



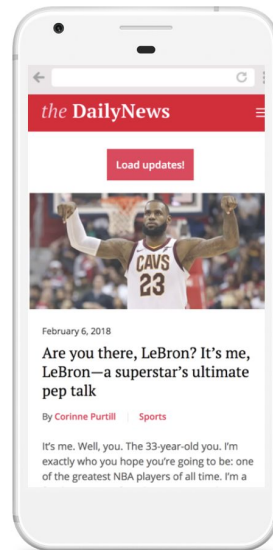
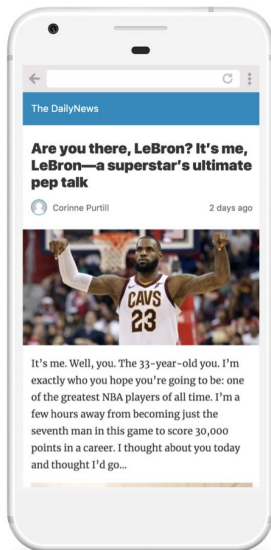
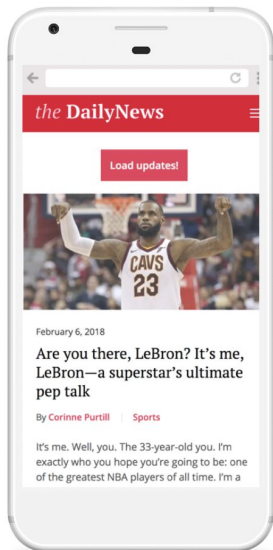
# Building an AMP Compatible WordPress Site

Felix Arntz | #WCDevSevilla19



# Agenda

- 01** Introduction to the AMP Framework
- 02** Using AMP in WordPress
- 03** Hands-on Workshop
- 04** Finding AMP Compatible Components



AMP back in the day

AMP today



# Introduction to the AMP Framework



**AMP is a web component framework to easily  
create**

**fast, user-first websites**



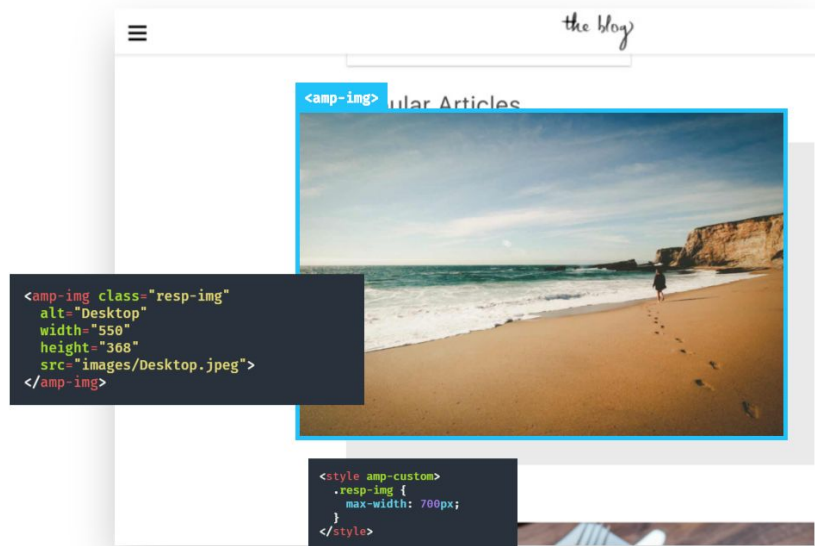
# Democratizing Performance

- AMP is an **open source** project.
- AMP has an **open governance** model.
- AMP is built on the **open web**.



# Web Components

Web Components are a standardized set of browser APIs that allow you to define your own HTML tags, reusable and self-contained.

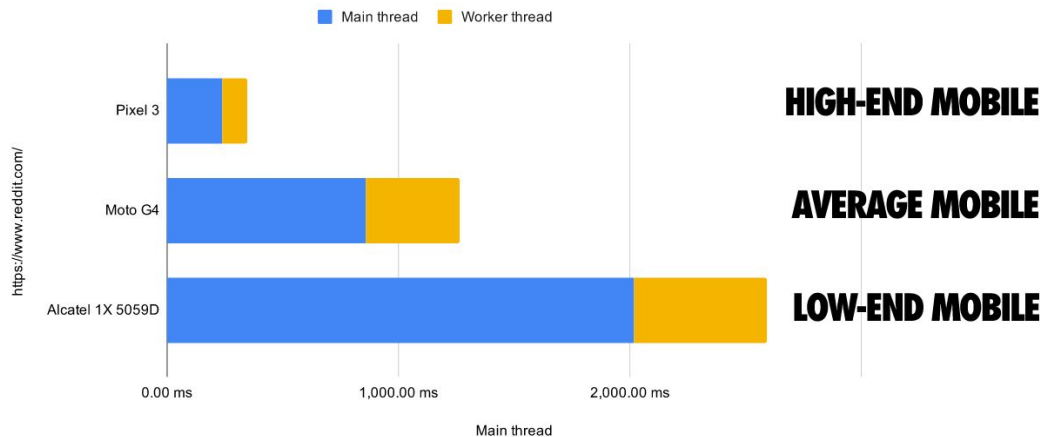




# COST OF JAVASCRIPT

REDDIT.COM

JavaScript Processing times for Reddit.com



<https://v8.dev/blog/cost-of-javascript-2019>





# AMP is an HTML Framework



**Nathan Pitman**   
@nathanpitman

2005 - HTML & CSS  
2006 - HTML & CSS  
2007 - HTML & CSS  
2008 - HTML & CSS  
2009 - HTML & CSS  
2010 - HTML & CSS  
2011 - HTML & CSS  
2012 - HTML & CSS  
2013 - HTML & CSS  
2014 - HTML & CSS  
2015 - HTML & CSS  
2016 - HTML & CSS  
2017 - HTML & CSS  
2018 - HTML & CSS  
2019 - HTML & CSS...



♥ 223 11:03 PM - Jul 5, 2019



**Mike Riethmuller**  
@MikeRiethmuller



2005 - Prototype  
2007 - MooTools  
2006 - jQuery  
2006 - Sass (no scss)  
2006 - YUI  
2009 - OOCSS  
2006 - SCSS  
2011 - SMACSS  
2011 - Bootstrap  
2011 - Grunt  
2012 - BEM  
2012 - Webpack  
2013 - React  
2013 - Gulp  
2015 - Babel  
2015 - CSS Modules  
2016 - Styled Components  
2016 - Create React App

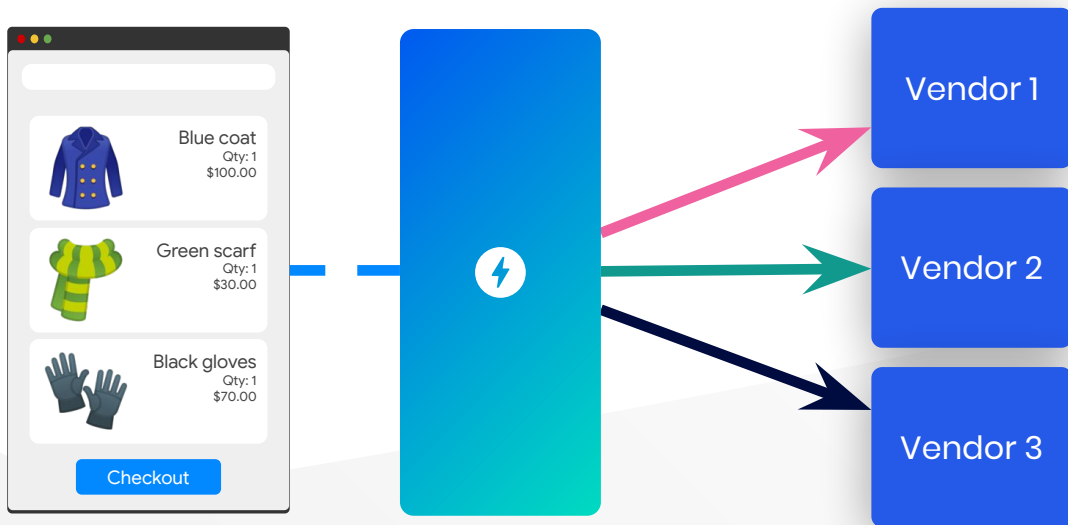
♥ 2,461 12:22 AM - Jul 5, 2019





# Interactivity in AMP

`<amp-analytics>`



```
<amp-analytics type="gtag">
  <script type="application/json">
    {
      "vars" : {
        "gtag_id": "<GA_MEASUREMENT_ID>"
        // More config.
      }
    }
  </script>
</amp-analytics>
<amp-analytics type="nielsen">
  <script type="application/json">
    // Config.
  </script>
</amp-analytics>
```



# Interactivity in AMP

`<amp-carousel>`



```
<amp-carousel type="carousel" ...>
  <a class="project-highlight" href="...">
    <amp-img src="..." ...></amp-img>
  </a>
  <!-- ... -->
</amp-carousel>
```



# Interactivity in AMP

## <amp-image-lightbox>

```
<amp-image-lightbox id="lightbox1" layout="nodisplay">
</amp-image-lightbox>
<!-- ... -->
<figure>
  <amp-img on="tap:lightbox1.open" role="button" tabindex="0"
  src="..." alt="Picture of a dog" width="300" height="246"></amp-img>
  <figcaption>Border Collie.</figcaption>
</figure>
<!-- ... -->
```





# The AMP Validator

The screenshot shows the AMP Validator interface. At the top left is the AMP logo (a lightning bolt in a circle). To its right are navigation links: HOWTO, GITHUB, PRIVACY, CHROME EXTENSION, VSCODE EXTENSION, and NPM. Below the logo is a text input field labeled "URL" and a dropdown menu currently set to "AMP" with a "VALIDATE" button to its right. The main area contains a code editor with the following HTML code:

```
1 <!DOCTYPE html>
2 <html amp>
3 <head>
4   <meta charset="utf-8">|
5   <meta name="viewport" content="width=device-width,minimum-scale=1">
6   <style amp-boilerplate>body{-webkit-animation:-amp-start 8s steps(1,end) 0s 1 normal both;-moz-a
7   <script async src="https://cdn.ampproject.org/v0.js"></script>
8 </head>
9 <body>
10   Hello world.
11 </body>
12 </html>
13
```

A yellow highlight is under the error message: **!** The mandatory tag 'link rel=canonical' is missing or incorrect. [Learn more.](#)

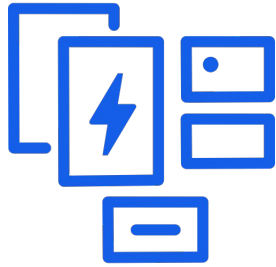
Below the code editor, the "Validation Status" is displayed as **FAIL**. At the bottom, a detailed error message is shown: **!** The mandatory tag 'link rel=canonical' is missing or incorrect. MANDATORY\_AMP\_TAG\_MISSING\_OR\_INCORRECT line 12, column 7

<https://validator.ampproject.org>

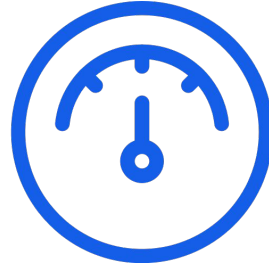


# A Minimal AMP Document

```
<!DOCTYPE html>
<html amp>
  <head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width">
    <link rel="canonical" href="self.html">
    <style amp-boilerplate>...</style>
    <noscript><style amp-boilerplate>...</style></noscript>
    <script async src="https://cdn.ampproject.org/v0.js"></script>
  </head>
  <body>
    Hello world.
  </body>
</html>
```



Web Components



Validator



CDN & Cache



# Key Principles for AMP Compatibility

- Use AMP components and declarative attributes instead of custom JavaScript.
- Use no more than 50 kilobyte of CSS per page.
- Use optimized AMP components for media files (e.g. [amp-img](#) instead of [img](#)).
- Have forms POST data via AJAX for contextual layout updates.
- Simplicity first: Use AMP components over custom events and state logic where possible.





# Using AMP in WordPress

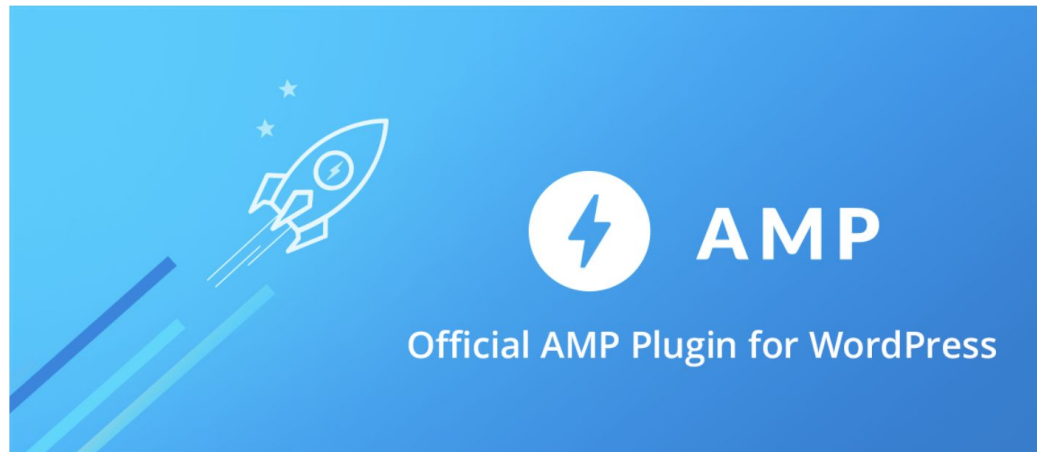


# The WordPress Plugin

[w.org/plugins/amp](https://w.org/plugins/amp)

Plugins

[My Favorites](#) [Beta Testing](#) [Developers](#)



AMP

By AMP Project Contributors



TODO: Sanitizers, internal Validator, 3 modes



# Hands-On Workshop



# Workshop Requirements

1. Download and install Local by Flywheel

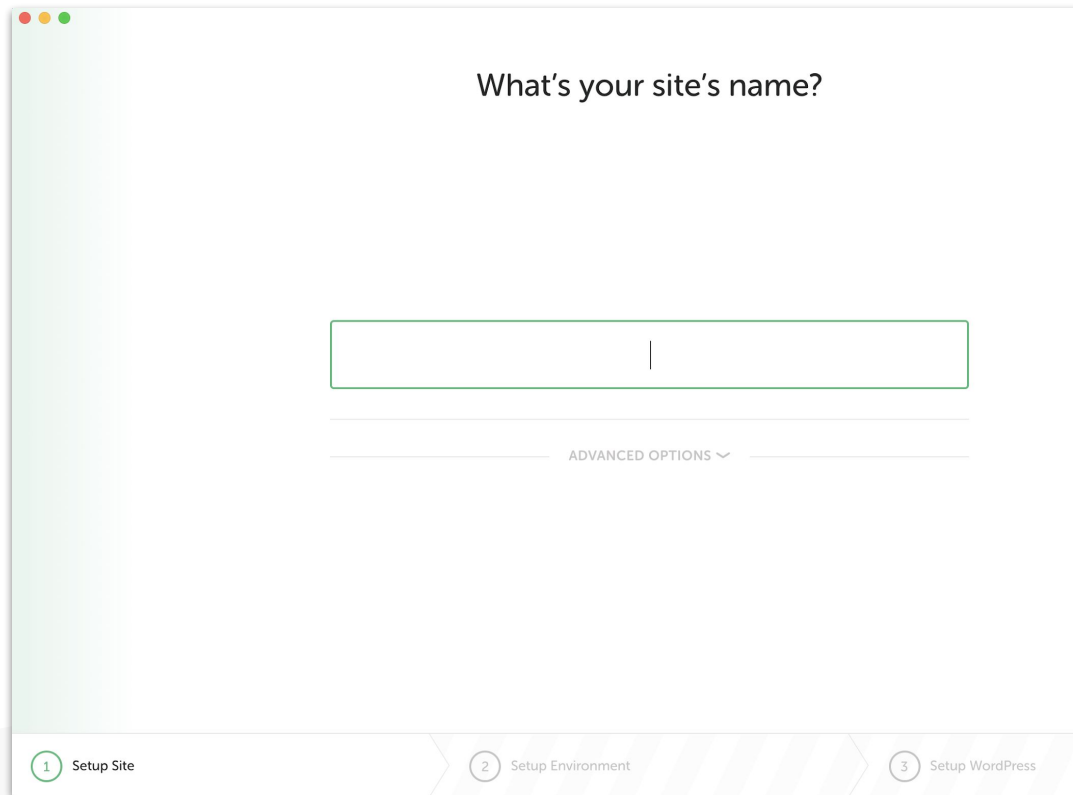
[localbyflywheel.com](https://localbyflywheel.com)

The screenshot shows the homepage of the Local by Flywheel website. The background is a vibrant green. At the top right, there is a blue banner with the text "NEW: Power up your workflow with Local Pro!" and a "LEARN MORE" button. The main header features the "LOCAL by Flywheel" logo on the left and navigation links for "FEATURES", "PRO NEW!", "PRICING", "ADD-ONS", and "LABORATORY" on the right. The central content area has the headline "The #1 local WordPress development tool" and a sub-headline: "Stop debugging local environments and spend more time launching WordPress sites." Below this is a "FREE DOWNLOAD!" button and a "Watch our video >" link. On the right side, there is an image of a laptop displaying the Local Pro interface, a small robot figurine, and a potted plant. At the bottom of the page, a white banner contains the text "Delightful & powerful features" in green.



# Workshop Requirements

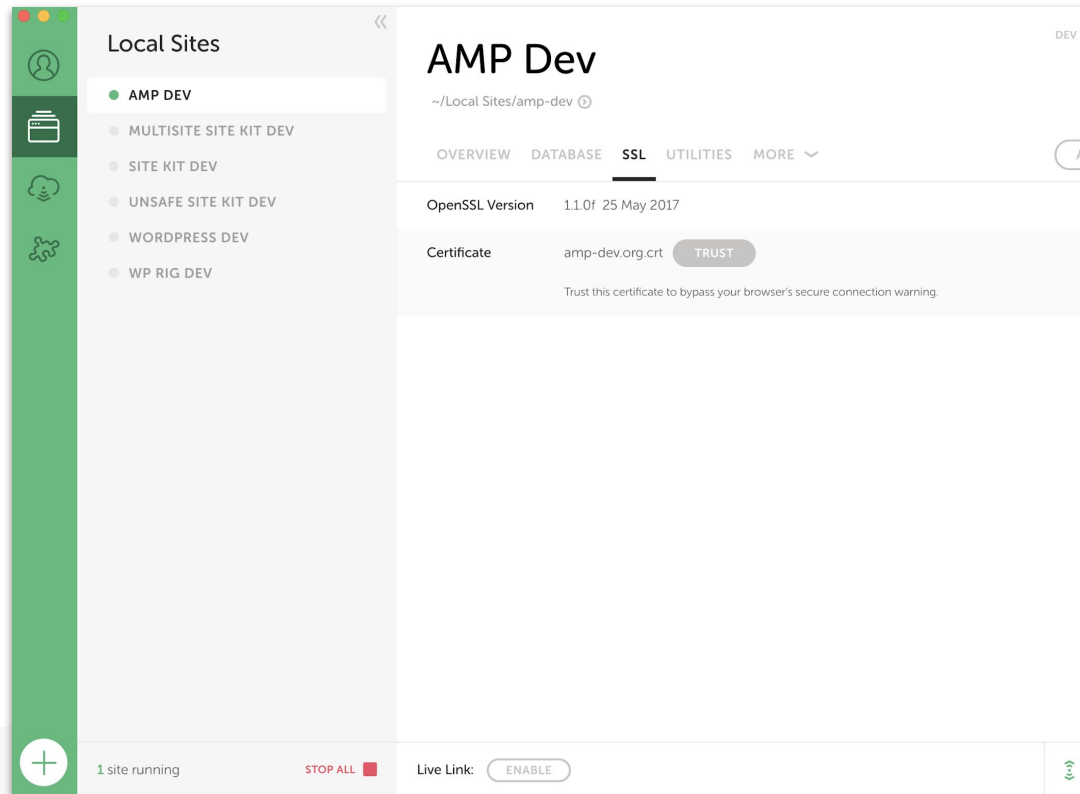
## 2. Set up a new site





# Workshop Requirements

3. Trust the new site's SSL certificate





# Workshop Requirements

4. Download the setup script into the site's /app directory

[felix-arntz.me/wcsev19](https://felix-arntz.me/wcsev19)

TODO: Screenshot & Link

NEW: Power up your workflow with Local Pro! [LEARN MORE](#)

LOCAL  
by Flywheel

FEATURES PRO <sup>NEW!</sup> PRICING ADD-ONS LABORATORY

## The #1 local WordPress development tool

*Stop debugging local environments and spend more time launching WordPress sites.*

[FREE DOWNLOAD!](#) [Watch our video >](#)

Delightful & powerful features





# Workshop Requirements

5. SSH into the new site's Docker container

The screenshot shows the 'Local Sites' interface with a context menu open over the 'AMP Dev' site. The menu options are:

- View Site
- Admin Dashboard
- Reveal in Finder
- Open Site SSH
- Restart
- Stop
- Start
- Clone
- Export
- Save as Blueprint
- Change Domain
- Rename
- Change Workspace
- Delete

The 'AMP Dev' site configuration is shown on the right:

## AMP Dev

~/Local Sites/amp-dev

**OVERVIEW** DATABASE SSL UTILITIES MORE

Local Environment	Preferred 1.3.2	CHANGE
Web Server	nginx	
PHP Version	7.2.9	
MySQL Version	5.7.23	
WordPress Version	5.2.2	
Site Name	AMP Dev	
Site Domain	amp-dev.org	CHANGE
Site Path	~/Local Sites/amp-dev	
Multisite	No	

At the bottom, it shows '1 site running', a 'STOP ALL' button, and a 'Live Link' button with 'ENABLE' text.



# Workshop Requirements

6. Run the downloaded script

A screenshot of a terminal window with a dark blue background. The window title bar shows three colored dots (red, yellow, green) on the left and the text '2. AM' on the right. The terminal content shows a shell prompt, a login message, a user prompt, and a command being executed.

```
/Users/felixarntz/Library/Application\ Support/Local
Last login: Mon Aug 19 18:50:10 on ttys002
~ ➤ /Users/felixarntz/Library/Application\ Supp
-n -e
root@b7a2ad09a370:/# sh ./app/wc-sevilla-setup.sh
```



TODO: WP Rig, amp-sidebar, amp-image-lightbox



# Finding AMP Compatible Components

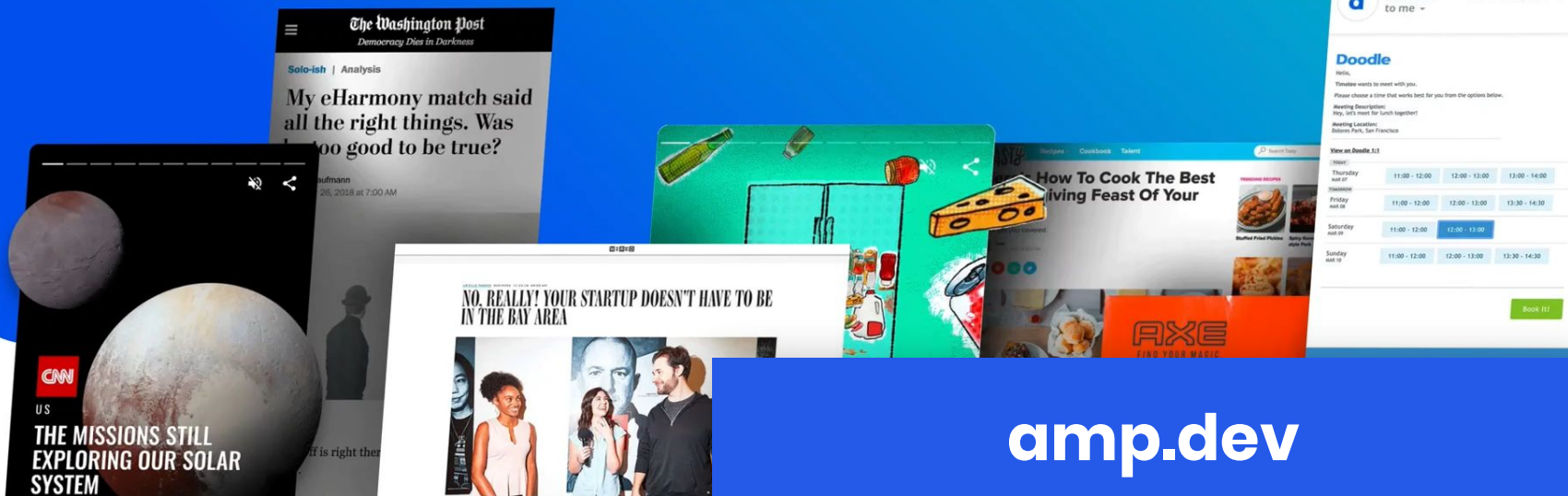


TODO.

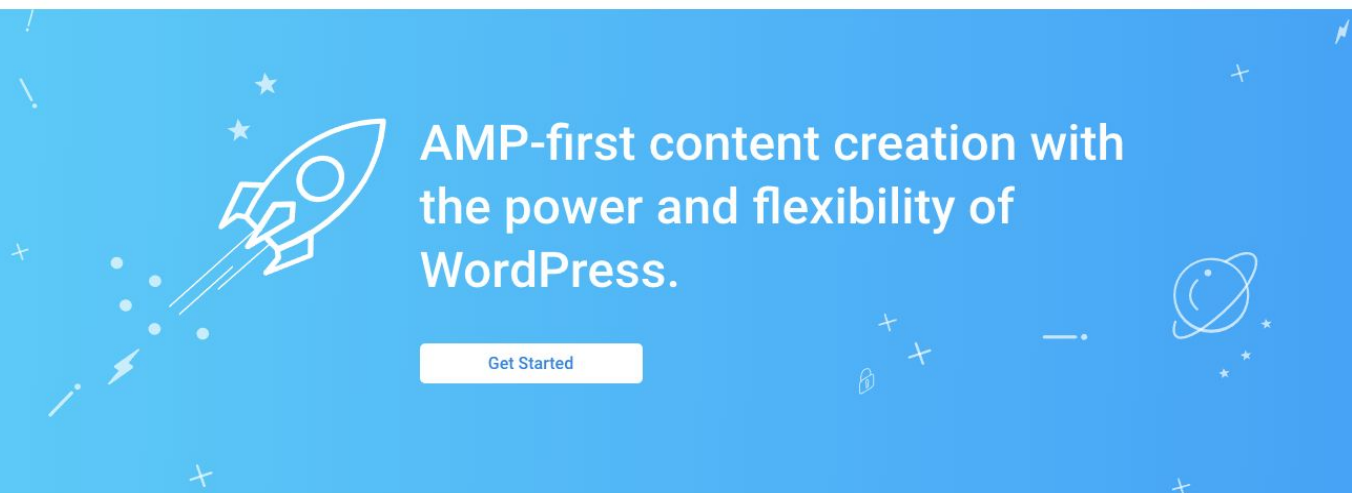


# Wrap Up

# AMP is a web component framework to easily create user-first ads.

[Get started](#)

amp.dev



# AMP-first content creation with the power and flexibility of WordPress.

Get Started



## Faster, Better Experiences

AMP pages load almost instantly enabling you to offer a consistently fast user experience across all devices and platforms and improve your core business metrics.



## AMP in WordPress, the WordPress Way

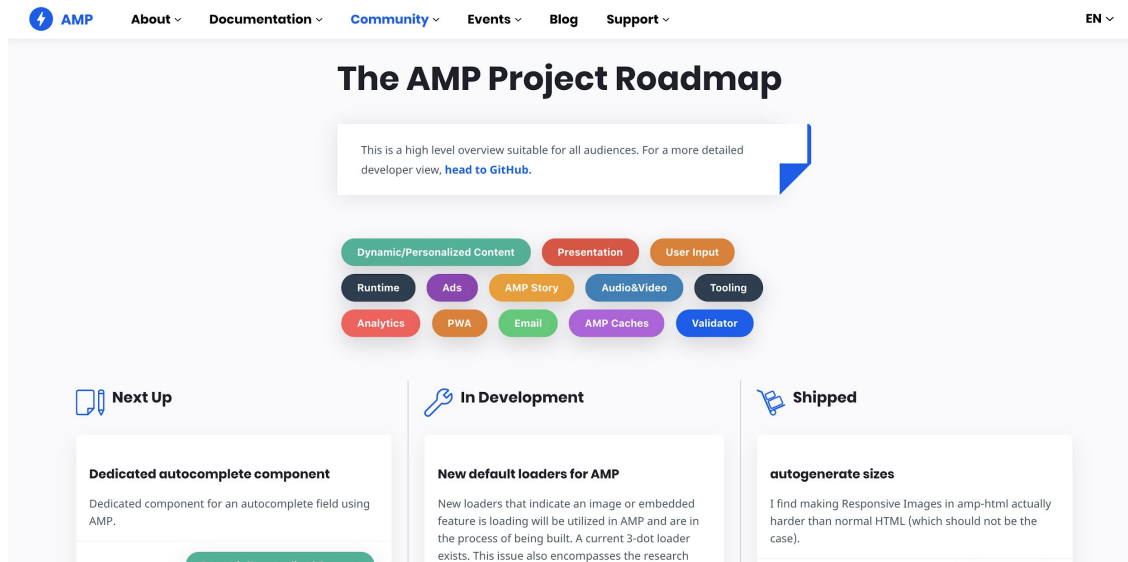
The Official AMP Plugin for WordPress is

[amp-wp.org](https://amp-wp.org)





# amp.dev/ community/ roadmap



The AMP Project Roadmap

This is a high level overview suitable for all audiences. For a more detailed developer view, [head to GitHub](#).

Dynamic/Personalized Content   Presentation   User Input

Runtime   Ads   AMP Story   Audio&Video   Tooling

Analytics   PWA   Email   AMP Caches   Validator

### Next Up

- Dedicated autocomplete component**  
Dedicated component for an autocomplete field using AMP.

### In Development

- New default loaders for AMP**  
New loaders that indicate an image or embedded feature is loading will be utilized in AMP and are in the process of being built. A current 3-dot loader exists. This issue also encompasses the research

### Shipped

- autogenerate sizes**  
I find making Responsive Images in amp-html actually harder than normal HTML (which should not be the case).



**Thank You**



Felix Arntz  
@felixarntz