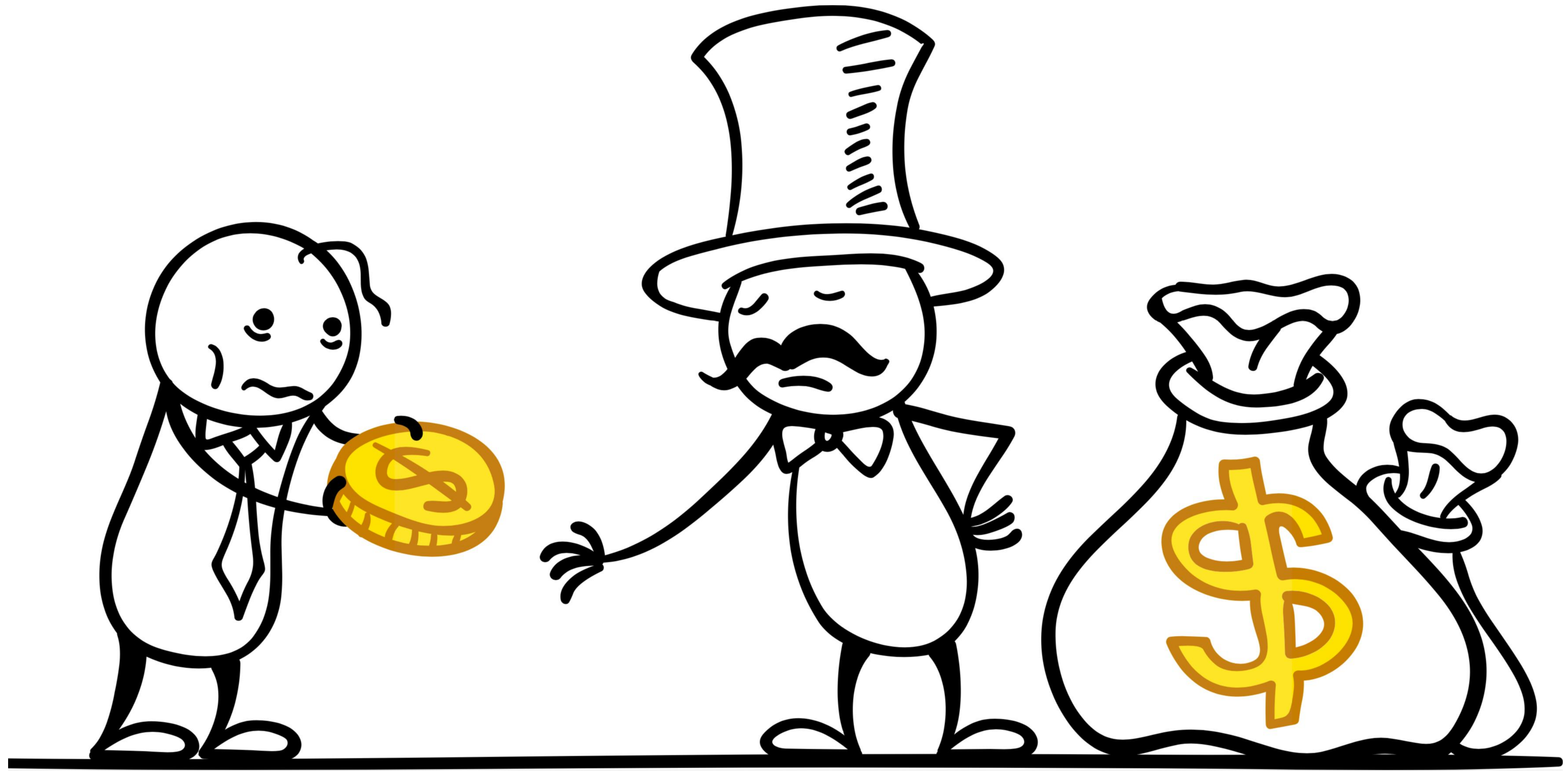
of mobile site visitors leave
after 3 seconds of load time

-7%

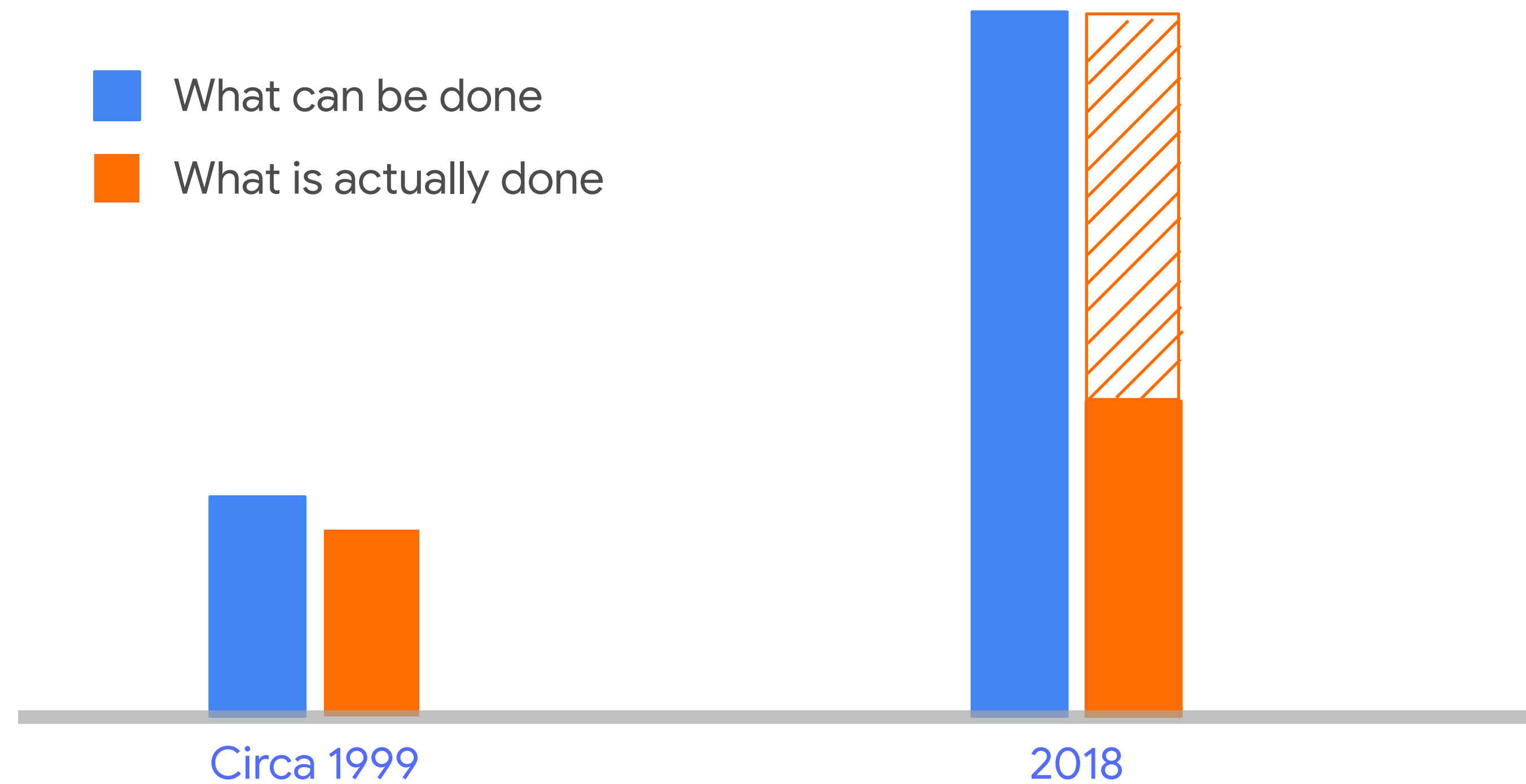
lost conversions per 1
second delay

2X

ad revenue for sites
loading in 5 sec vs 19 sec



Closing the Capability/Usage gap



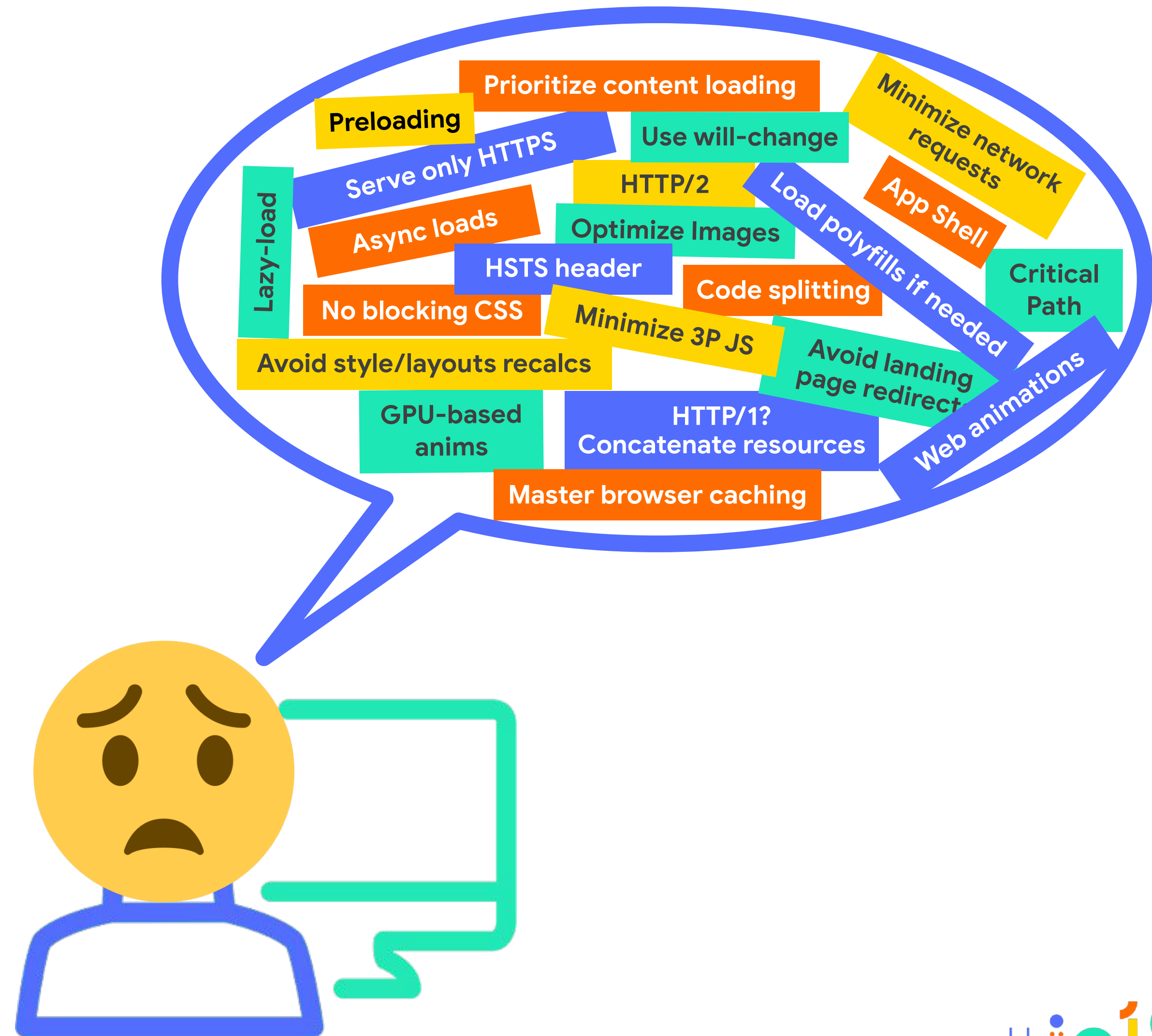
Closing the gap

All developers do the right thing



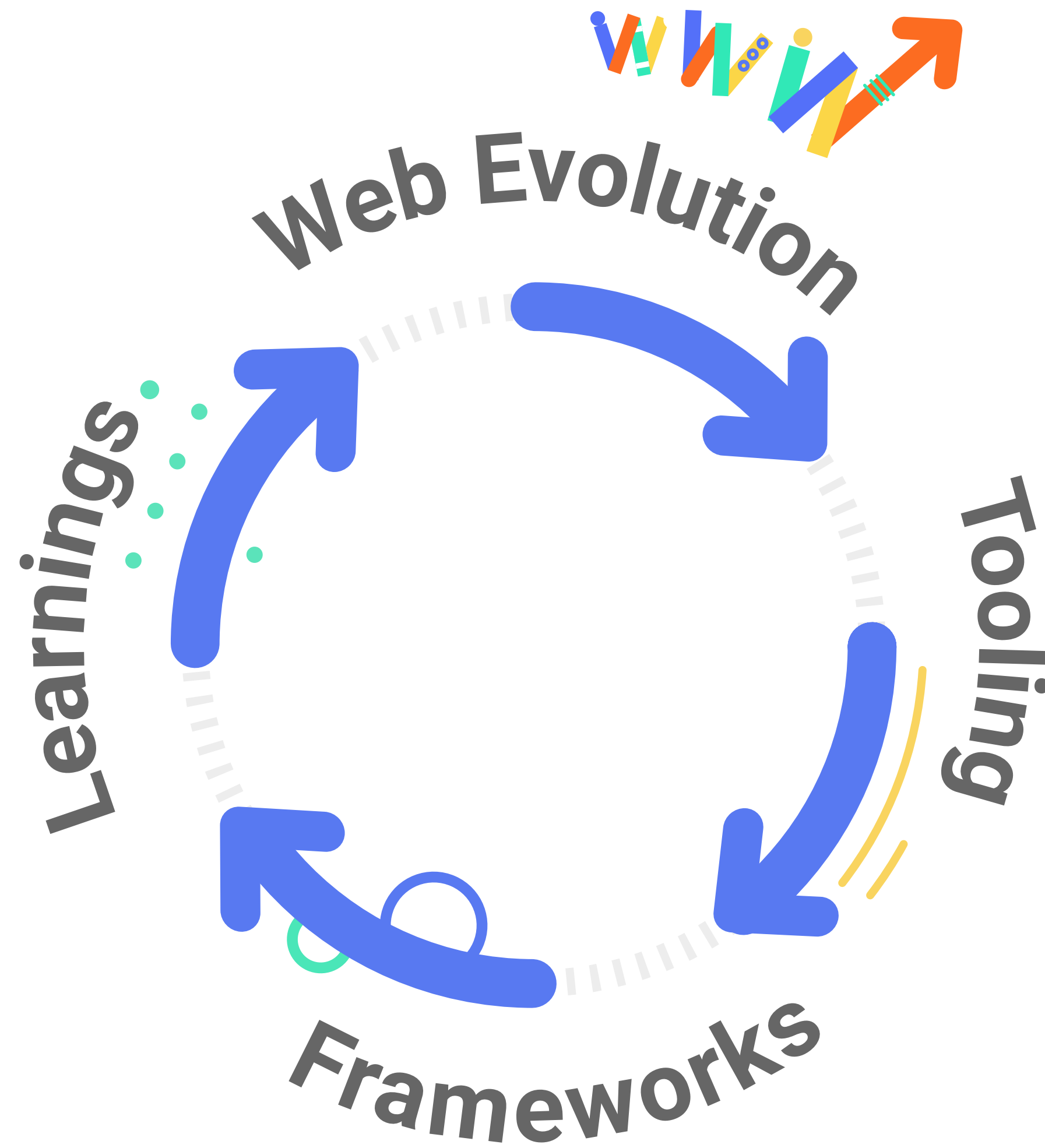
Closing the gap

All developers do the right thing?

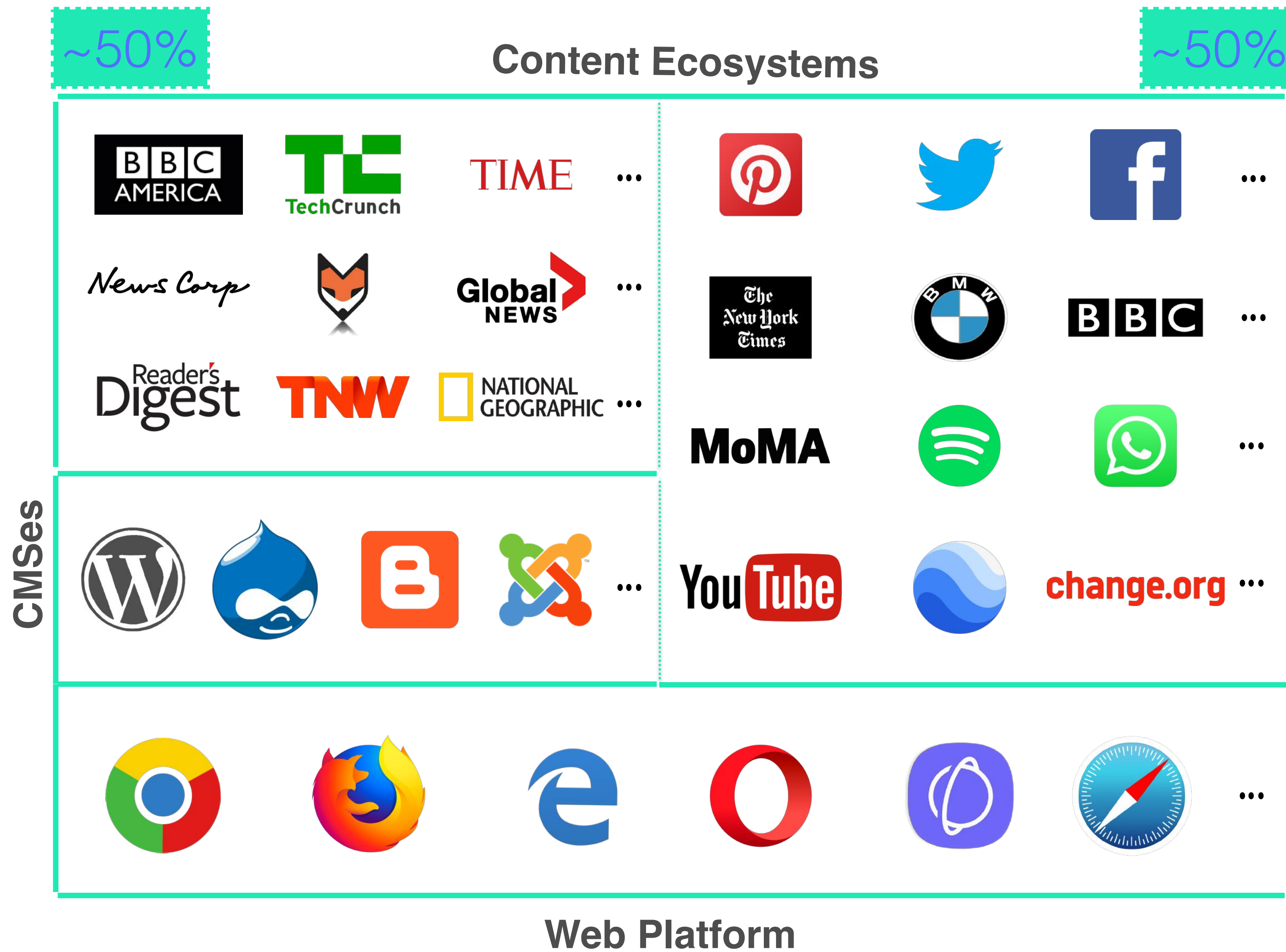


Closing the gap

Progressive Web ecosystem!



A Simple Model of The Web







59%

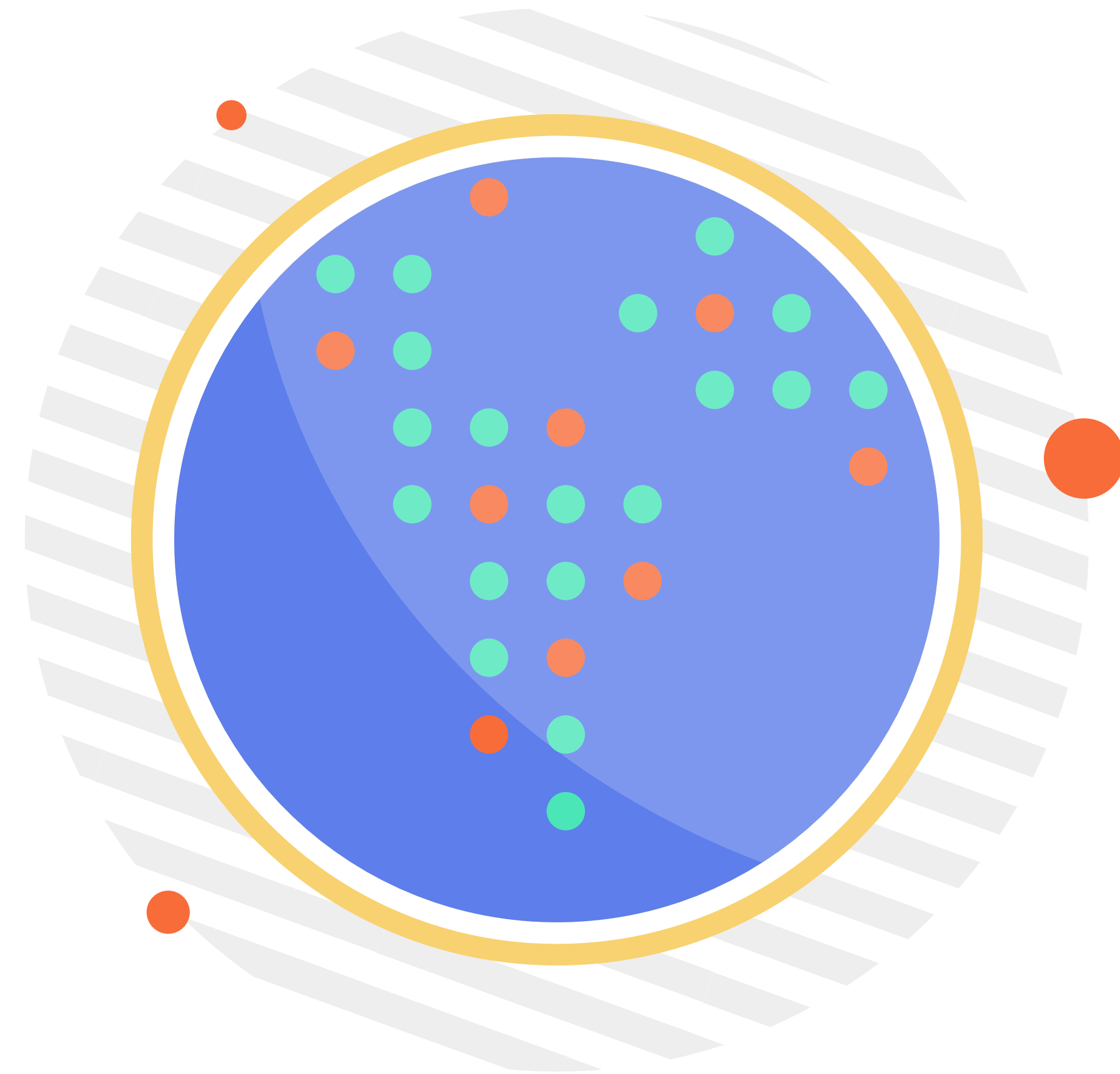
opensourcecms.com/cms-market-share



Open-source
CMS market share



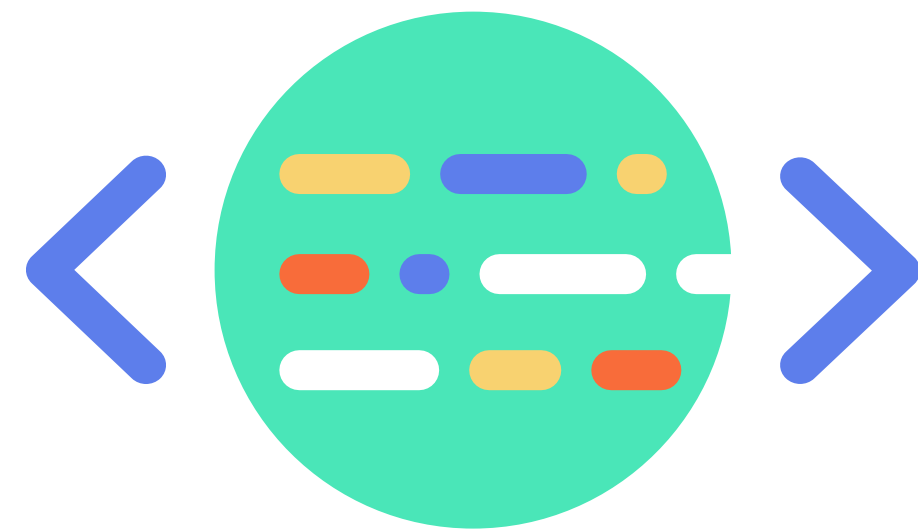
WordPress
powers 30% of
the web



Progressive WordPress



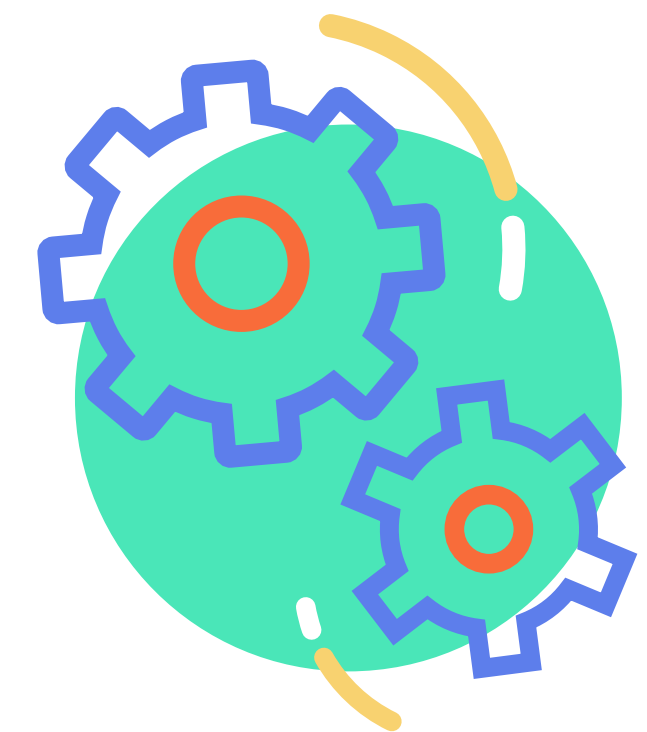
Modern workflows



Coding best practices

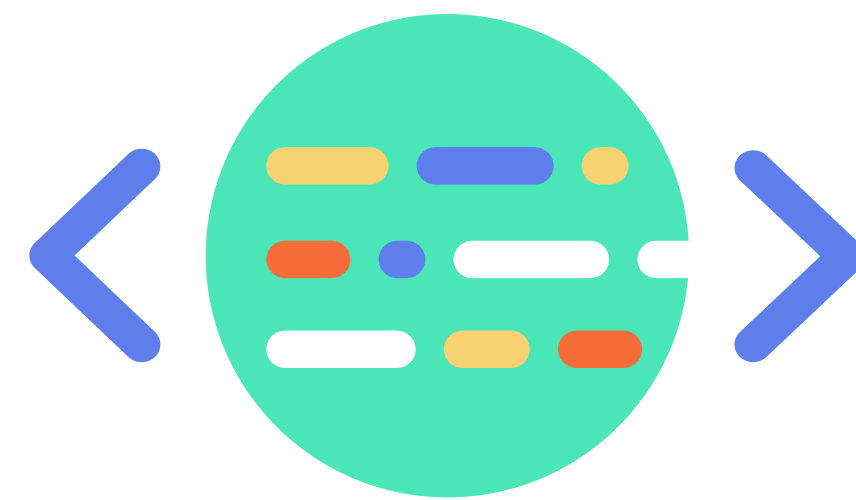


Performance best practices



Modern Web APIs

AMP



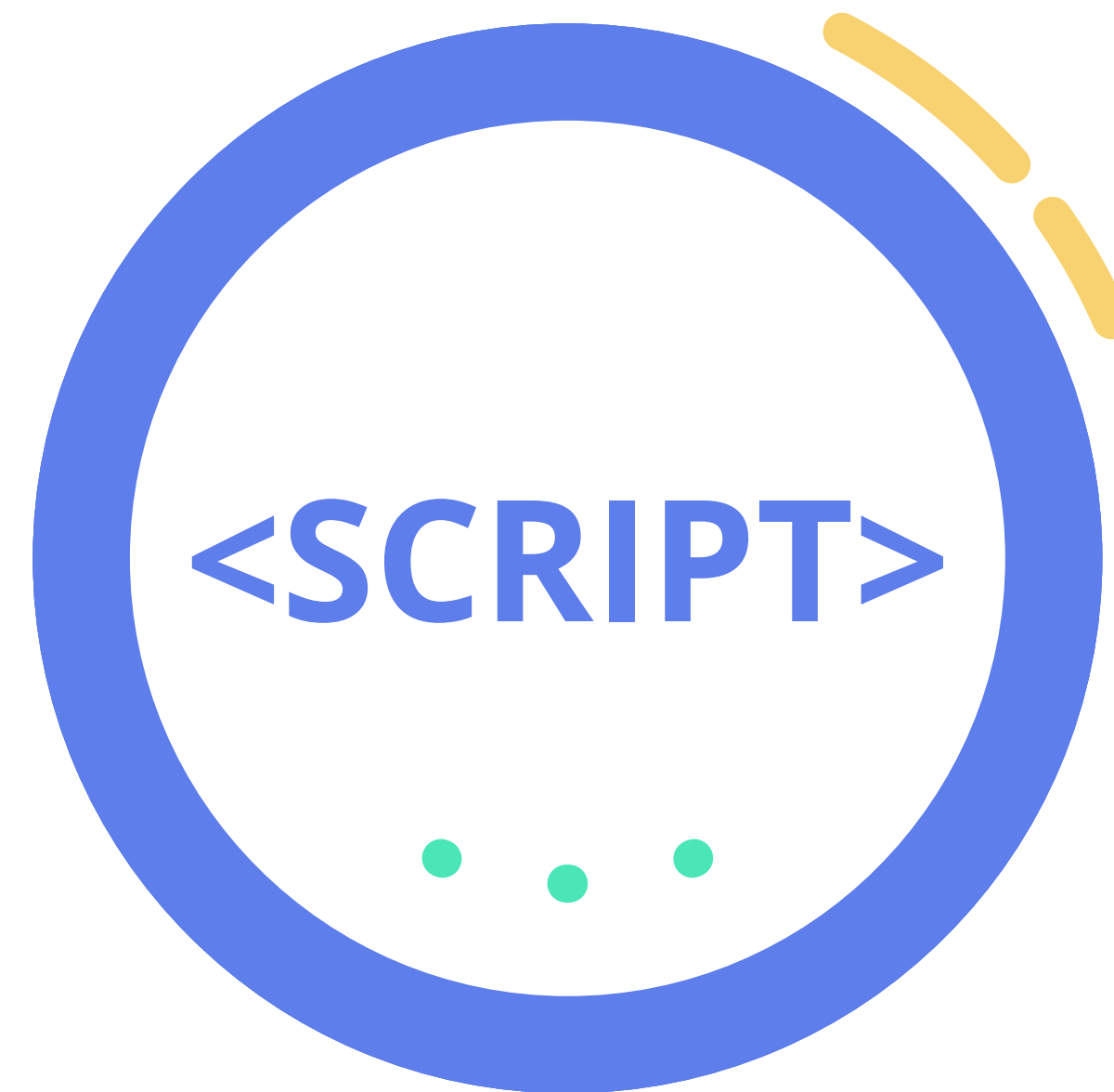
Coding
best practices



Performance
best practices



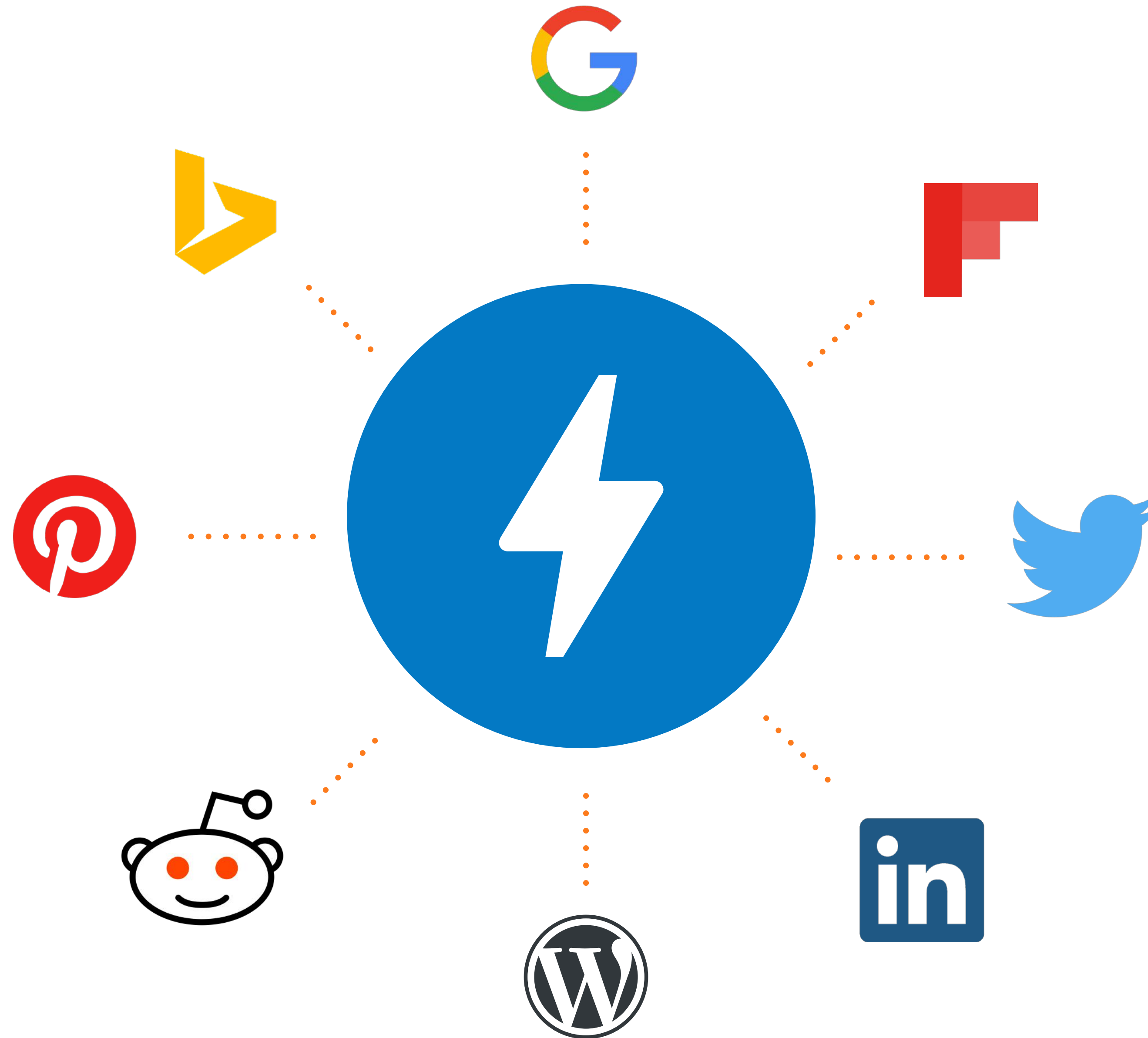
AMP HTML



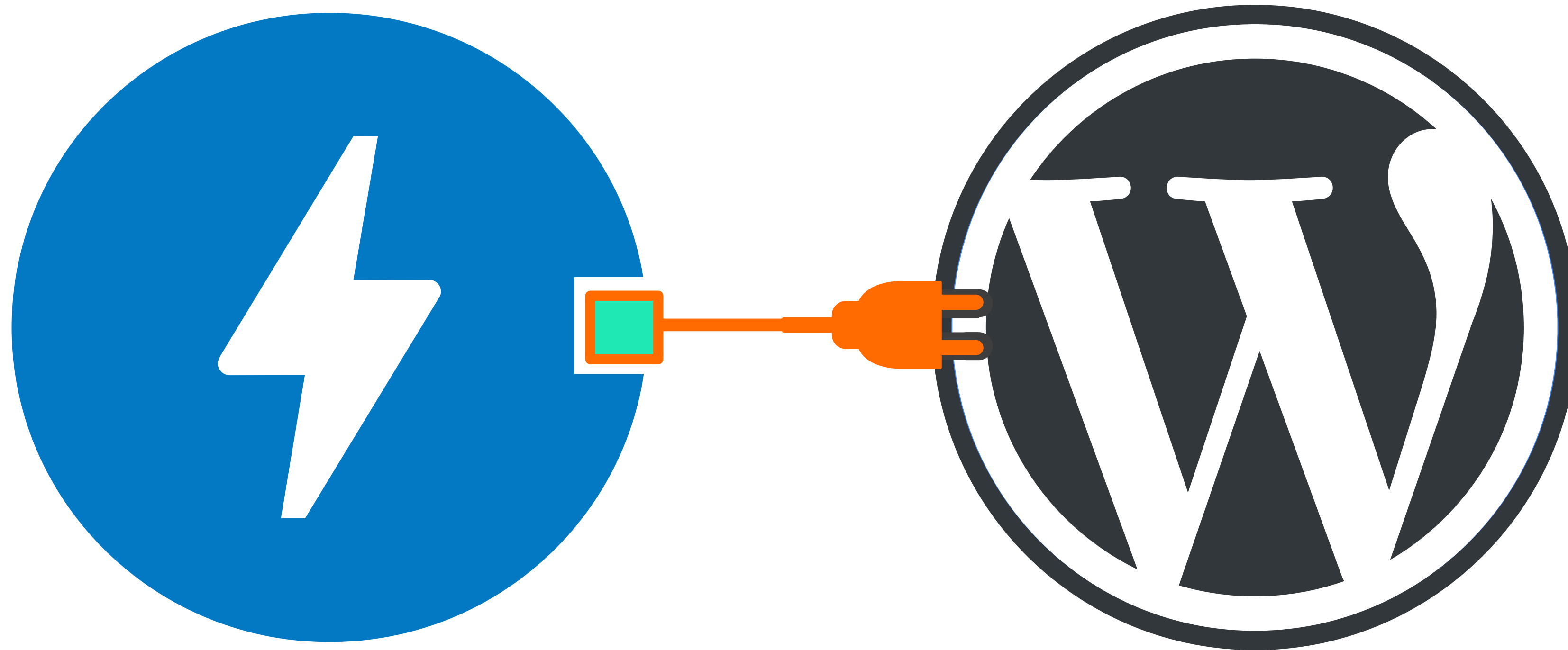
AMP JS

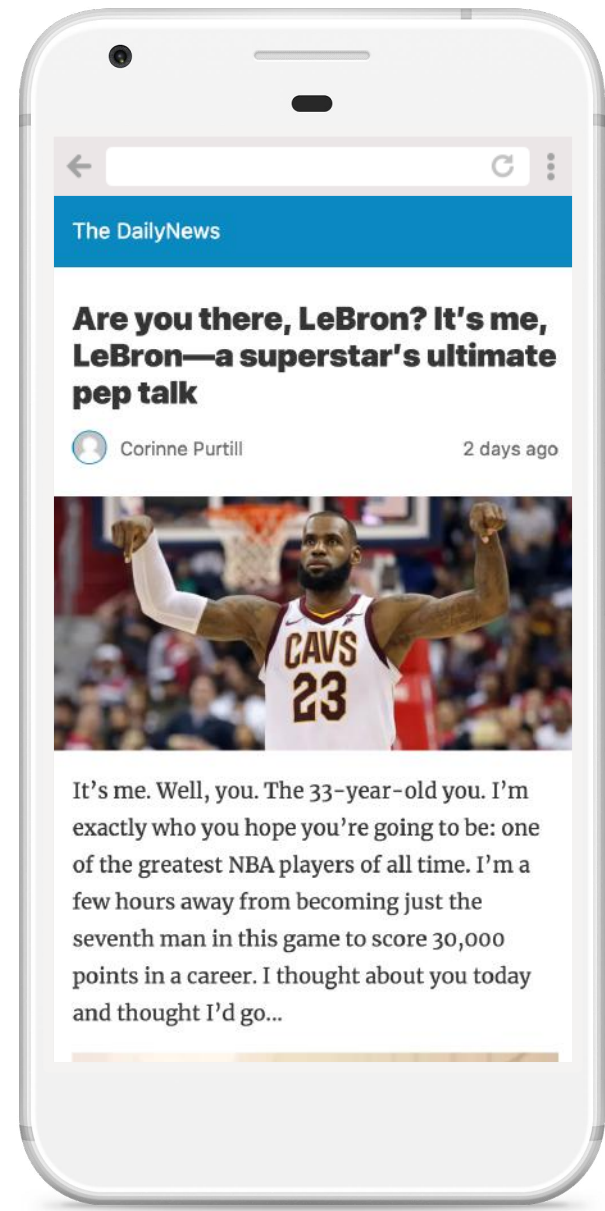
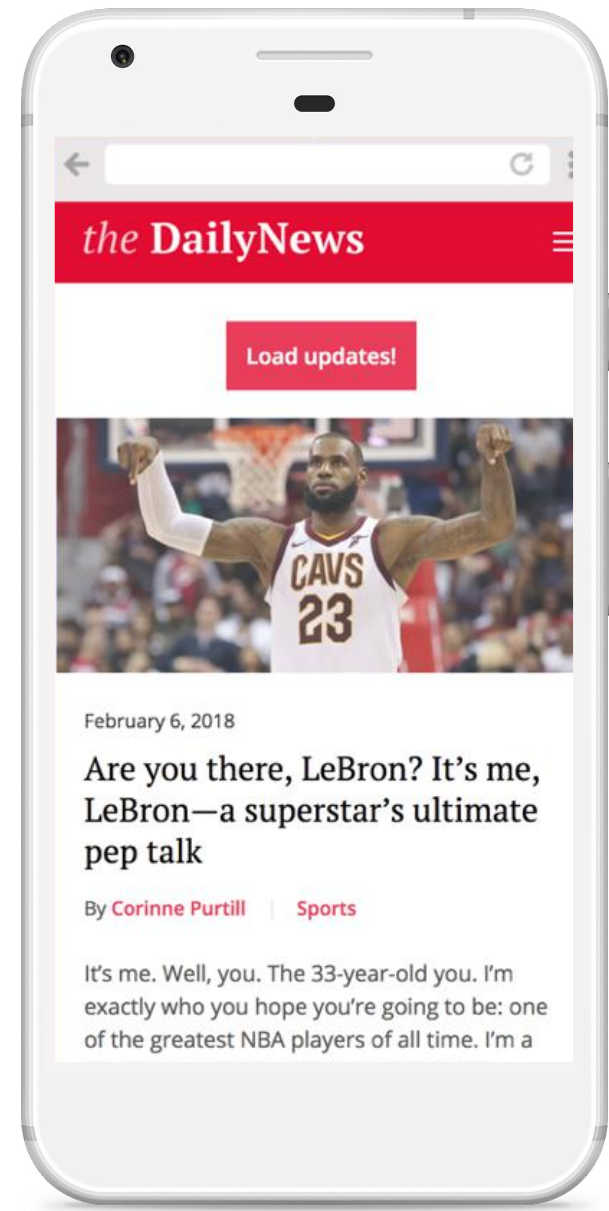
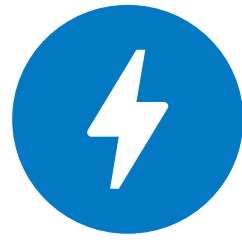


AMP Cache

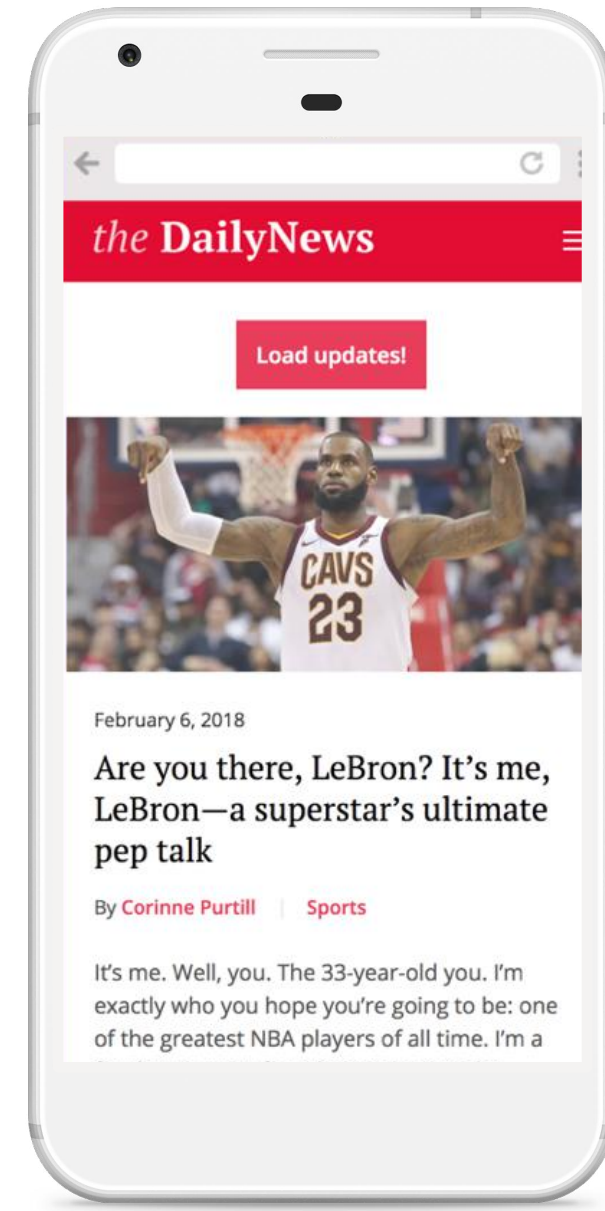
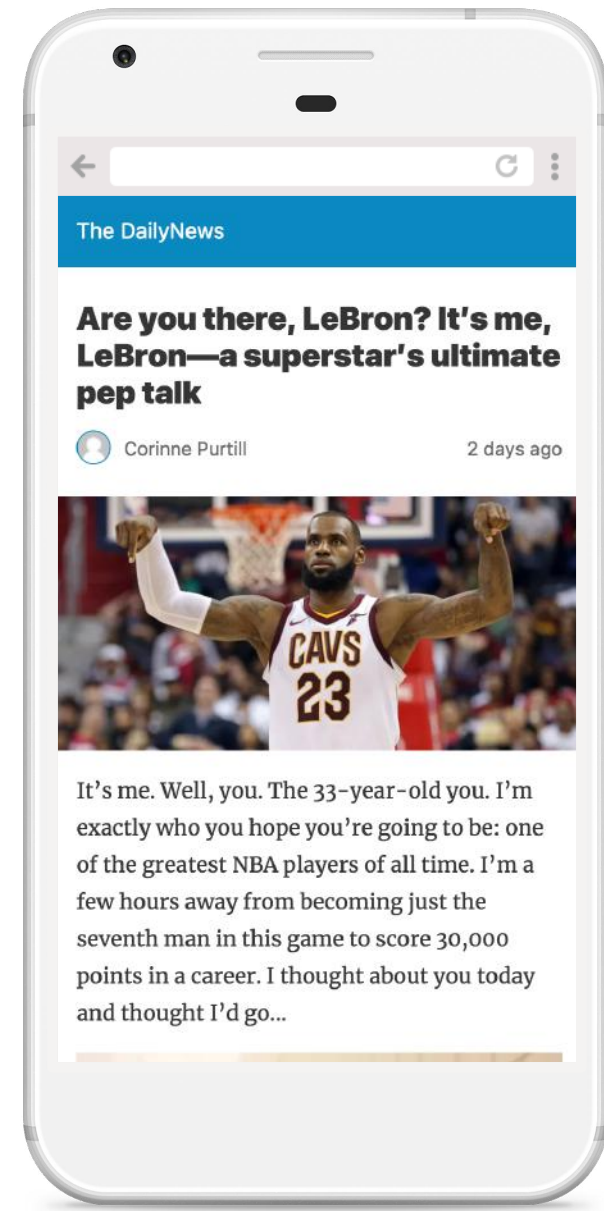
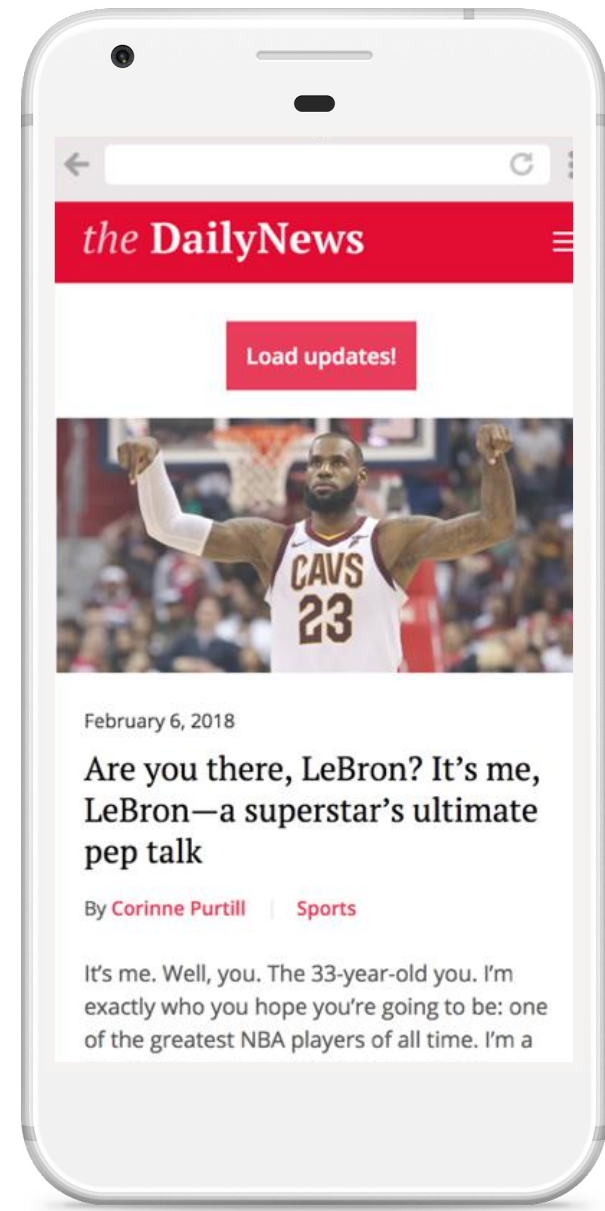
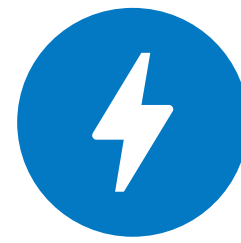


AMP in WordPress



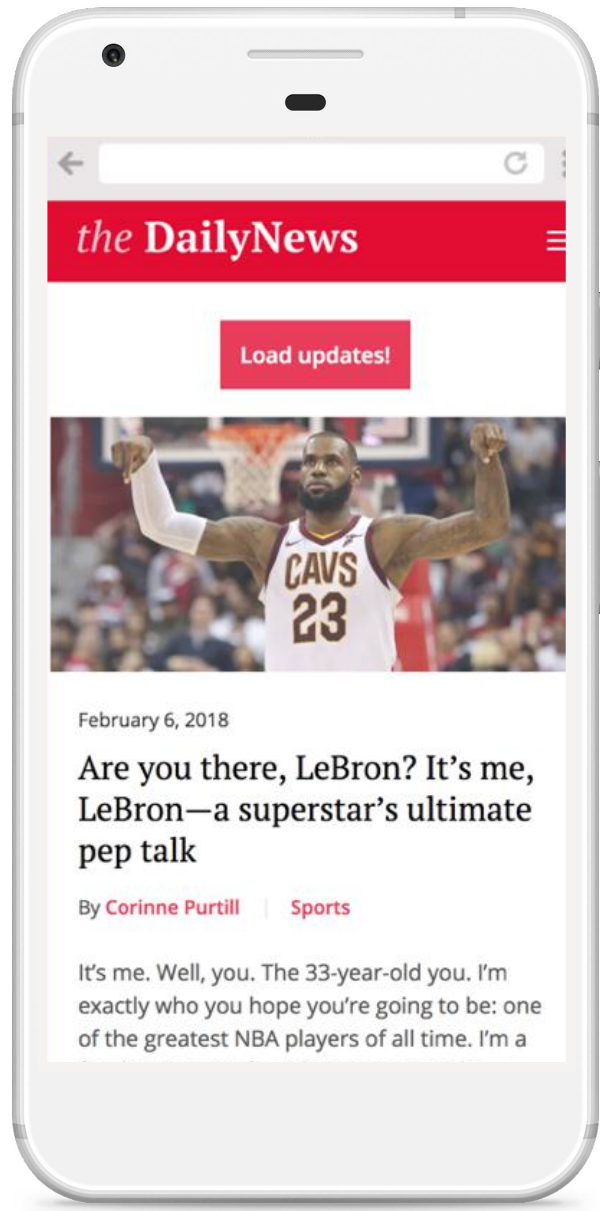
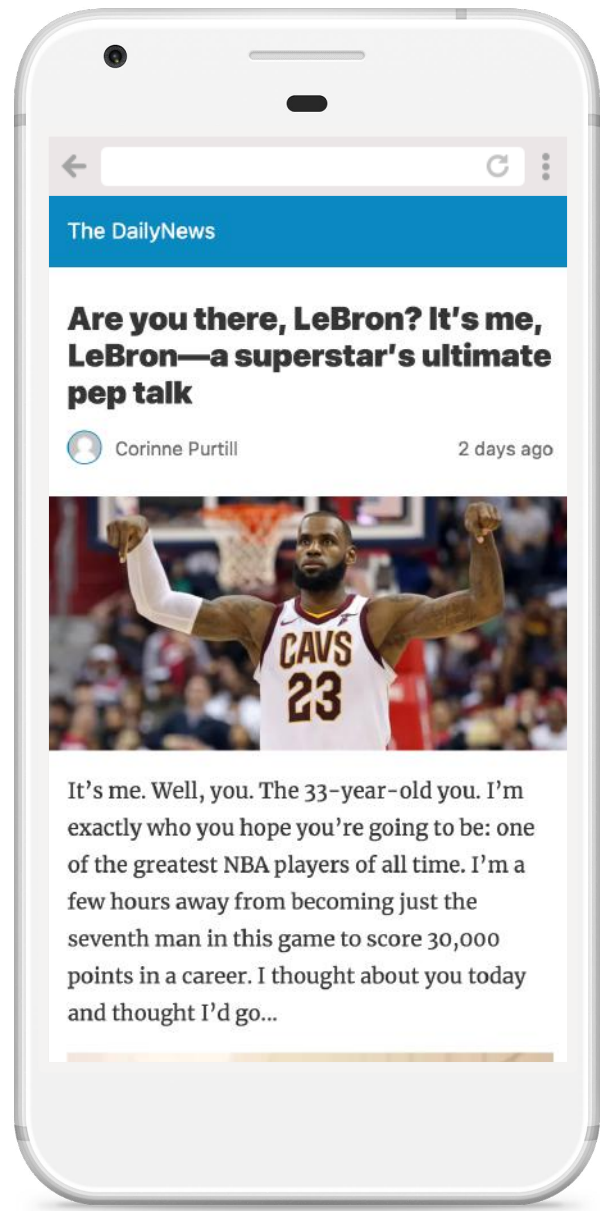
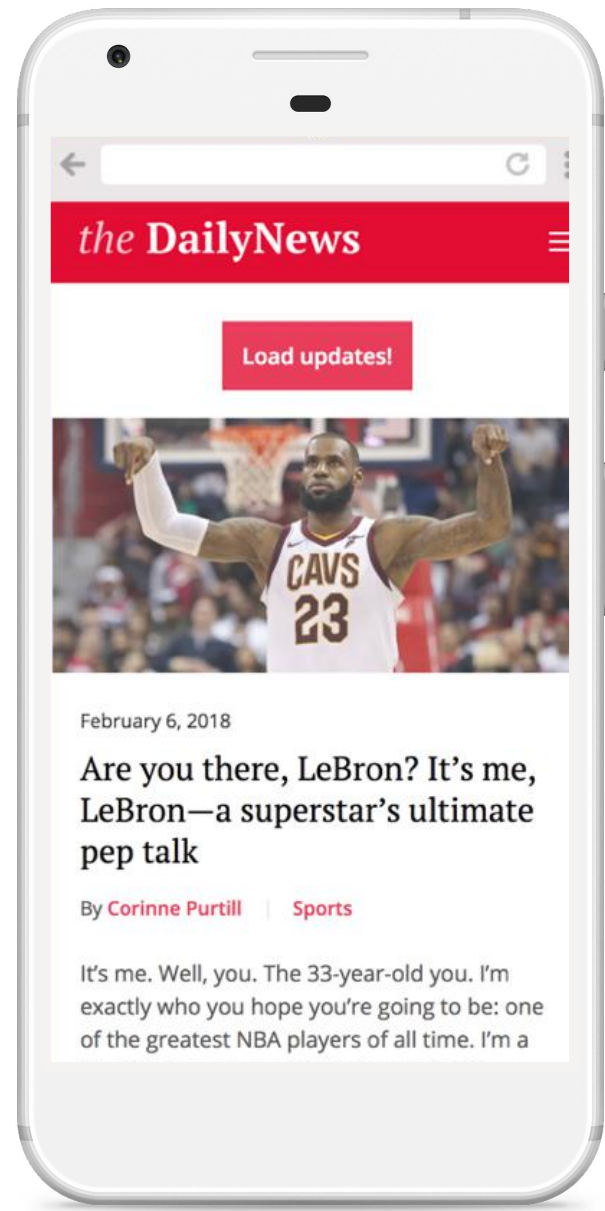
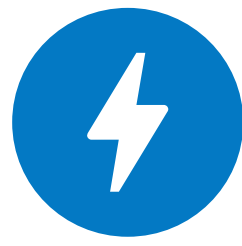


Paired mode
(v0.1 - v0.5)



Paired mode
(v0.1 - v0.5)

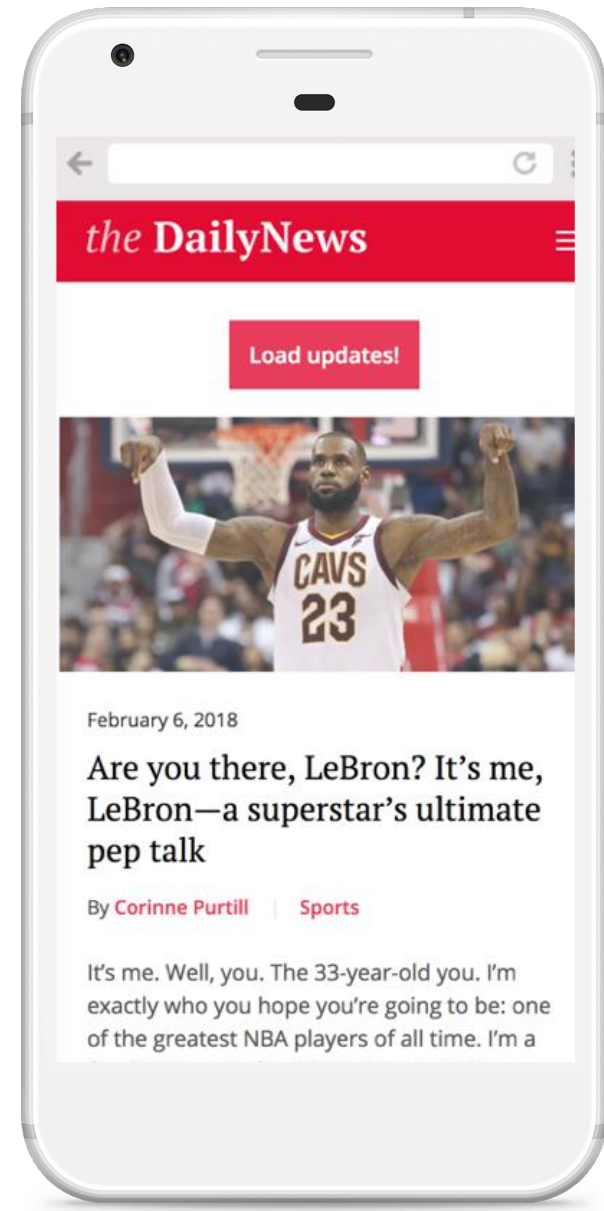
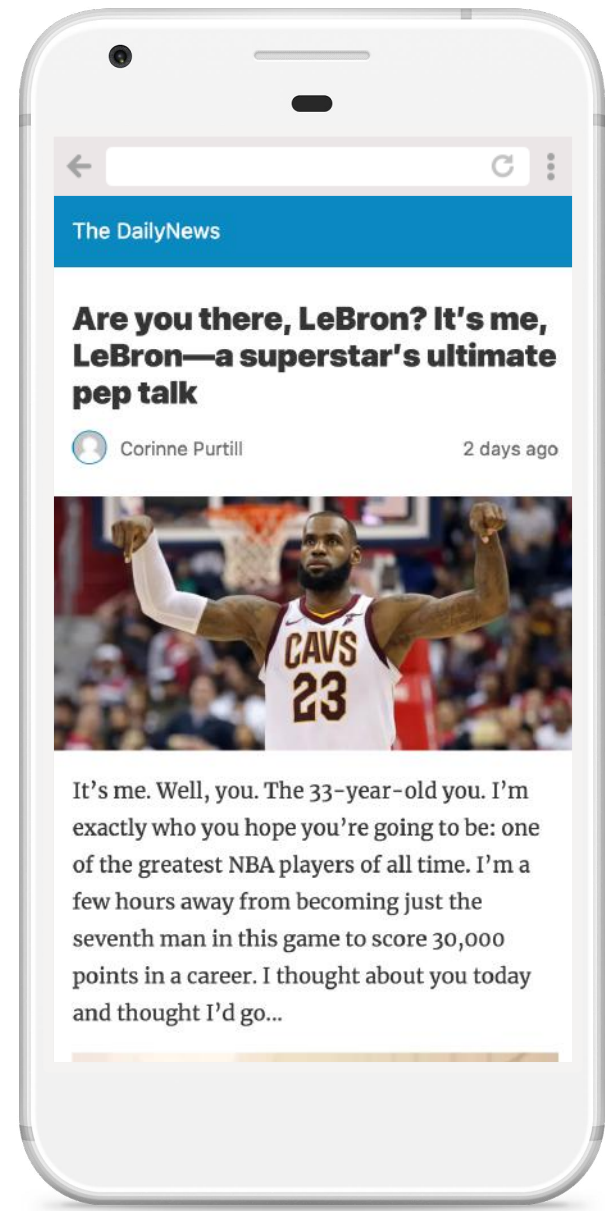
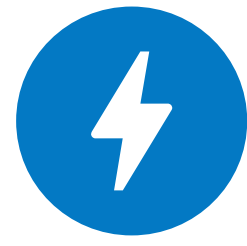
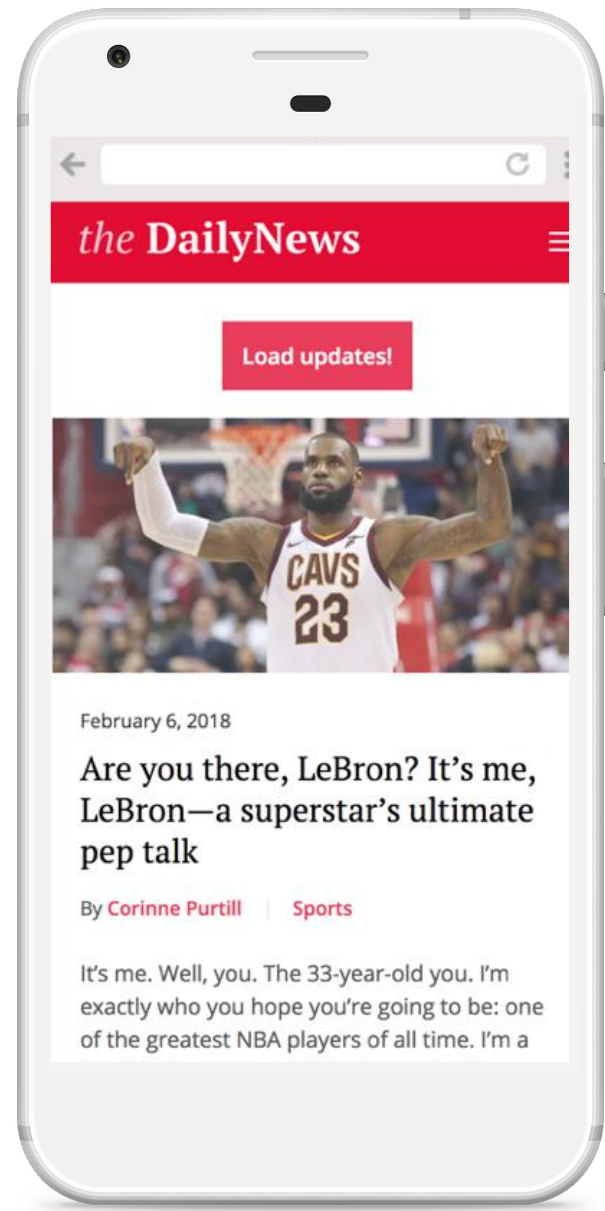
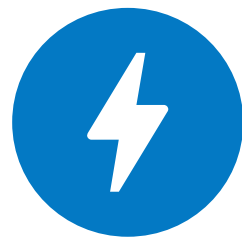
Native AMP
standard WordPress
(v0.6 - 0.7)



Paired mode
(v0.1 - v0.5)

Native AMP
standard WordPress
(v0.6 - 0.7)

Tooling/editorial
workflows
(v1.0-alpha)



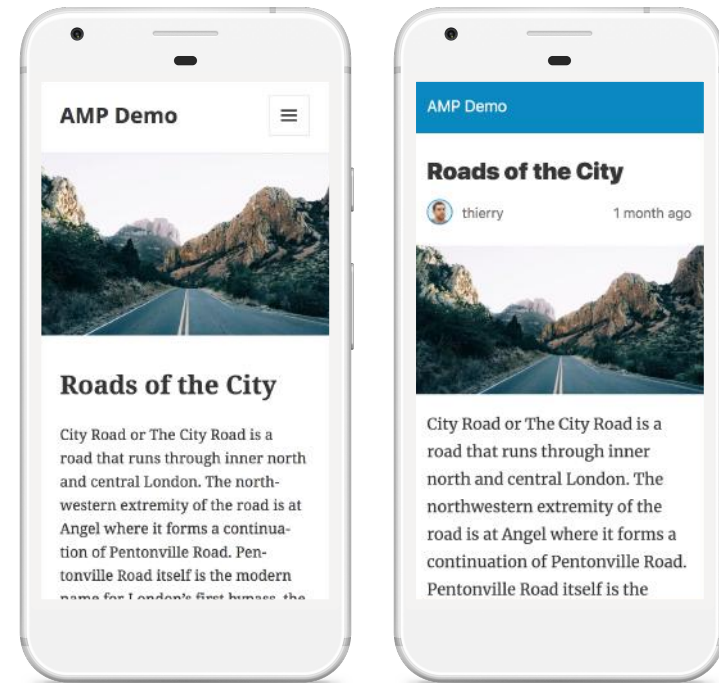
Paired mode
(v0.1 - v0.5)

Native AMP
standard WordPress
(v0.6 - 0.7)

Tooling/editorial
workflows
(v1.0-alpha)

Ecosystem
adoption
(v1.0+)

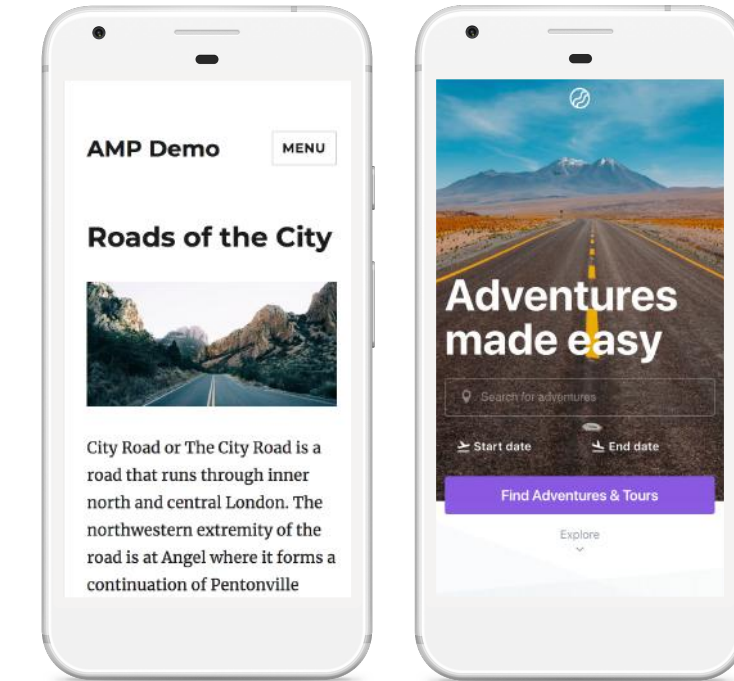
AMP WordPress Plugin



Closing the Visual Gap

New Paired Mode

New Native Mode



v0.1 - v0.6

v0.7

v1.0-alpha

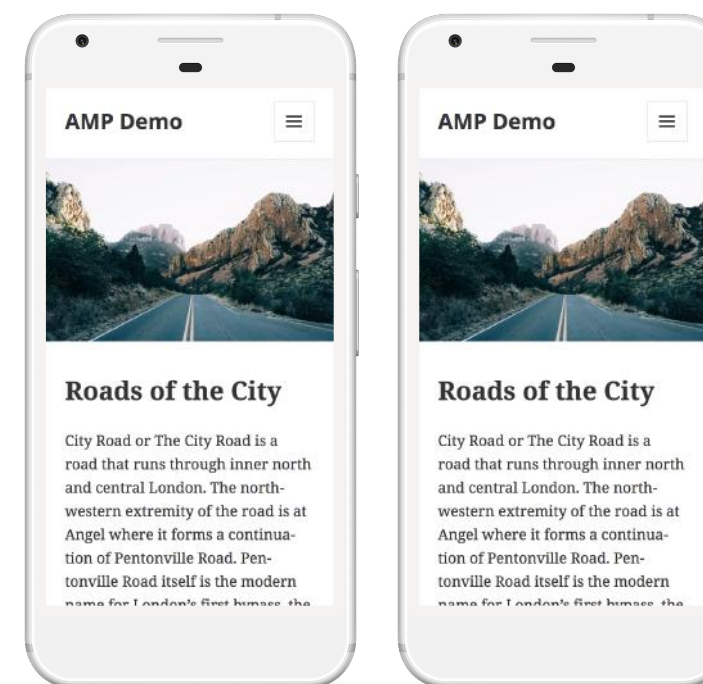
Initial phase

Legacy Paired Mode

AMPCConf
Amsterdam

Google I/O
Mountain View

WCEU
Belgrade



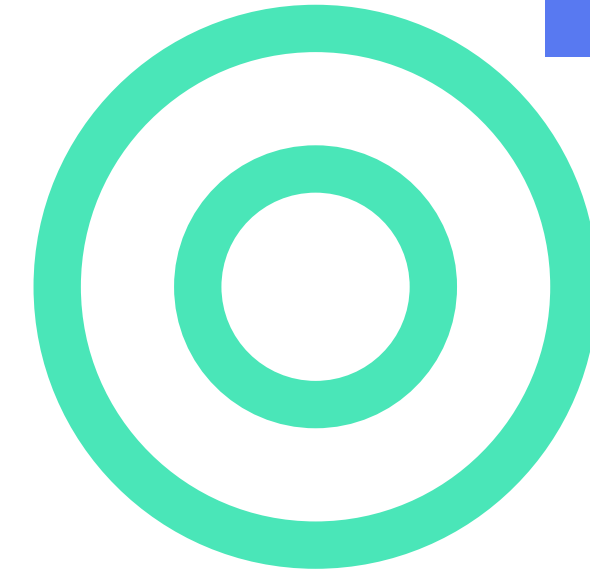
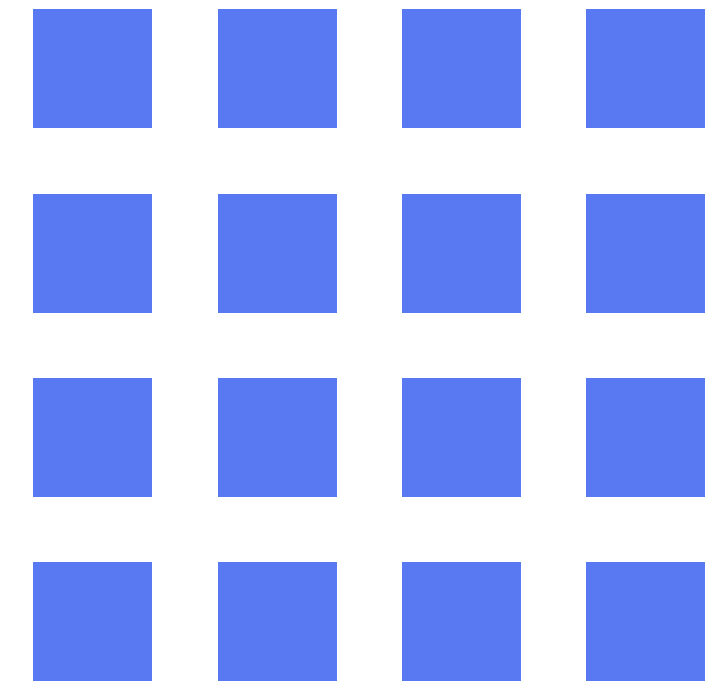
AMP for everyone

Paired Mode++

Native Mode++

Core Themes AMP support

Gutenberg AMP support



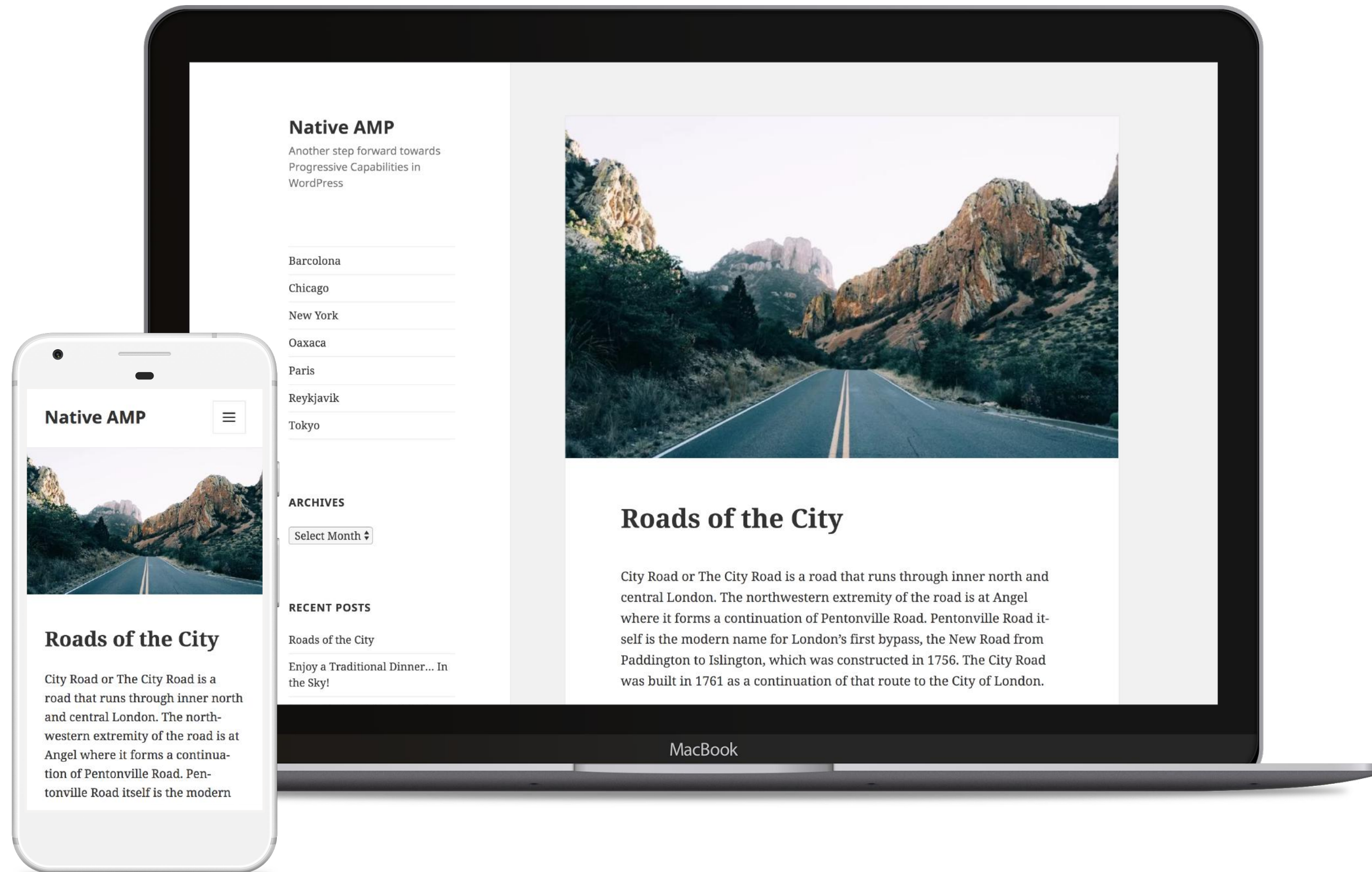
Further along the Progressive WordPress road



Empowering developers

Tooling, workflows & an amazing content creation experience





Native AMP for all

Converting the WordPress **Twenty Fifteen** theme: a theme active on ~ **1/2 million** websites



Native AMP

Another step forward towards Progressive Capabilities in WordPress

Barcelona

Chicago

New York

Oaxaca

Paris

Reykjavik

Tokyo

ARCHIVES

Select Month 

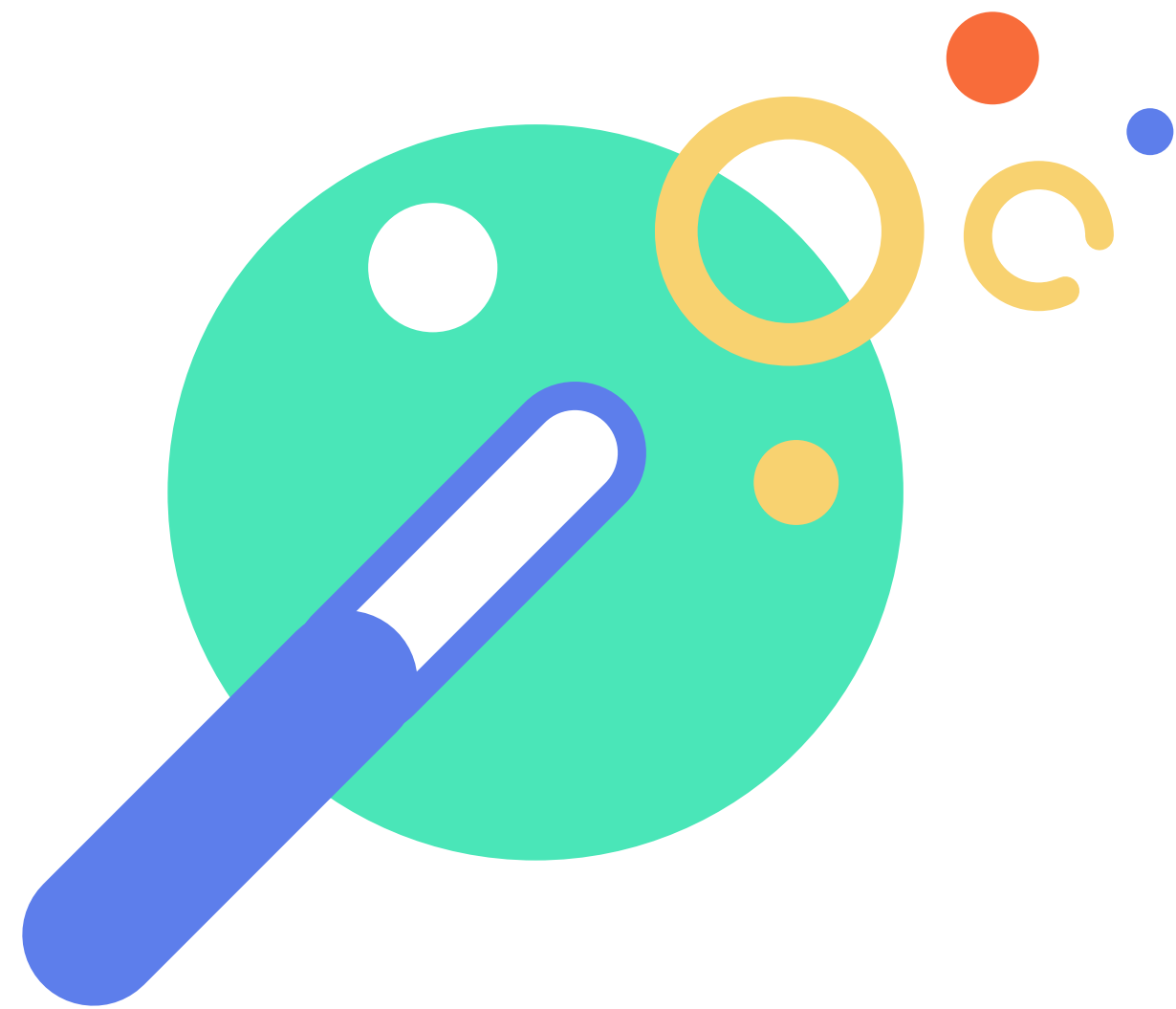
RECENT POSTS

Roads of the City



Roads of the City

City Road or The City Road is a road that runs through inner north and central London. The northwestern extremity of the road is at Angel where it forms a continuation of Pentonville Road. Pentonville Road itself is the modern name for London's first bypass, the New Road from



AMP plugin's magic

Code the WordPress way, let the plugin do the rest



AMP theme support

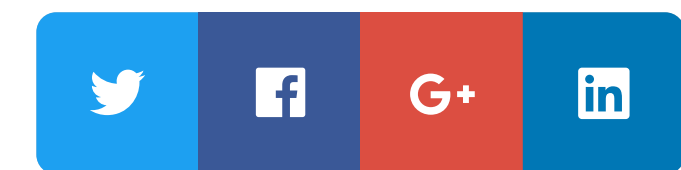
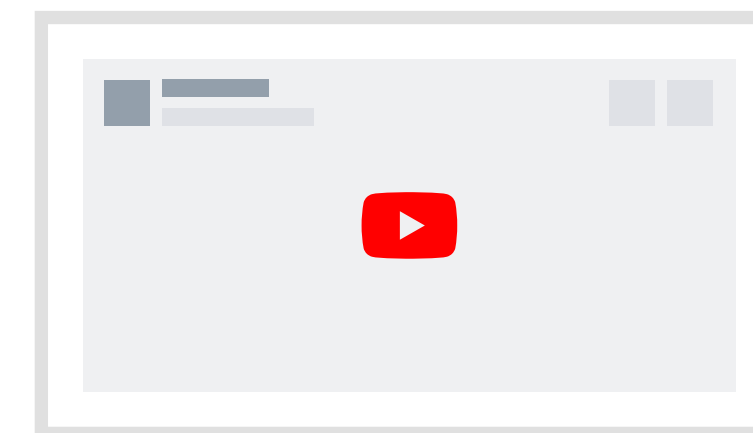
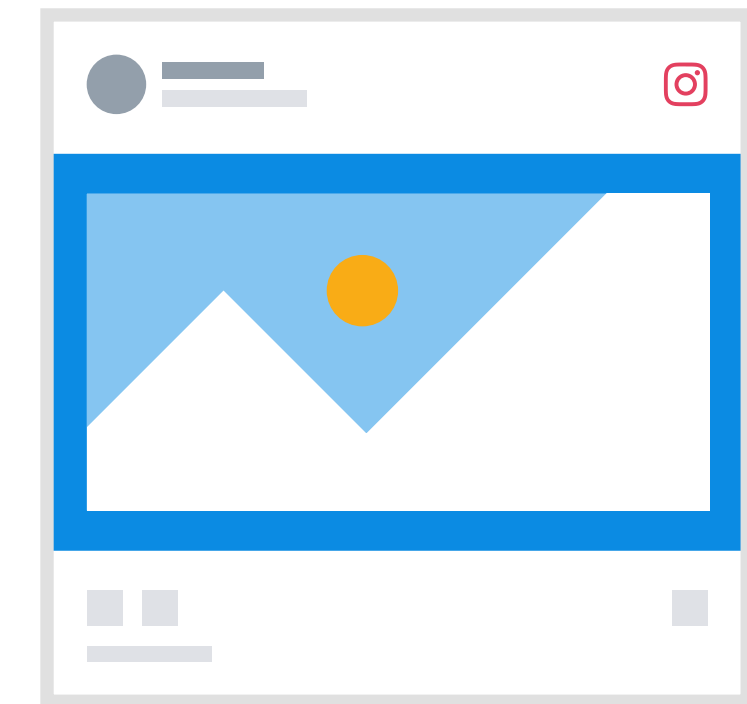
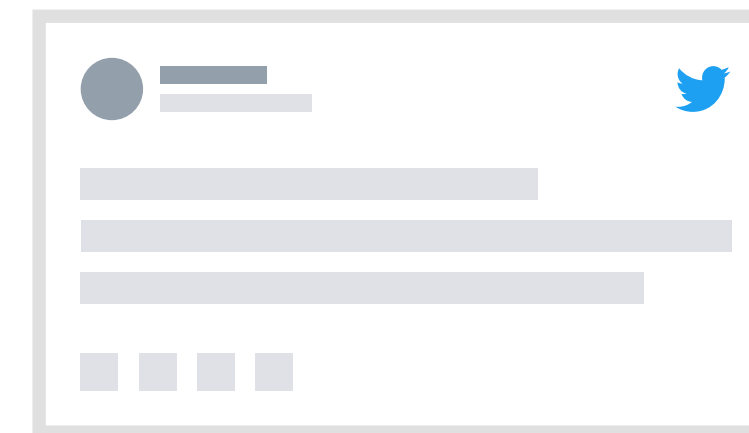
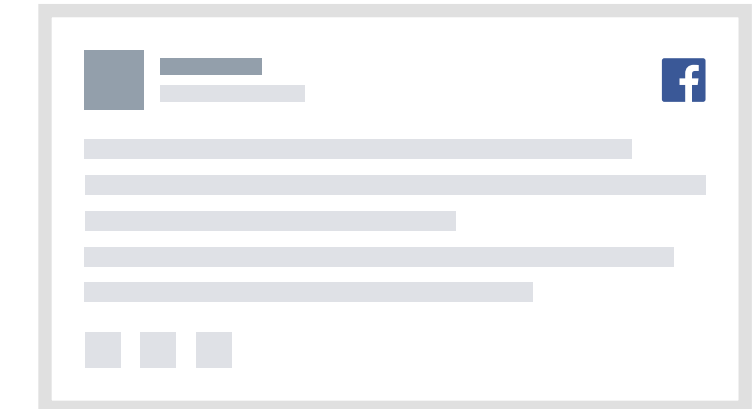
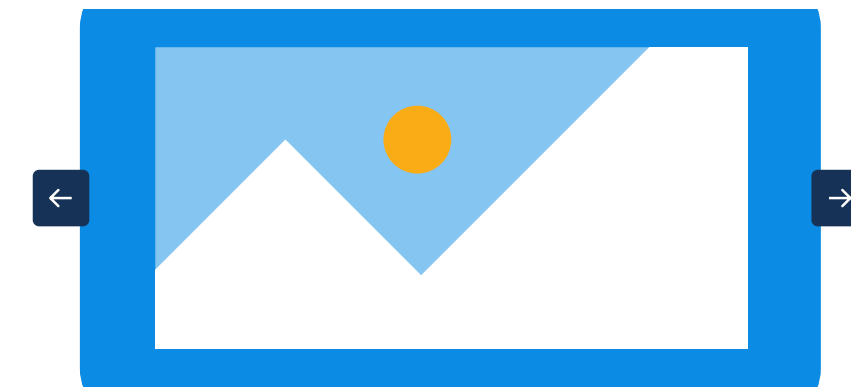
Declaring AMP theme support tells the AMP plugin that the theme wants to be a **Native AMP citizen**

```
add_action(
    'after_setup_theme',
    function() {
        add_theme_support( 'amp' );
    }
);
```



AMPLify WordPress

All WordPress core components are auto-magically AMP compatible: **Widgets**, **Embeds**, **Comments** & many more...



BEFORE

```
<select
  name="archive-dropdown"
  on="document.location.href=this.options[this.selectedIndex].value;"
>
</select>
```

⚠ Disallowed JavaScript

⚡ AMP Validator

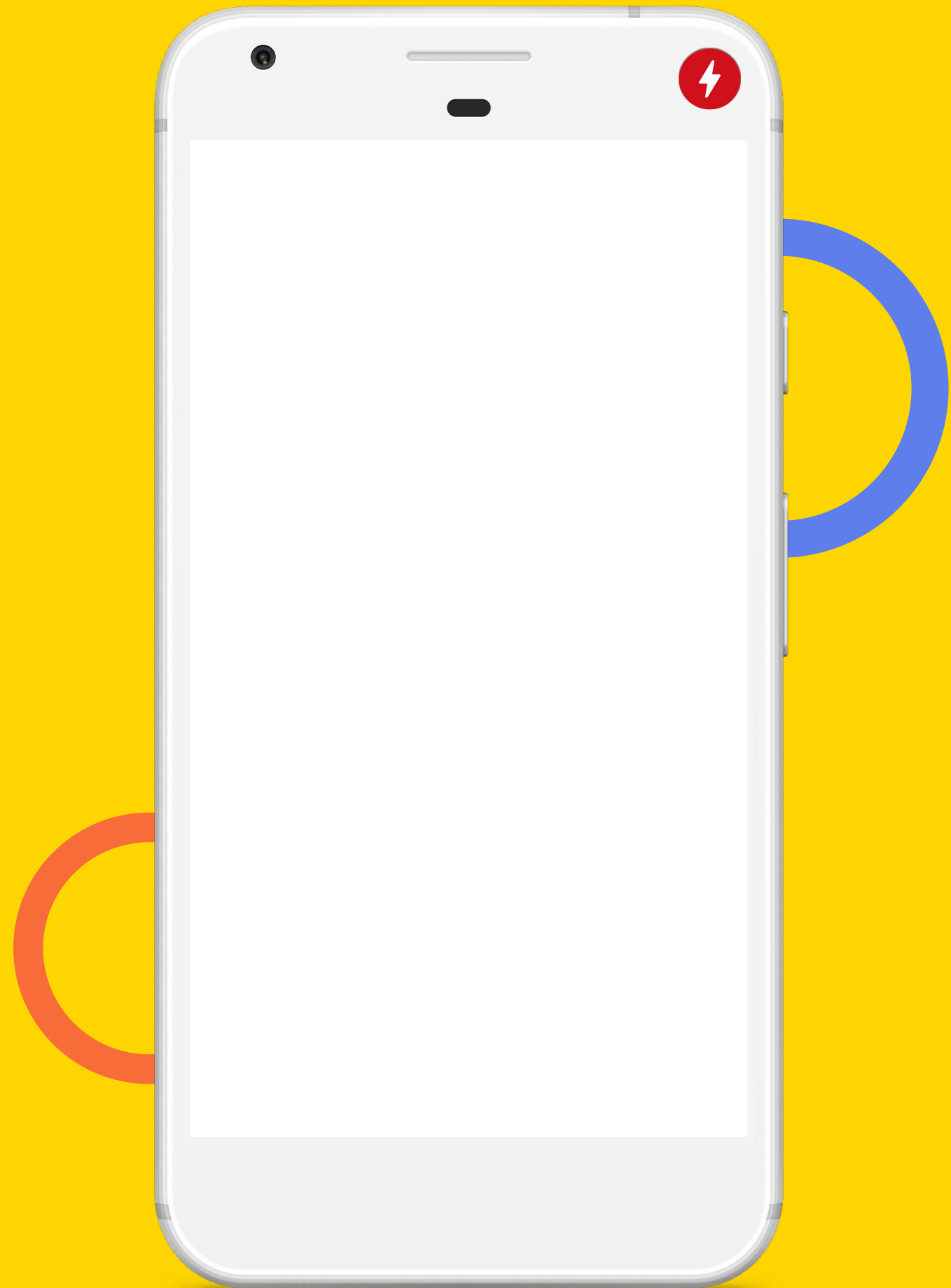
AFTER

```
<select
  name="archive-dropdown"
  on="change:AMP.navigateTo(url=event.value)"
>
</select>
```

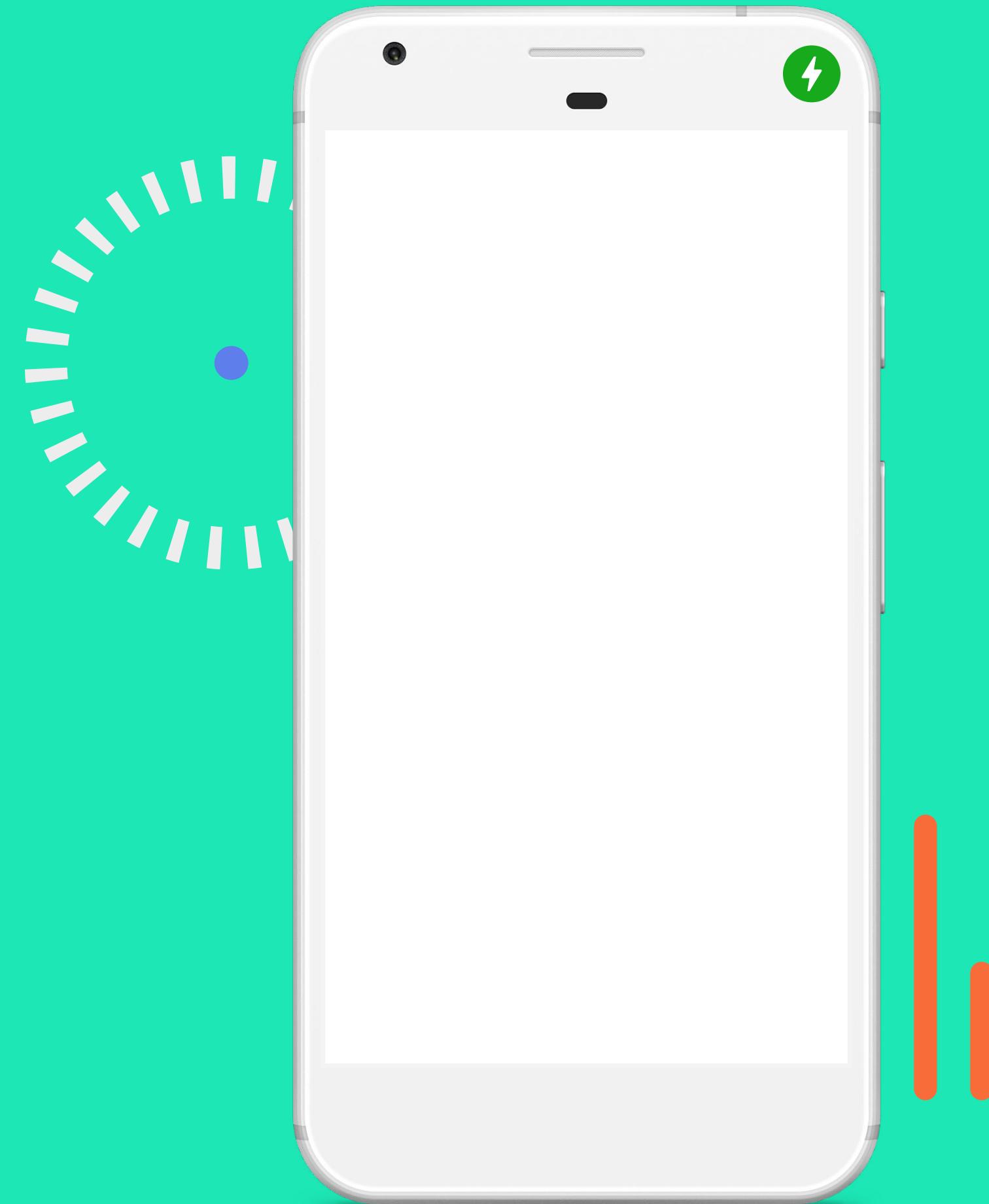
⚡ AMP Validator



Invalid AMP

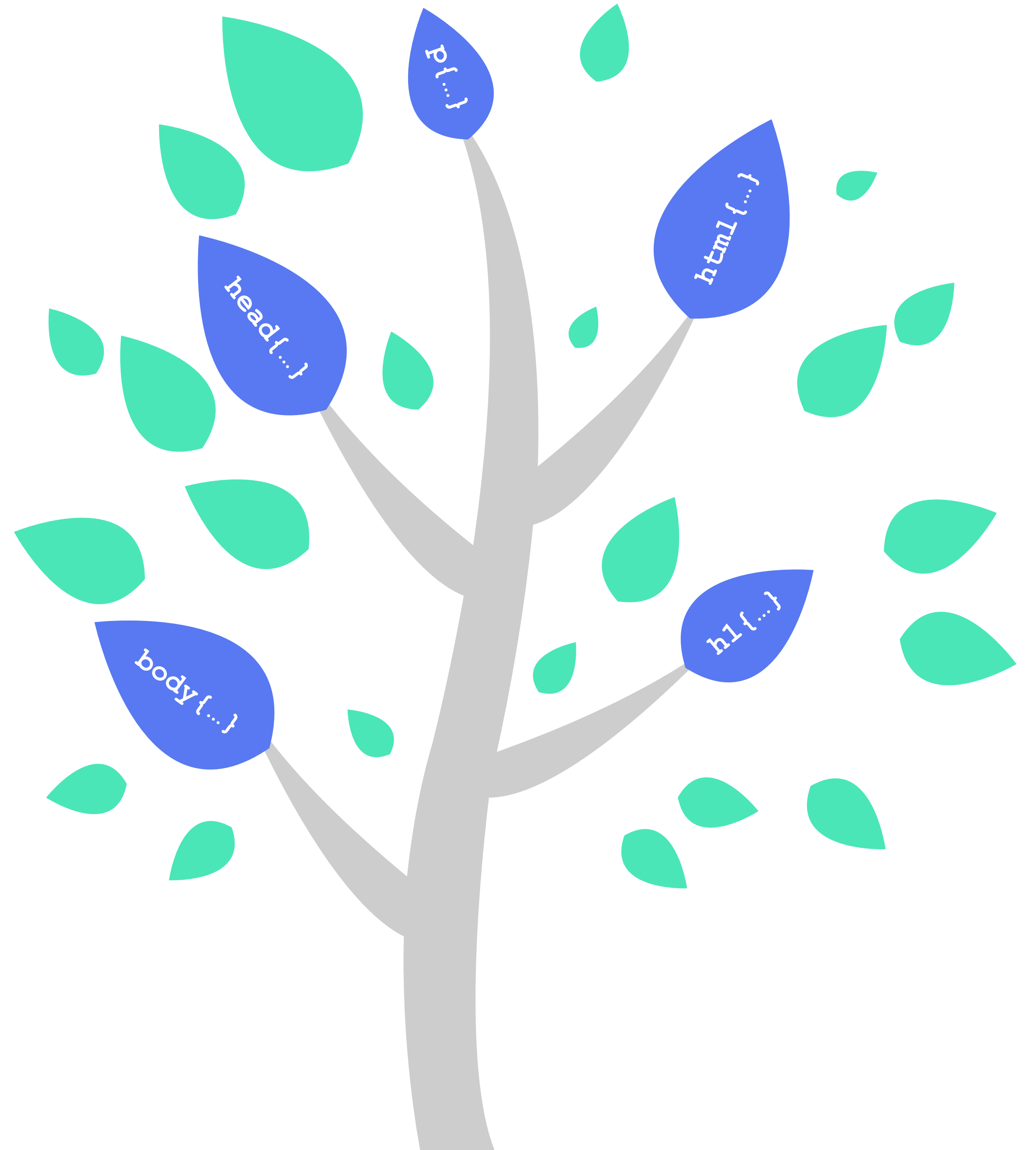


Valid AMP



CSS Tree Shaking

Ensures only the CSS needed on any given page is loaded



BEFORE

```
<html>
  <head>
    <link rel="stylesheet" href="https://sample.io/genericons.css">
    <link rel="stylesheet" href="https://sample.io/style.css">
  </head>
</html>
```

⚠ Disallowed StyleSheet

⚠ Disallowed StyleSheet

⚠ 96KB

⚡ AMP Validator

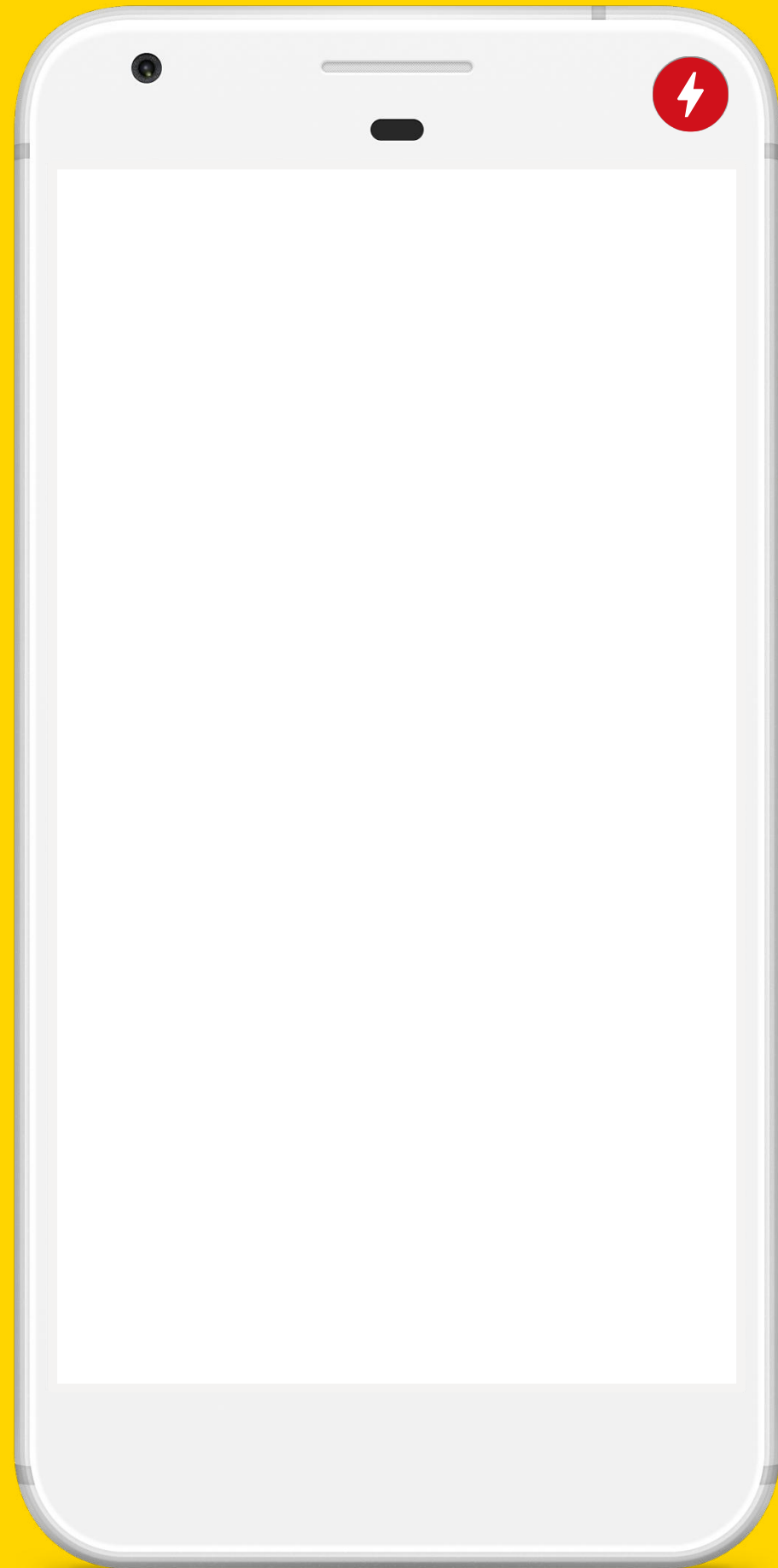
AFTER

```
<html ⚡>
  <head>
    <style amp-custom>...</style>
  </head>
</html>
```

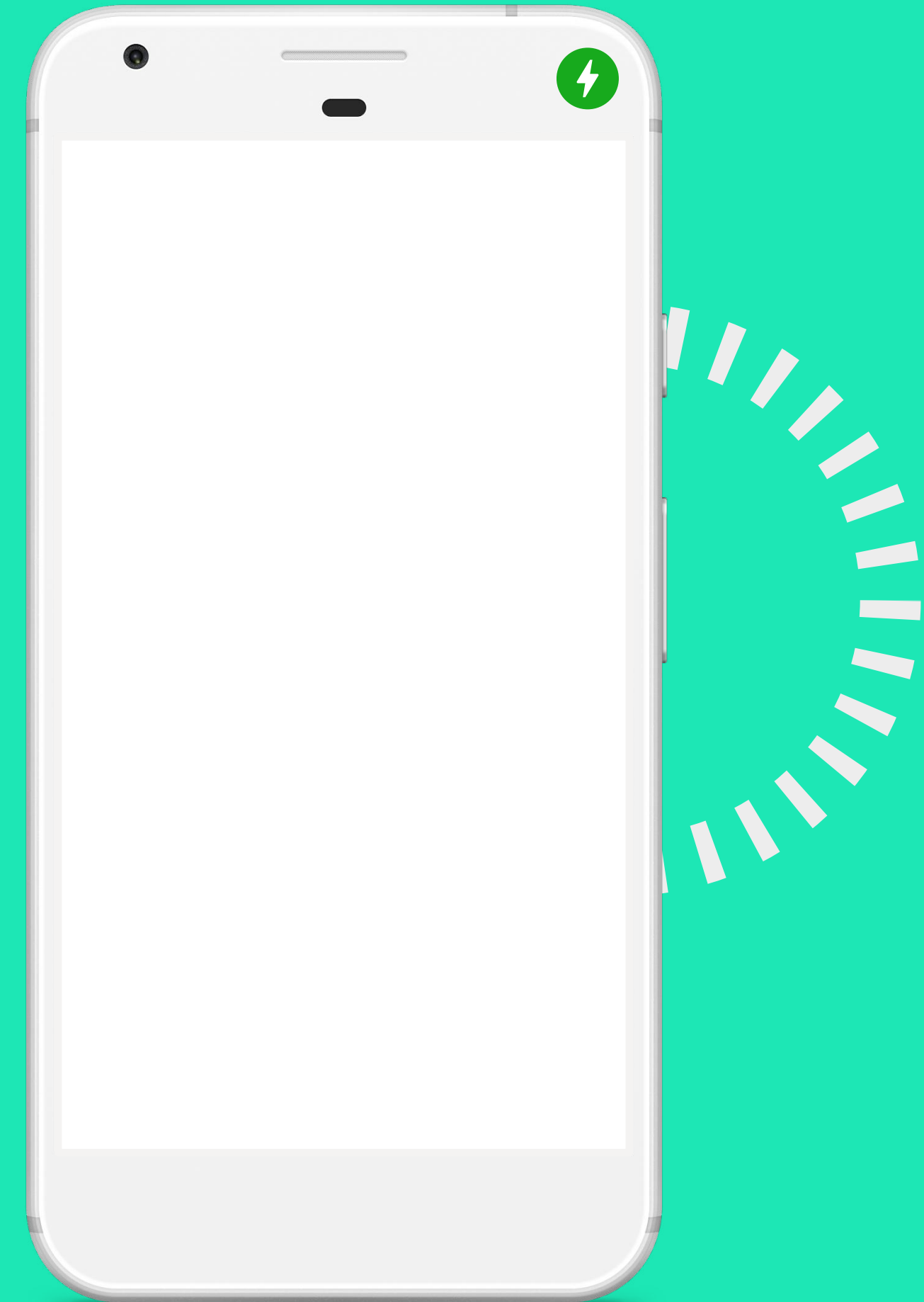
⚡ AMP Validator



Invalid AMP



Valid AMP





Rendering Valid AMP

Validate page output and ensure
AMP compatibility wherever possible

BEFORE

```
<html>
  <head>
    <script href="https://s.io/functions.js"></script>
  </head>
  <body>
    <img width="1200" height="577" href="https://s.io/image.jpg">
  </body>
</html>
```

⚠ Disallowed Custom JavaScript

⚠ Invalid AMP HTML

⚡ AMP Validator

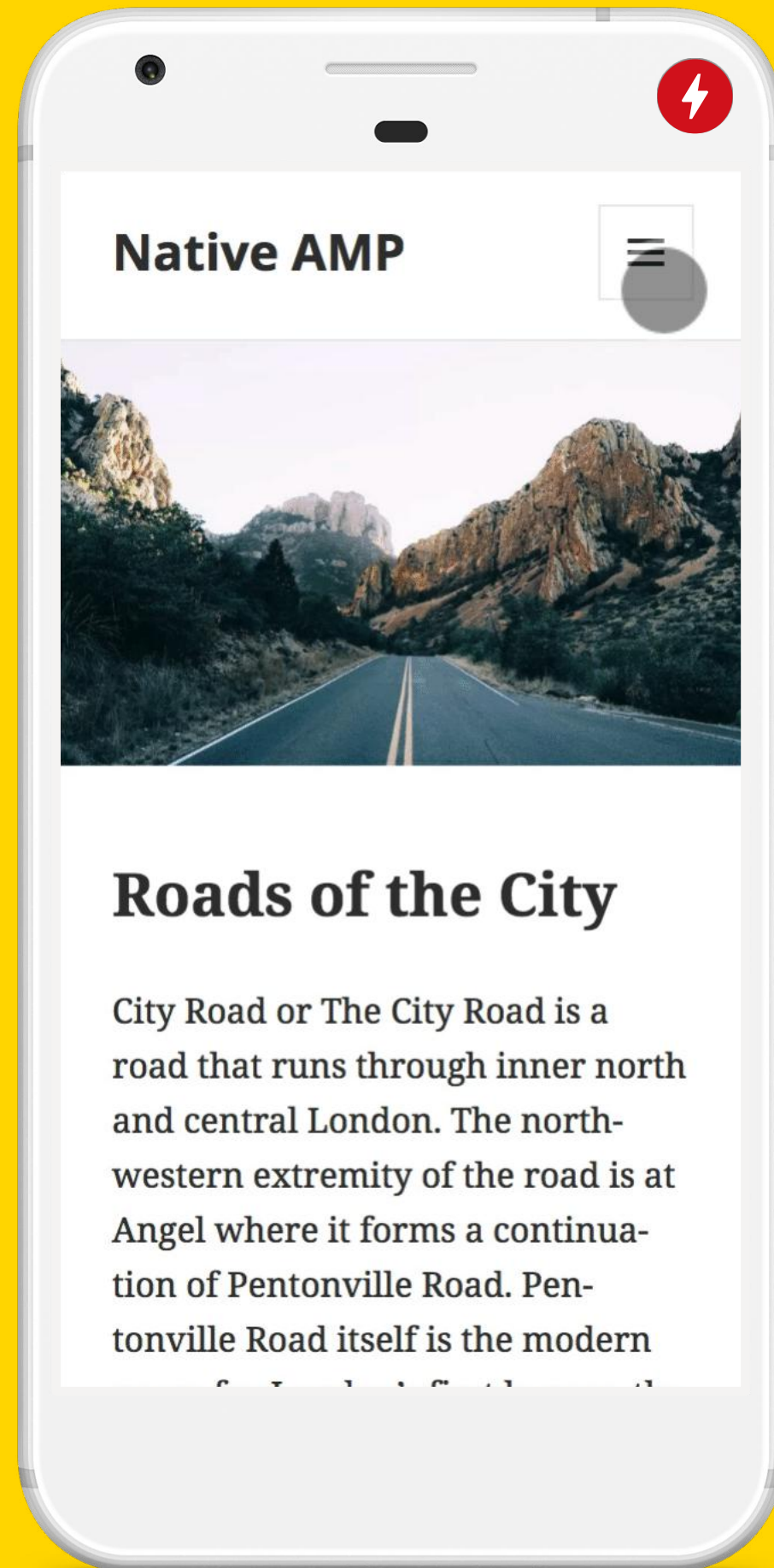
AFTER

```
<html ⚡>
  <head></head>
  <body>
    <amp-img width="1200" height="577" href="https://s.io/image.jpg"></amp-img>
  </body>
</html>
```

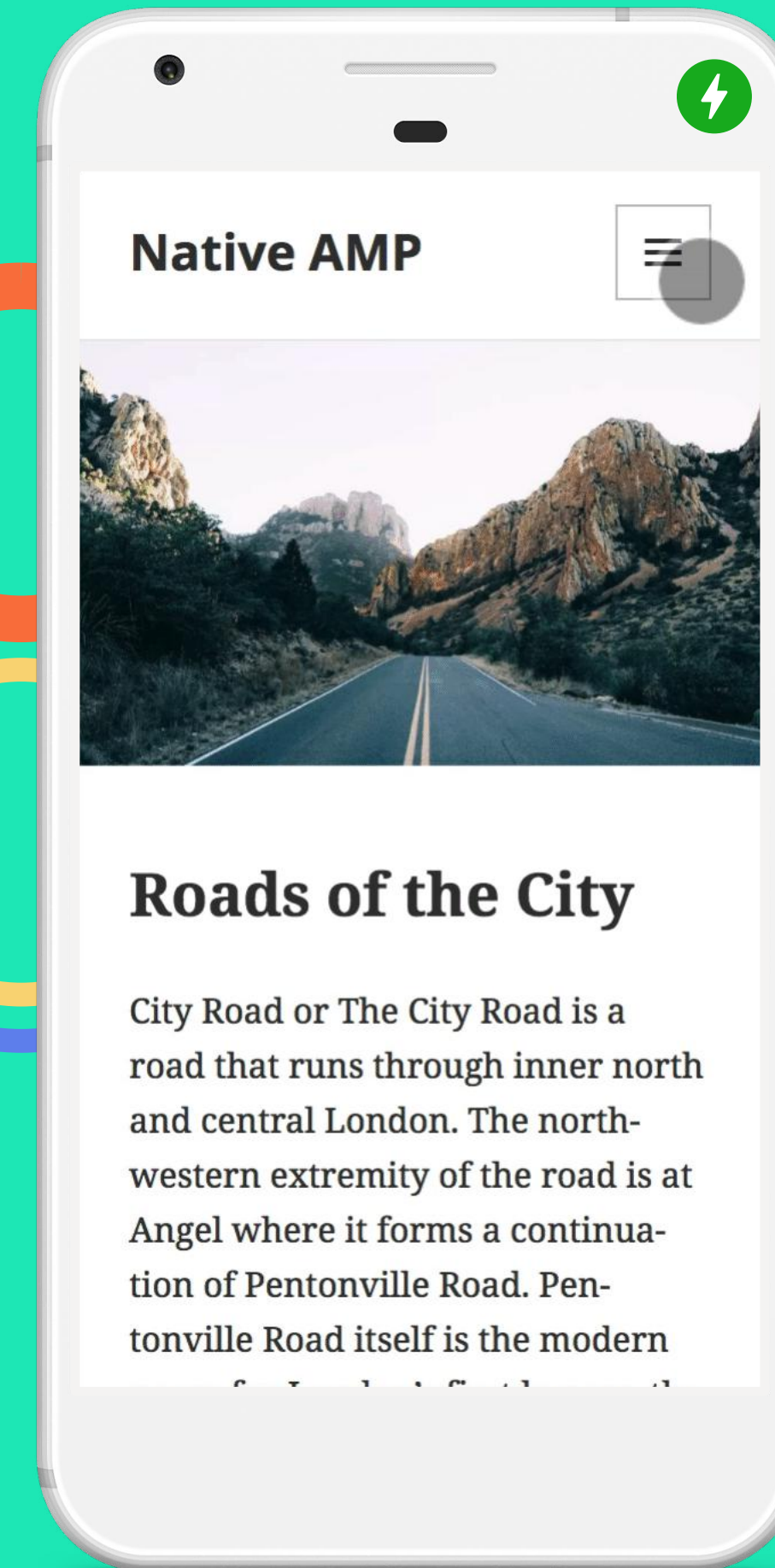
⚡ AMP Validator

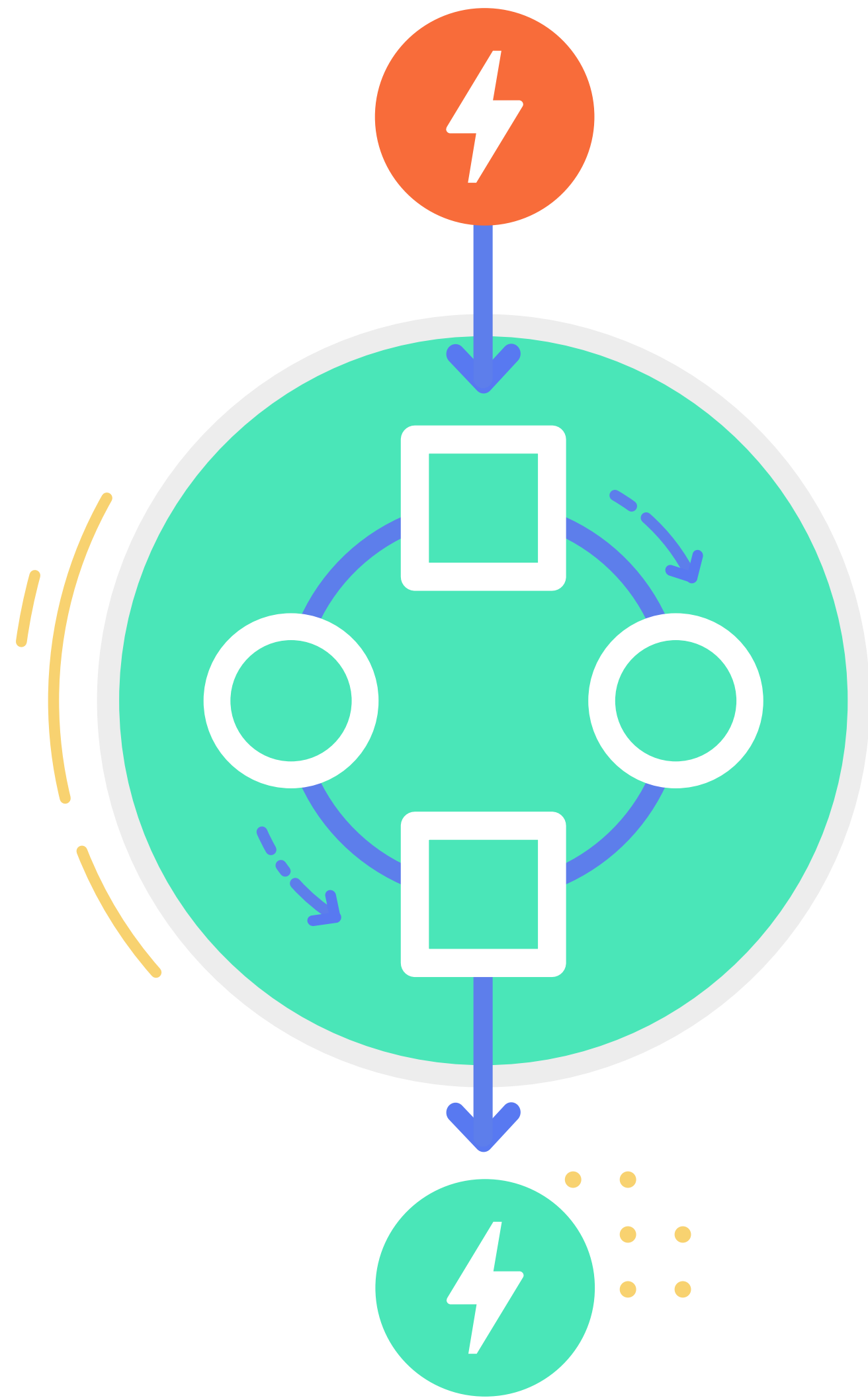


Invalid AMP



Valid AMP





Validation Workflow

Power, Control & Trust

By **enabling AMP**, the plugin will apply the CSS Tree Shaking mechanism

Apply CSS Tree Shaking

Preview

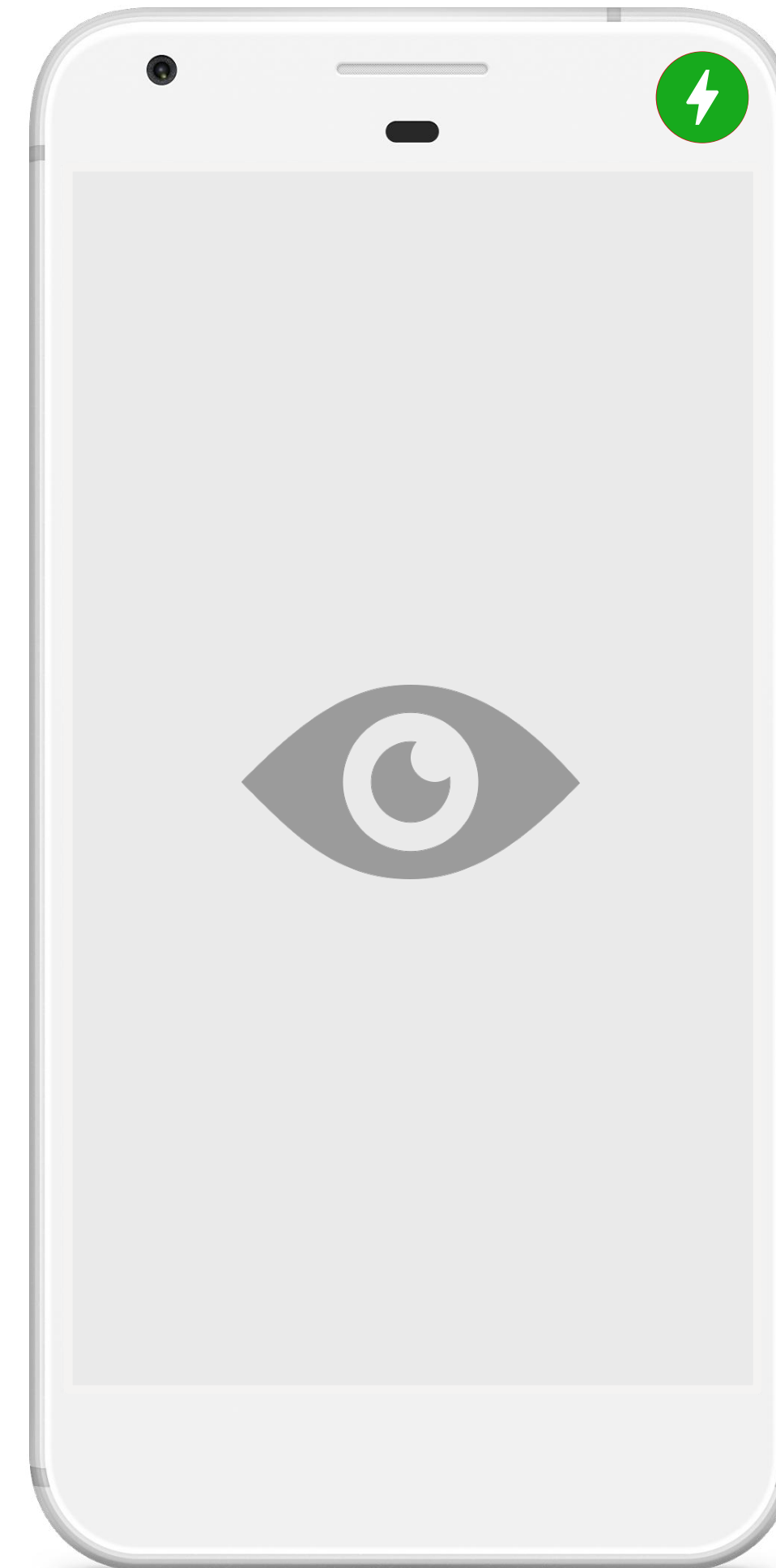


Remove `functions.js` script

Preview



```
<button
  [class]="navMenu.open ? 'toggled-on' : ''"
  on="tap:AMP.setState( { navMenu.open: {
    navMenu: ! navMenu.open
  } } )">
  Menu Toggle
</button>
```



Native AMP Twenty Fifteen theme

- ✓ Enable AMP theme support
- ✓ Fix menu toggle using AMP Bind
- ✓ Validate all “sensitive” AMP conversions after reviewing them



Native AMP

Another step forward towards Progressive Capabilities in WordPress

Barcelona

Chicago

New York

Oaxaca

Paris

Reykjavik

Tokyo

ARCHIVES

Select Month 

RECENT POSTS

Roads of the City

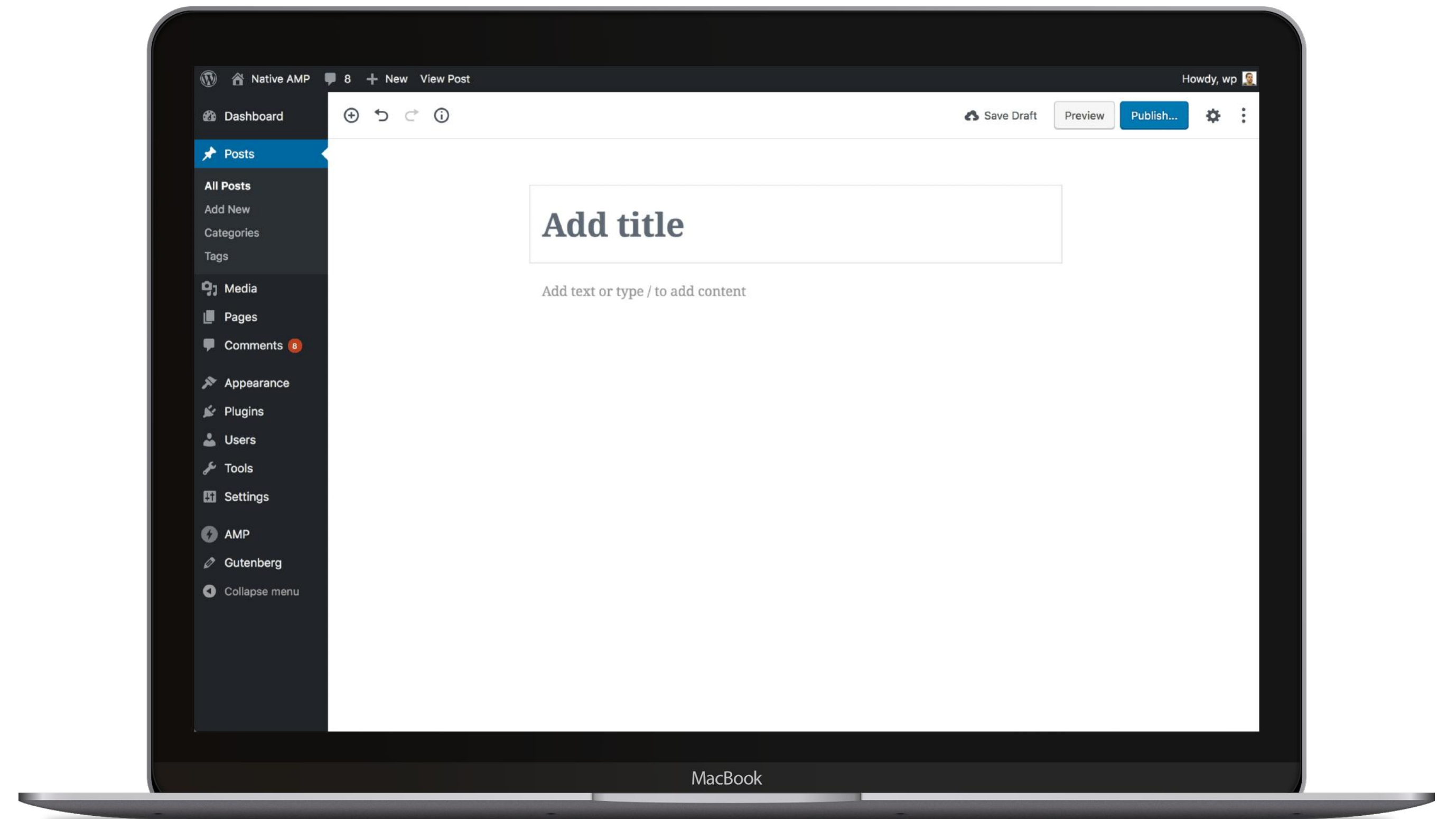


Roads of the City

City Road or The City Road is a road that runs through inner north and central London. The northwestern extremity of the road is at Angel where it forms a continuation of Pentonville Road. Pentonville Road itself is the modern name for London's first bypass, the New Road from

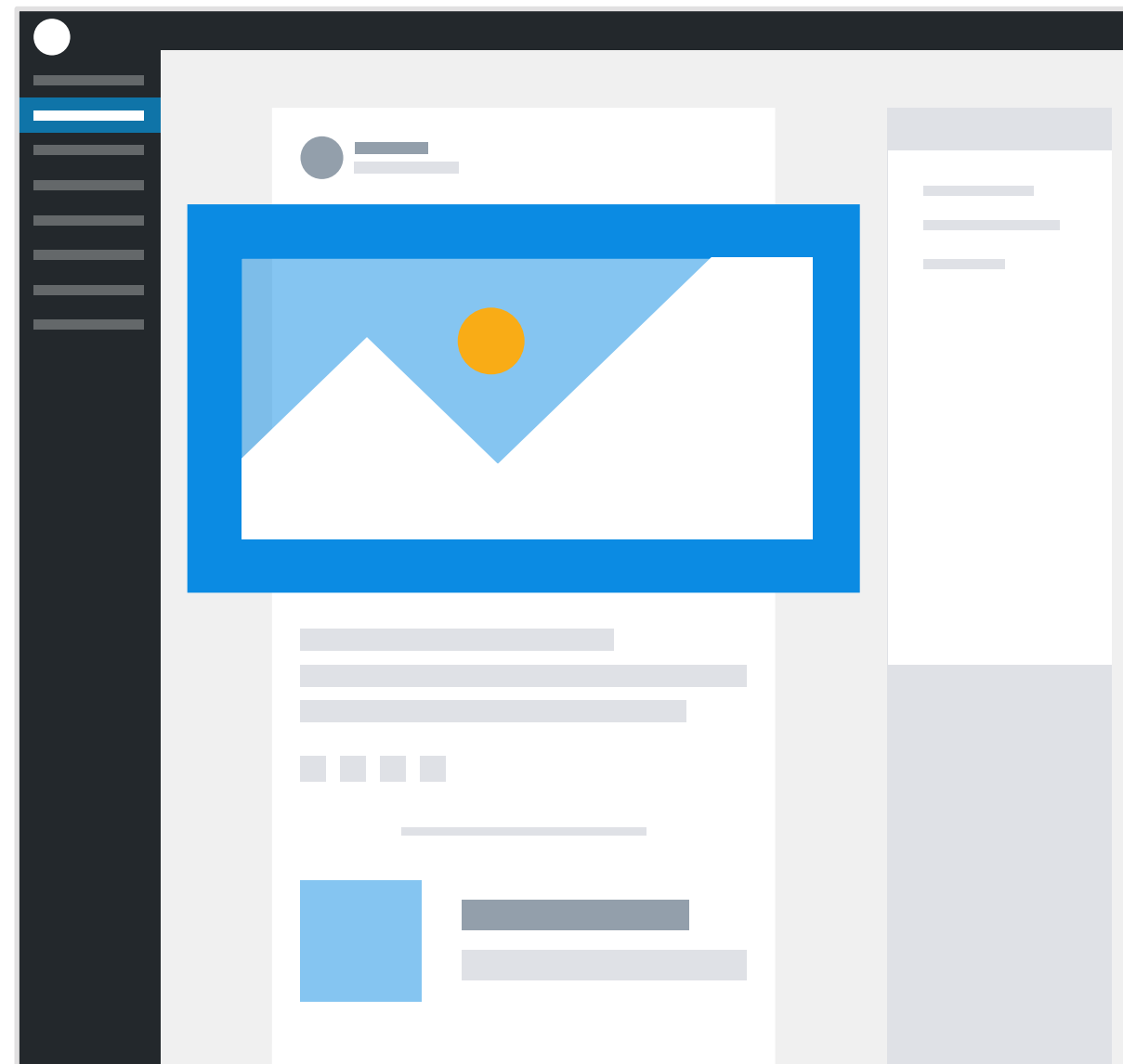
Gutenberg

A new, revolutionary, unified
WordPress **content creation**
experience

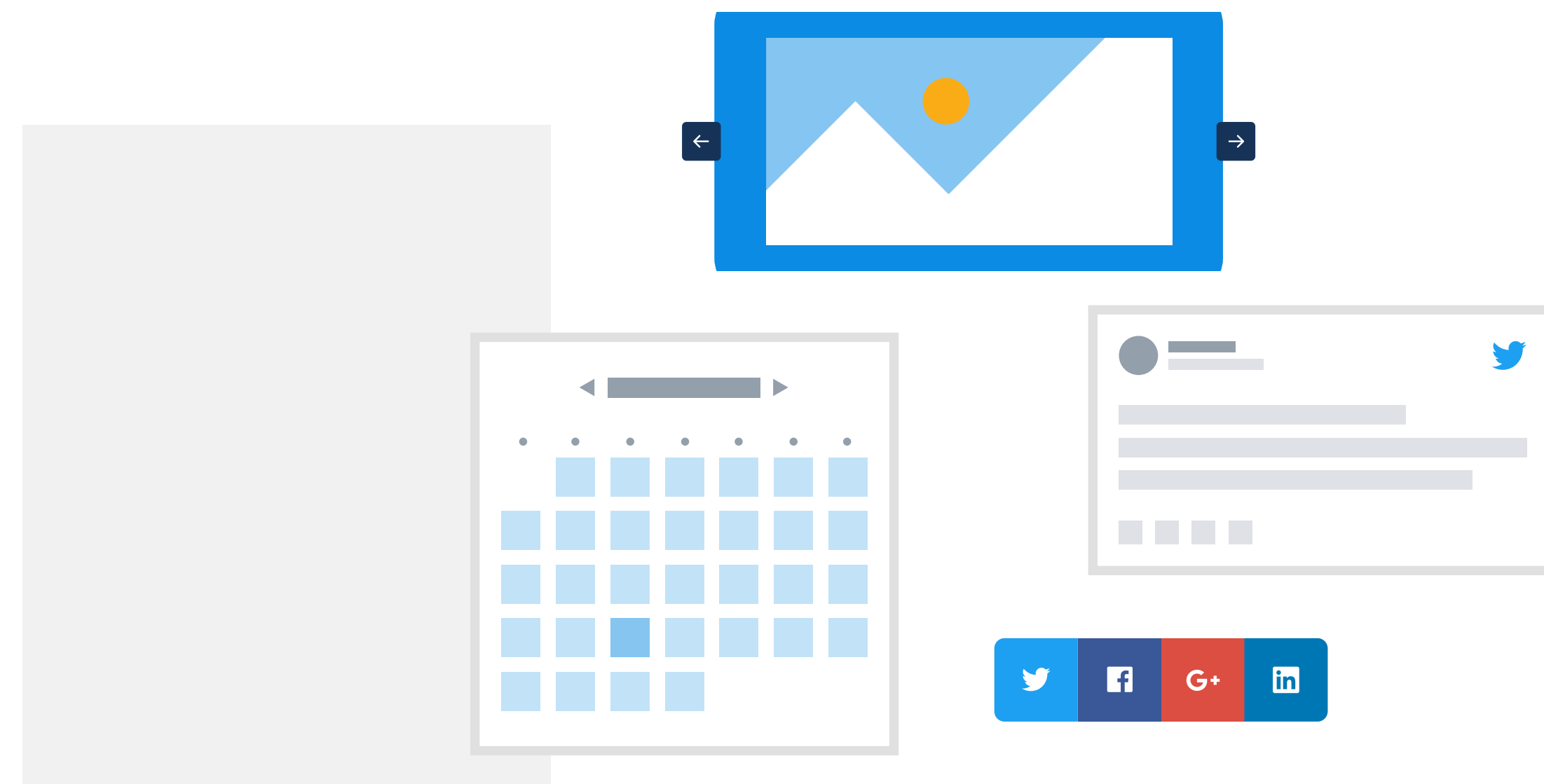


Leveraging Gutenberg capabilities

Gutenberg Blocks



Gutenberg AMP Blocks AMP Components





What's **possible** today?

WordPress is more than a blogging platform







Adventures made easy

Find and book activities, tours, and experiences.

 Search for adventures

 Start date

 End date

Find Adventures & Tours

Discover Adventures

Get inspired and find your next big trip

From The Blog

Lorem Ipsum es simplemente el texto de relleno de las imprentas y archivos de texto. Lorem ...

[Read more](#)

Browse by Activity

- Dashboard
- Posts
- Media
- Pages**
- All Pages
- Add New
- Adventures
- Comments
- Appearance
- Plugins 2
- Users
- Tools
- Settings
- AMP
- Gutenberg
- Collapse menu



Add title

Write your story



Document Block

Status & Visibility

Visibility [Public](#)

Publish [April 26, 2018 12:23 pm](#)

Pending Review

Author Thierry Muller

Featured Image

Discussion

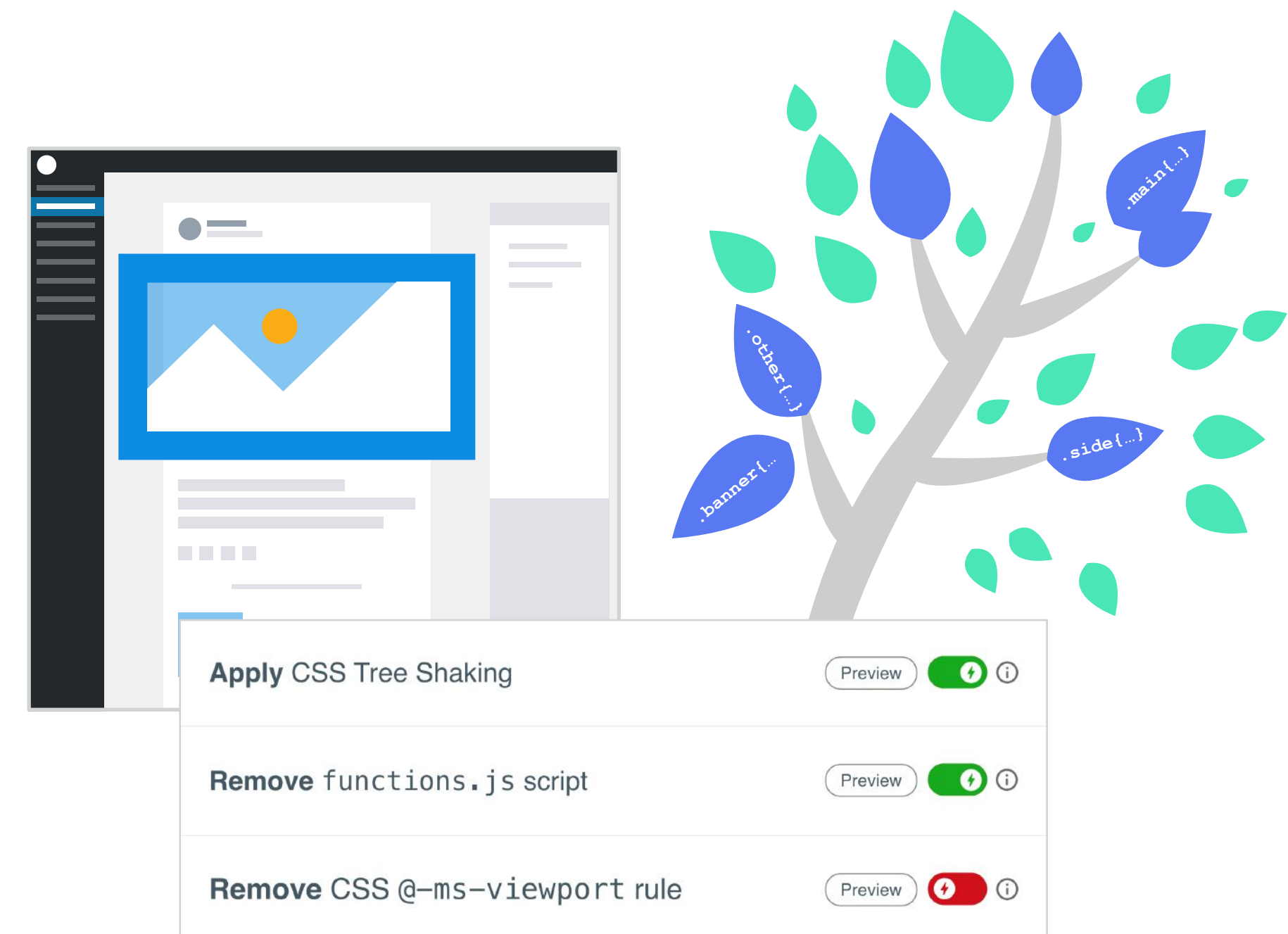
Page Attributes

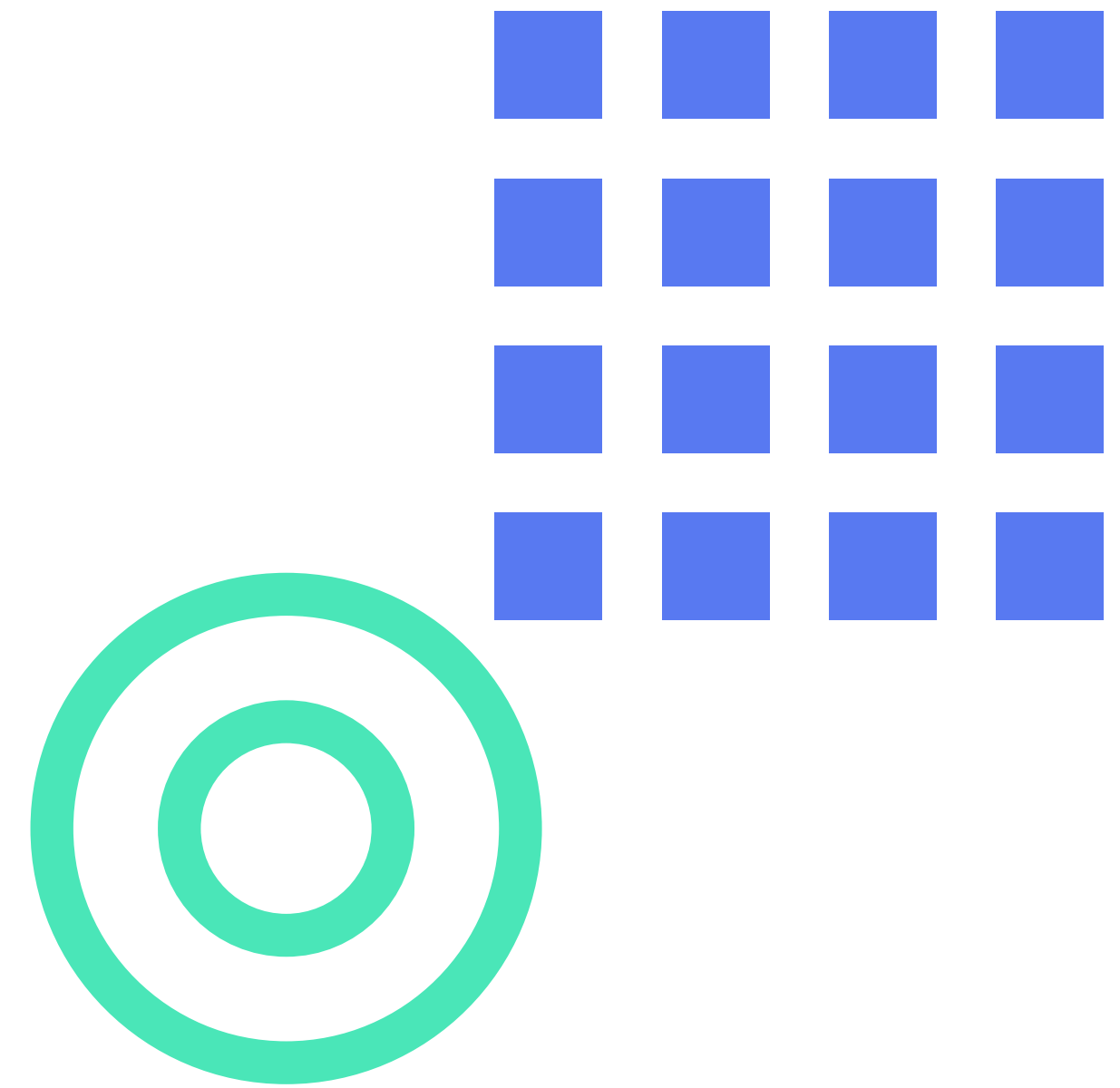
Where are we at today?

AMP Plugin 0.7
Released

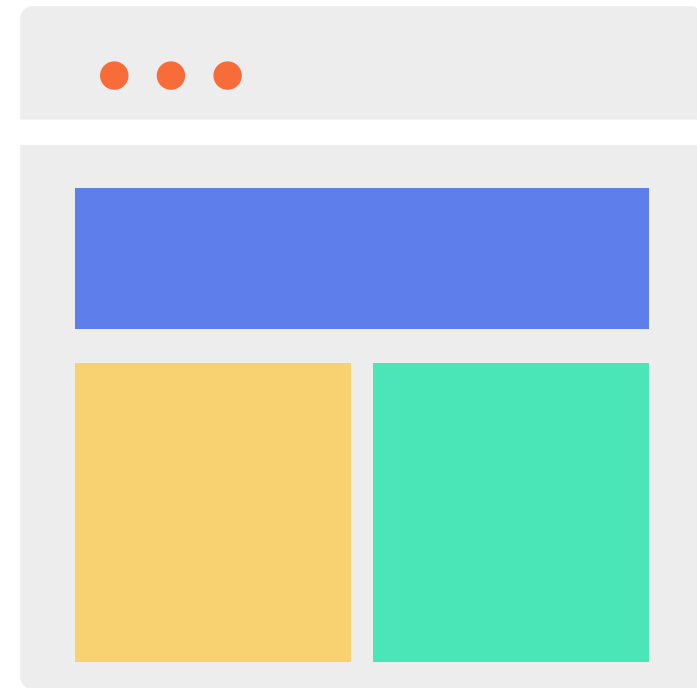


AMP Plugin 1.0
In Progress



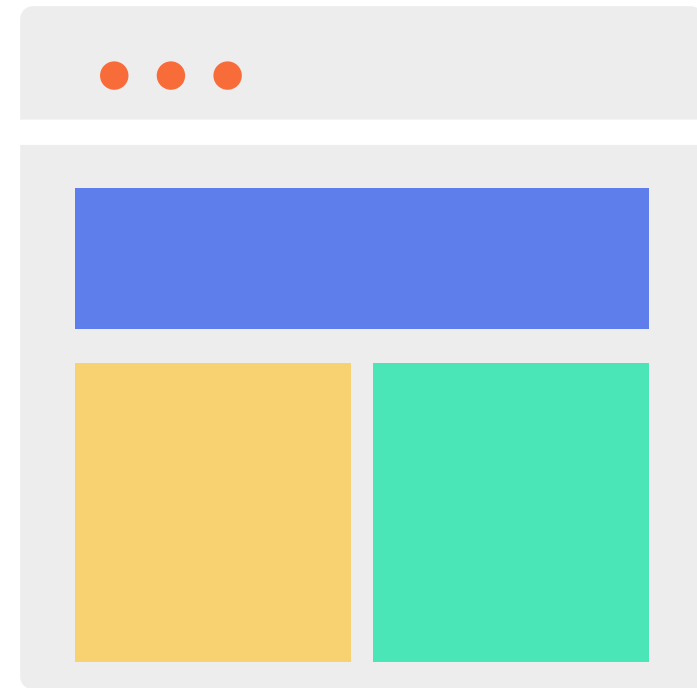


The road ahead...



App Shell navigation
(with **SW integration**)

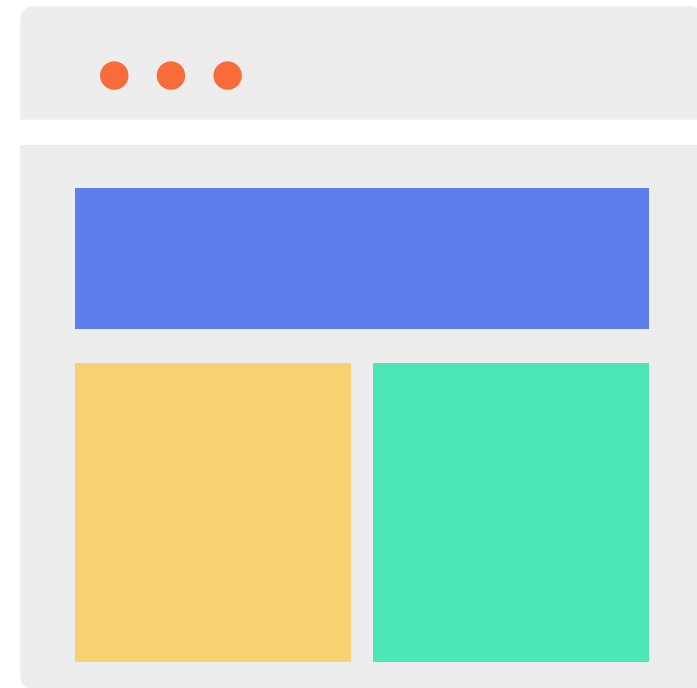




App Shell navigation
(with **SW integration**)



Progressive Themes
boilerplate



App Shell navigation
(with **SW integration**)

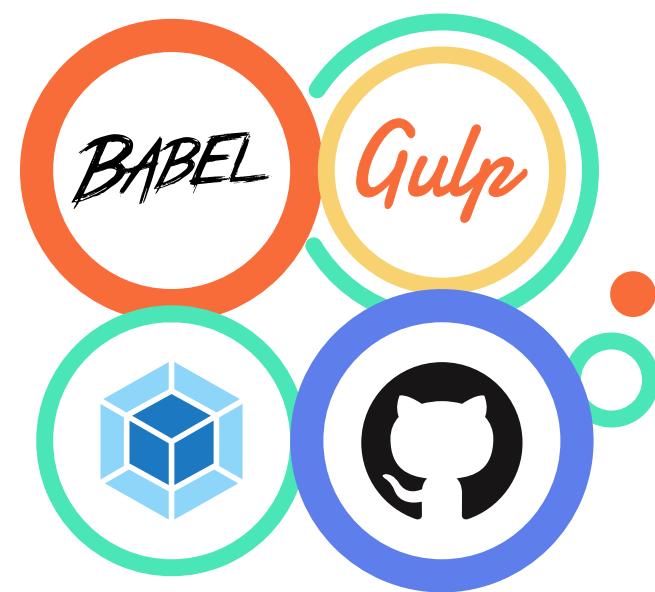


Progressive Themes
boilerplate

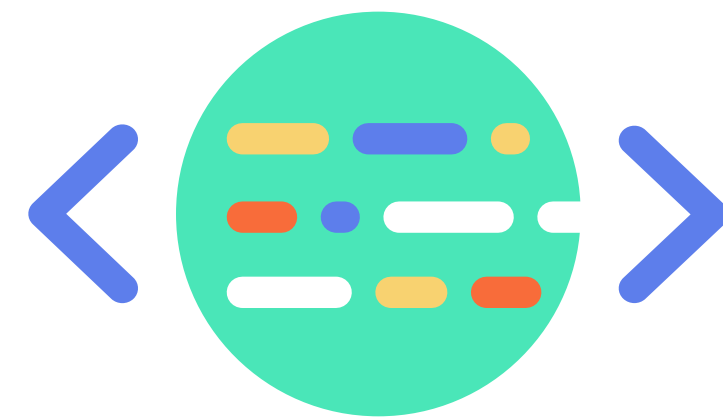


Ecosystem
adoption

Progressive Theme Boilerplate



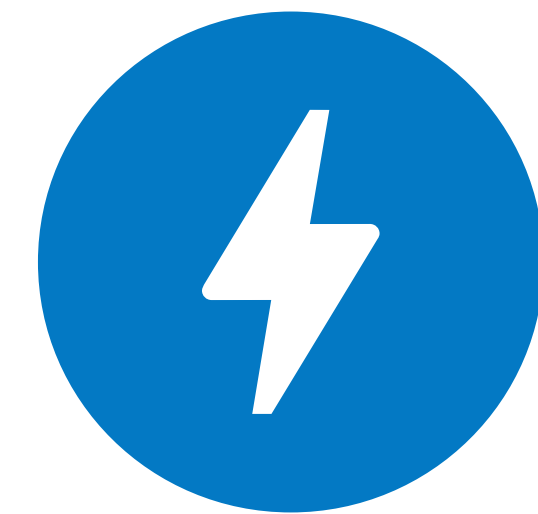
Modern development
workflow



Coding
best practices



Performance
best practices



Opt-in AMP
plugin integration

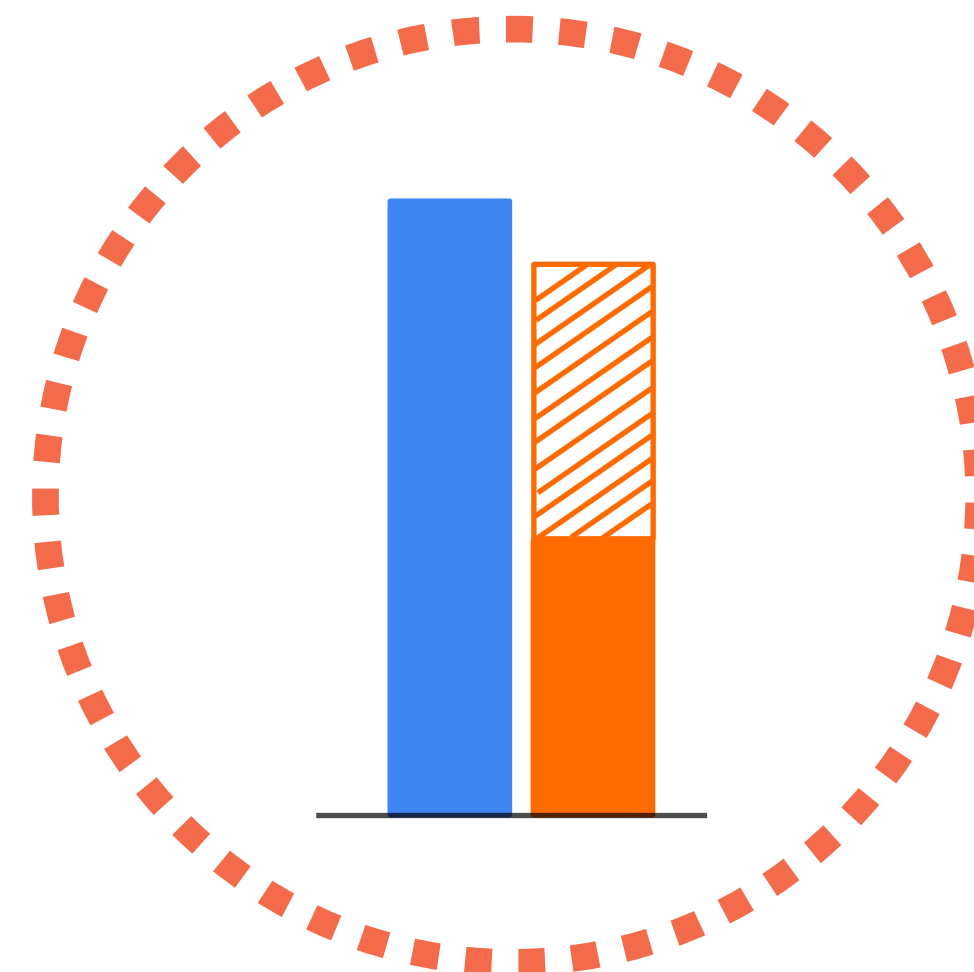
www.linkedin.com/learning/



Takeaways



User-first:
It is all about UX



Strive to close
the C/U Gap



Progressive
WordPress FTW!



experts wanted!

goo.gl/bY4Xcy





Thank you!



Alberto Medina

Google

 @iAlbMedina



Thierry Muller

XWP

 @TweetyThierry

Helpful resources:

AMP Plugin github.com/Automattic/amp-wp

Travel theme github.com/xwp/travel

Progressive Themes boilerplate github.com/mor10/pstt

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