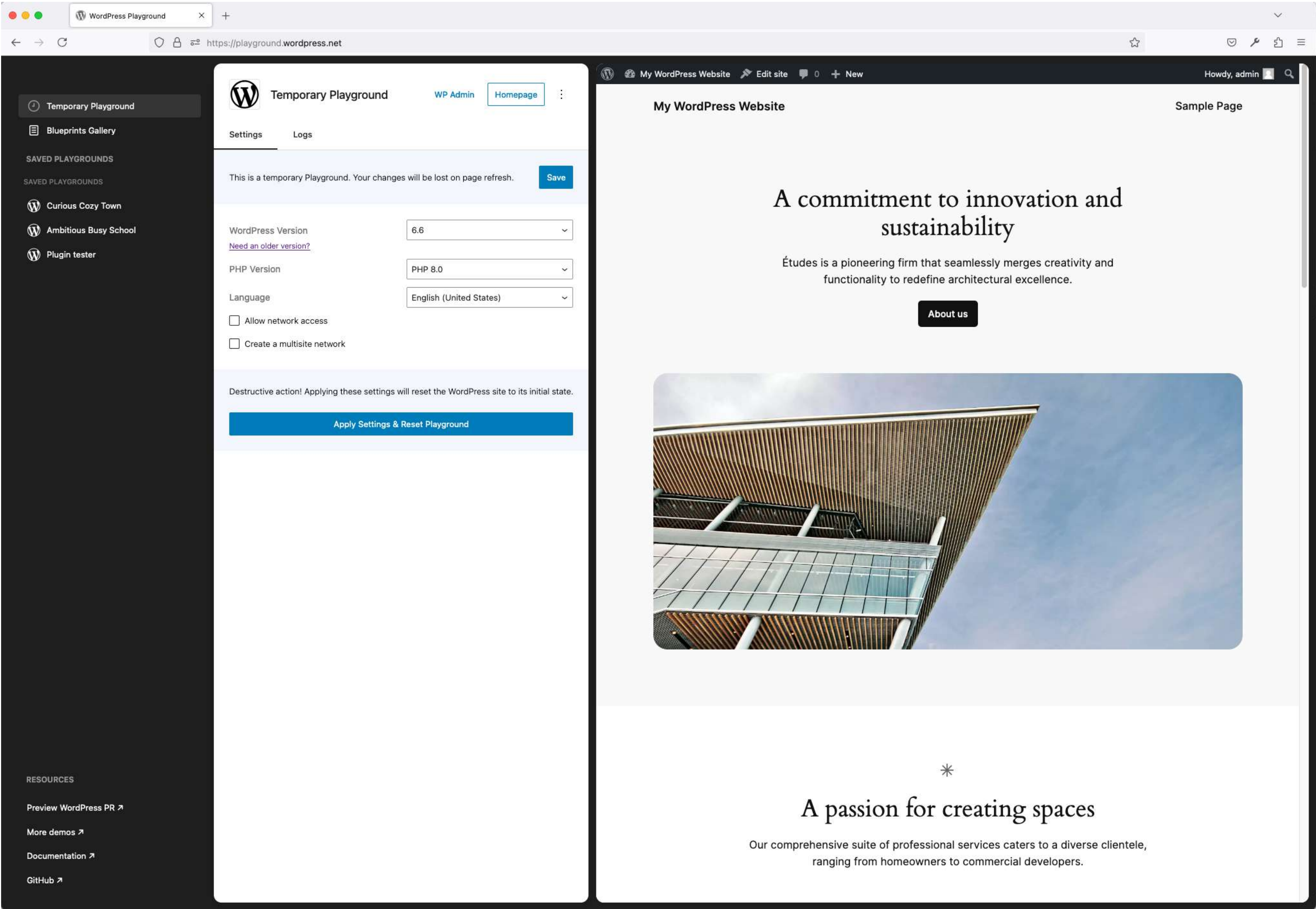


Discover How WordPress Playground is Transforming the WordPress Ecosystem

Berislav Grgičak

WordPress Playground

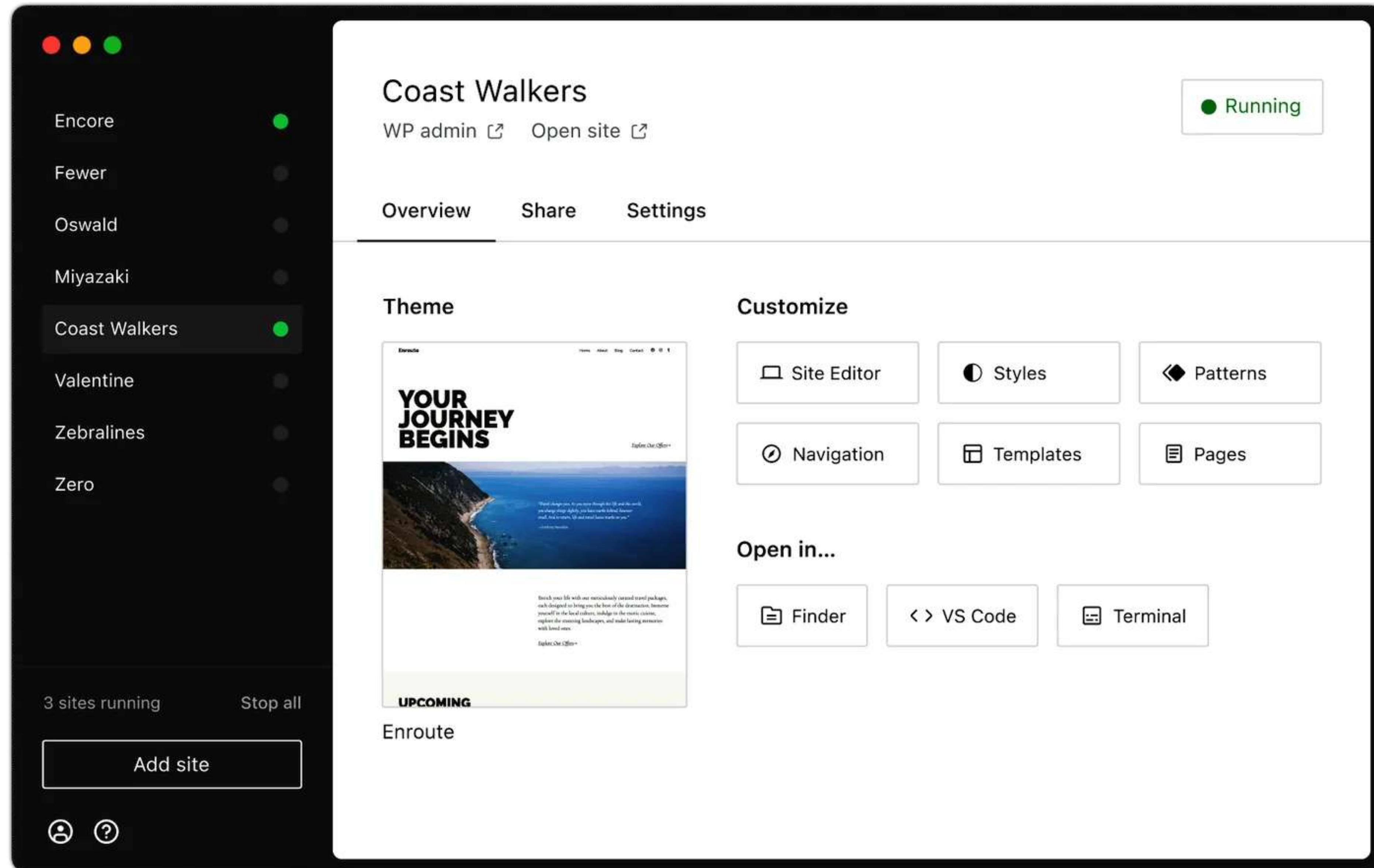
Web apps





Mobile apps

Desktop apps



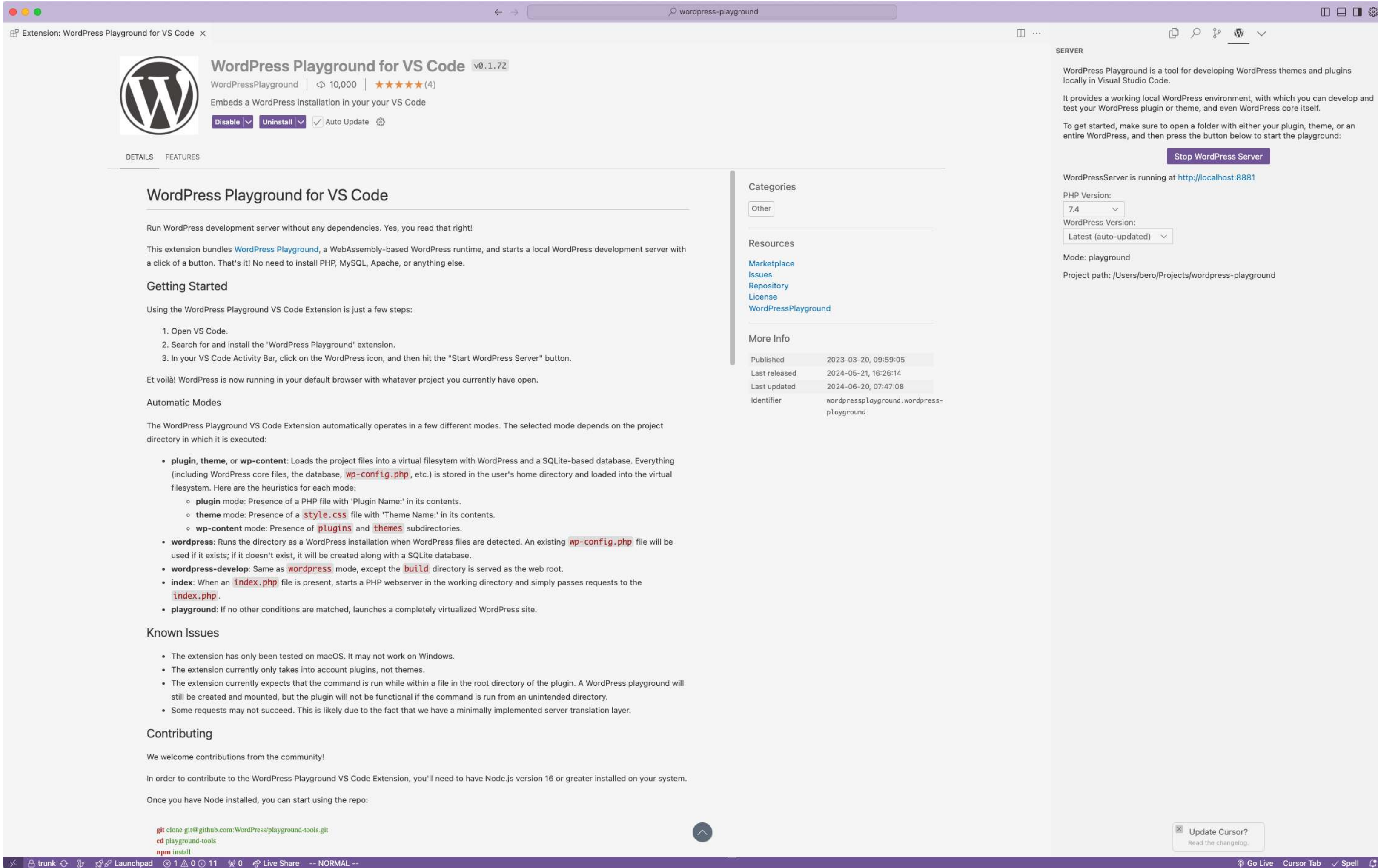
```
mux ls && read tmux_session && tmux attach -t ${tmux_session:-default} || tmux

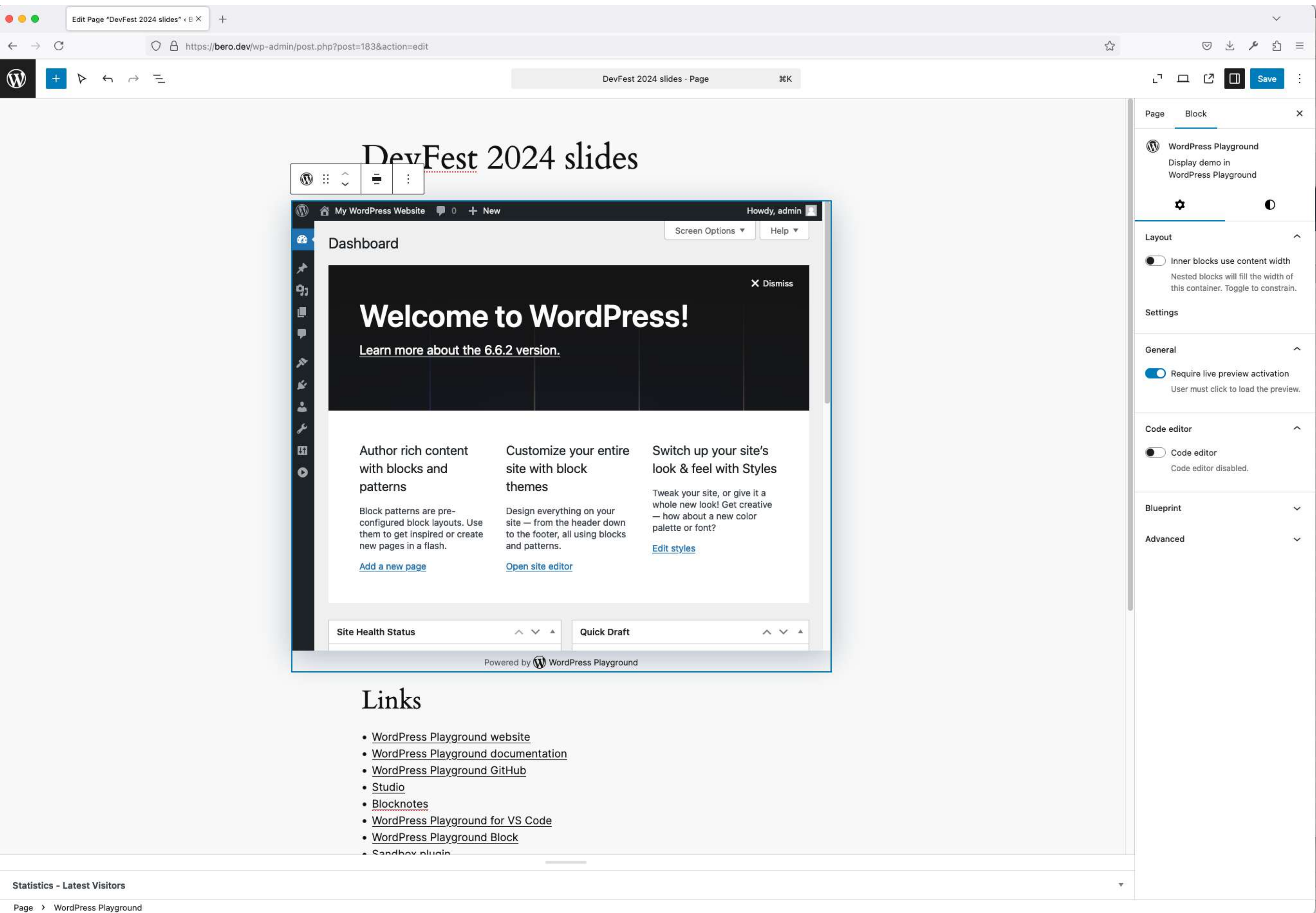
→ ~ playground server
Starting a PHP server...
Setting up WordPress latest
Running the Blueprint...
Running the Blueprint – 100%

Finished running the blueprint
WordPress is running on http://127.0.0.1:9400
█
[default] <zsh 5:zsh 6:zsh 7:bun*"Mac.local" 22:02 23-Oct-24
```

CLI tools

IDE extension





Playground block

Testing

Workflow runs · bgrgicak/playground-tester/actions?page=3

bgrgicak / playground-tester

<> Code

Issues

Pull requests

Actions

Projects

Settings

Search

Type / to search

Actions

New workflow

All workflows

Generate reports

pages-build-deployment

Run Tests on Pull Request

Test plugins

Test themes

Update error stats data

Update available themes and plu... Disabled

Management

Caches

Attestations

Runners

Usage metrics

Performance metrics

All workflows

Showing runs from all workflows

Filter workflow runs

21,963 workflow runs

	Event	Status	Branch	Actor
Update error stats data	Update error stats data #3354: Scheduled	main	8 hours ago	6m 2s
Test plugins	Test plugins #8102: Scheduled	main	8 hours ago	23m 38s
Test themes	Test themes #8031: Scheduled	main	10 hours ago	9m 29s
Test plugins	Test plugins #8101: Scheduled	main	10 hours ago	20m 22s
Test themes	Test themes #8030: Scheduled	main	11 hours ago	10m 27s
Update error stats data	Update error stats data #3353: Scheduled	main	11 hours ago	5m 54s
Test plugins	Test plugins #8100: Scheduled	main	11 hours ago	22m 58s
Test themes	Test themes #8029: Scheduled	main	11 hours ago	9m 56s
Test plugins	Test plugins #8099: Scheduled	main	11 hours ago	19m 46s
Generate reports	Generate reports #2230: Scheduled	main	11 hours ago	56m 1s
Test themes	Test themes #8028: Scheduled	main	11 hours ago	10m 28s
Update error stats data	Update error stats data #3352: Scheduled	main	11 hours ago	5m 22s
Test plugins	Test plugins #8098: Scheduled	main	12 hours ago	19m 35s
Test themes	Test themes #8027: Scheduled	main	12 hours ago	9m 19s
Test plugins	Test plugins #8097: Scheduled	main	12 hours ago	22m 10s
Test themes	Test themes #8026: Scheduled	main	13 hours ago	10m 44s
Update error stats data	Update error stats data #3351: Scheduled	main	13 hours ago	5m 41s
Test plugins	Test plugins #8096: Scheduled	main	13 hours ago	20m 2s
Test themes	Test themes #8025: Scheduled	main	13 hours ago	12m 28s
Test plugins	Test plugins #8095: Scheduled	main	13 hours ago	12m 28s

Dashboard

Home

Updates

Posts

Media

Pages

Comments

Appearance

Plugins

Users

Tools

Settings

Collapse menu

Dashboard

Screen Options

Help

×

Dismiss

Welcome to WordPress!

[Learn more about the 6.6.2 version.](#)



Author rich content with blocks and patterns

Block patterns are pre-configured block layouts. Use them to get inspired or create new pages in a flash.

[Add a new page](#)



Customize your entire site with block themes

Design everything on your site — from the header down to the footer, all using blocks and patterns.

[Open site editor](#)



Switch up your site's look & feel with Styles

Tweak your site, or give it a whole new look! Get creative — how about a new color palette or font?

[Edit styles](#)

Site Health Status

No information yet...

Site health checks will automatically run periodically to gather information about your site. You can also [visit the Site Health screen](#) to gather information about your site now.

At a Glance

 1 Post

 1 Page

 1 Comment

WordPress 6.6.2 running [Twenty Twenty-Four](#) theme.

Activity

Recently Published

Today, 12:34 pm

Hello world!

Recent Comments



From [A WordPress Commenter](#) on [Hello world!](#)

Hi, this is a comment. To get started with moderating, editing, and deleting comments, please visit the

Quick Draft

Title

Content

What's on your mind?

Save Draft

WordPress Events and News

Enter your closest city to find nearby events. [Select location](#)

City: Cincinnati

Submit

Cancel

RSS Error: WP HTTP Error: Missing header/body separator

RSS Error: WP HTTP Error: A valid URL was not provided.

[Meetups](#)

[WordCamps](#)

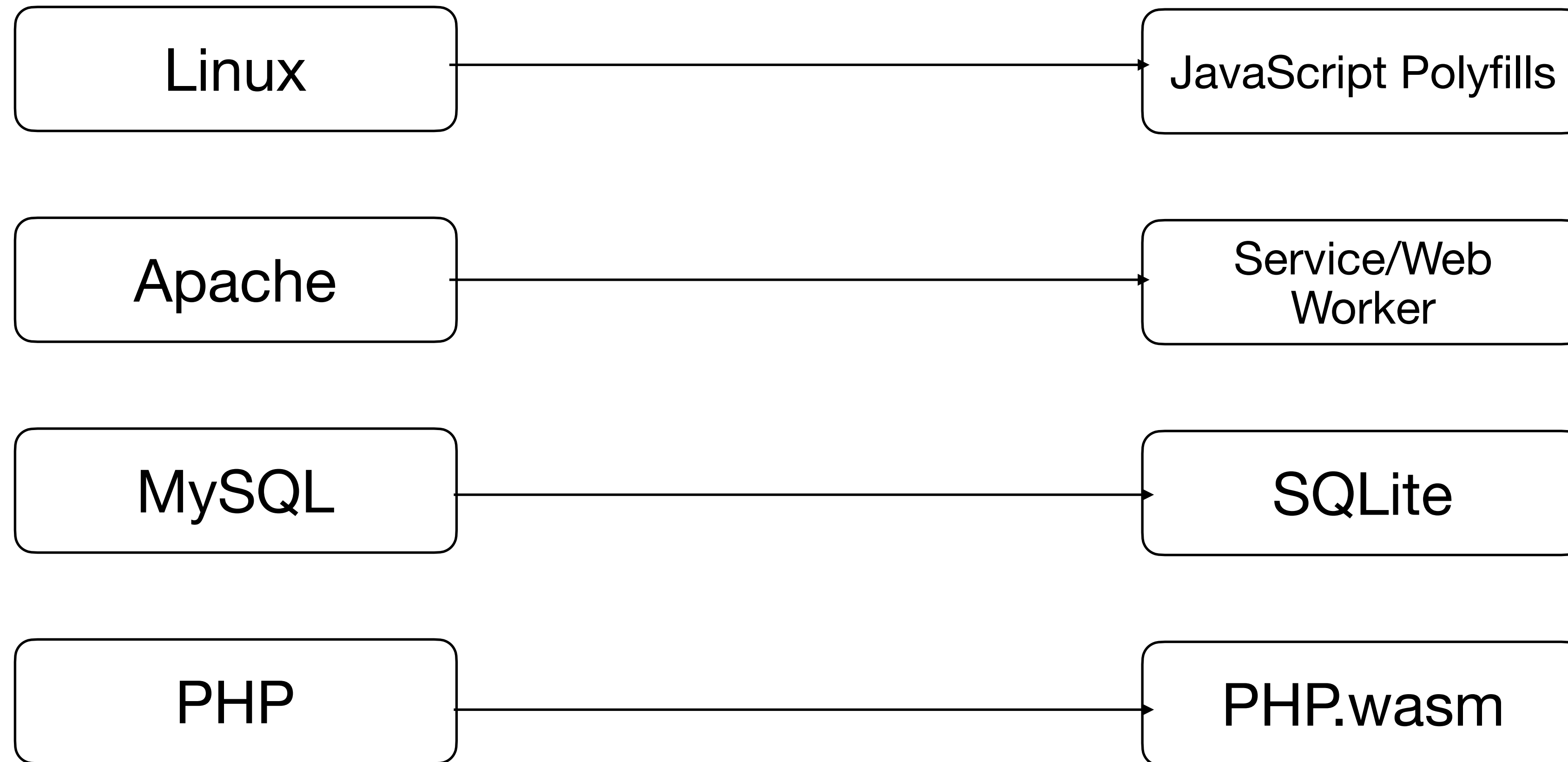
[News](#)

Drag boxes here

Drag boxes here

How does Playground work?

LAMP vs Playground



```
<iframe src="https://playground.wordpress.net/"></iframe>
```

Query API

```
https://playground.wordpress.net/  
?theme=pendant  
&wp=6.5  
&url=/wp-admin/
```

```
<iframe id="wp"></iframe>
<script type="module">
  import {
    startPlaygroundWeb
  } from 'https://playground.wordpress.net/client/index.js';
  const client = await startPlaygroundWeb({
    iframe: document.getElementById('wp'),
    remoteUrl: `https://playground.wordpress.net/remote.html`,
  });
</script>
```

Playground boot

Service Worker

- Register Service Worker
 - Intercept fetch events
 - Cache assets
 - Serve cache while offline

Playground boot

Web Worker

- Start Web Worker
 - Executes heavy tasks
 - Starts a PHP runtime
 - Loads a request handler
 - Boots WordPress

Playground boot

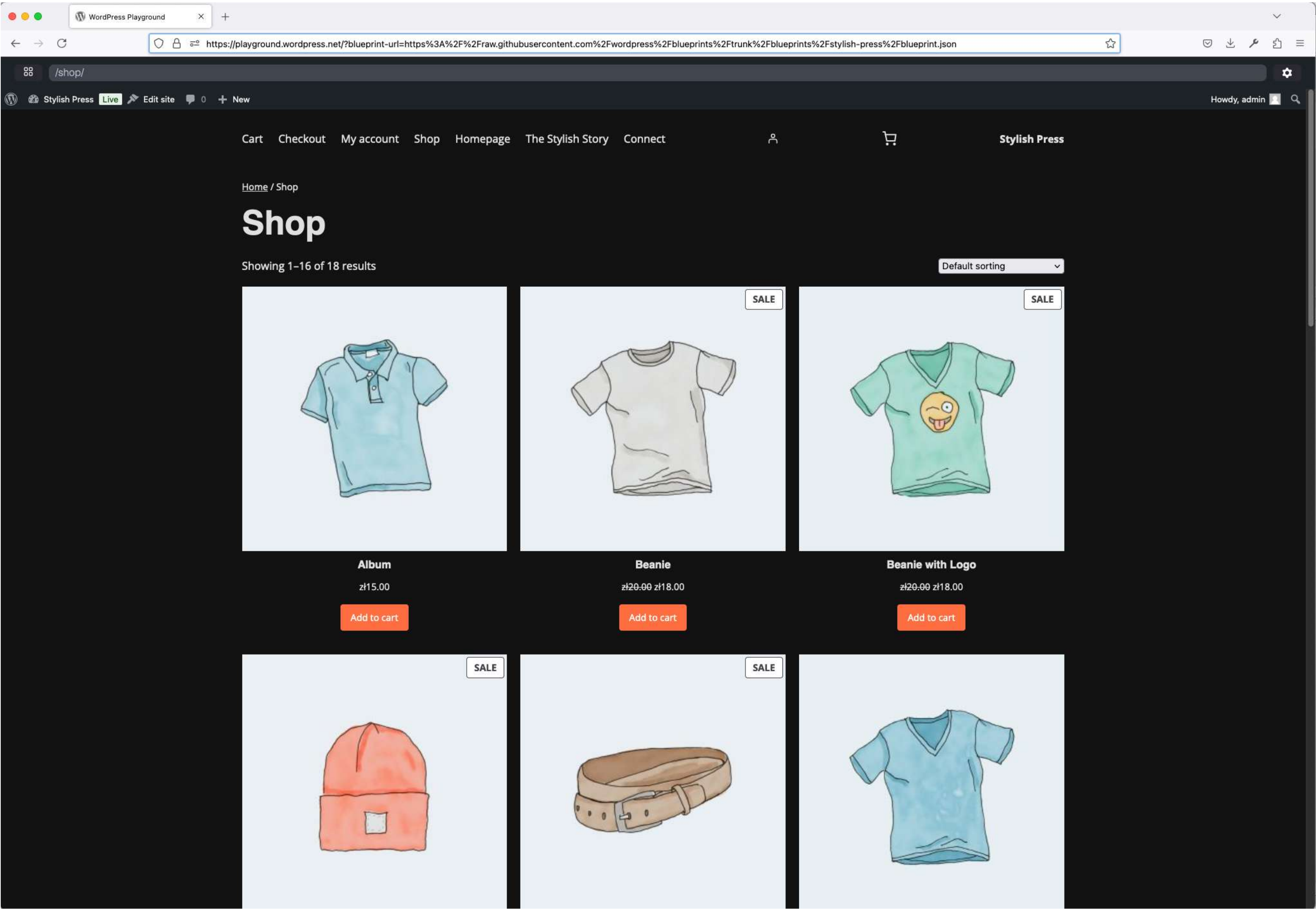
Boot WordPress

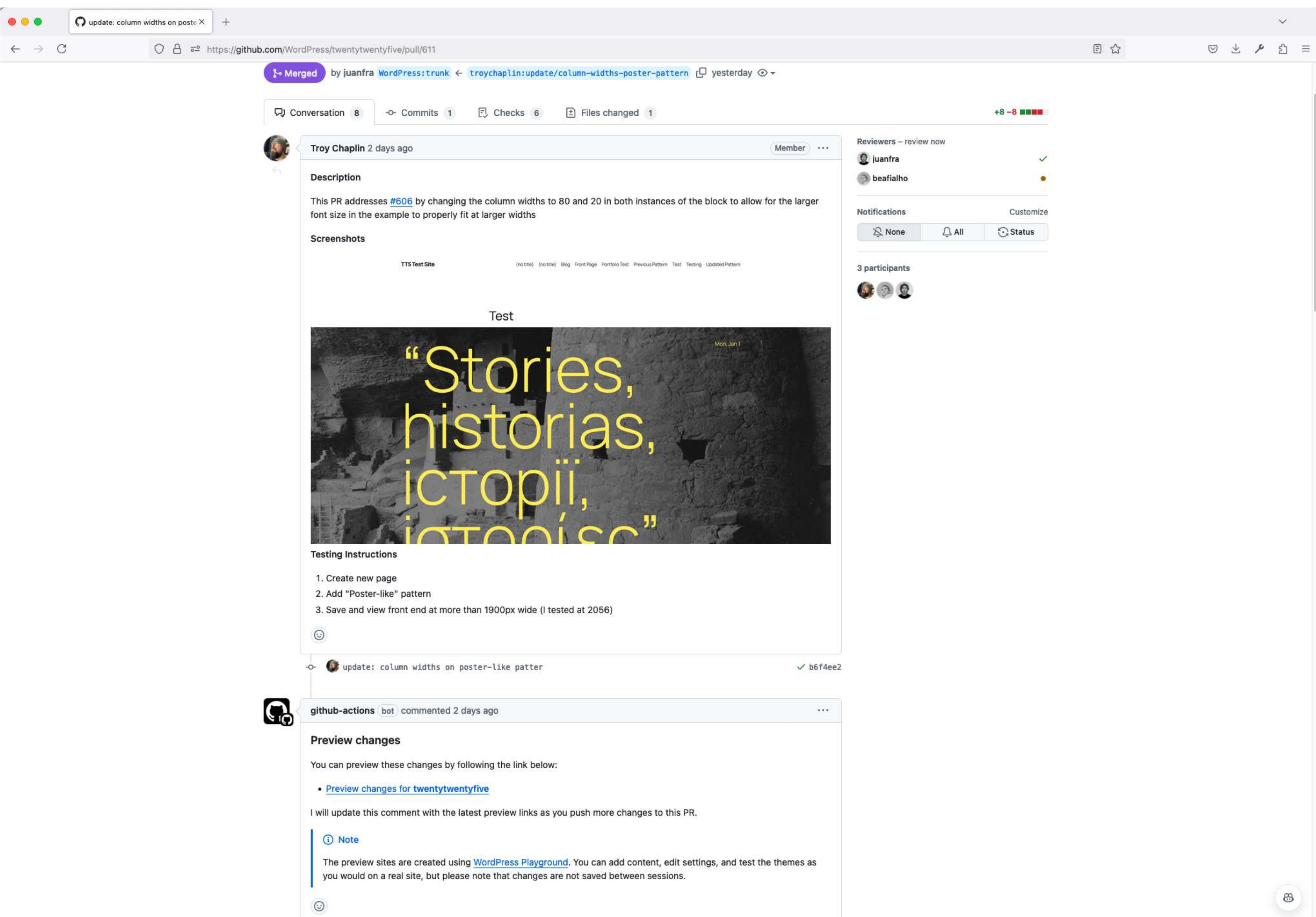
- Download WordPress
- Setup environment
- Install WordPress
- Run Blueprint

Blueprints

```
{
  "$schema": "https://playground.wordpress.net/blueprint-schema.json",
  "login": true,
  "siteOptions": {
    "blogname": "My first Blueprint"
  },
  "steps": [
    {
      "step": "installTheme",
      "themeData": {
        "resource": "wordpress.org/themes",
        "slug": "adventurer"
      }
    },
    {
      "step": "installPlugin",
      "pluginData": {
        "resource": "wordpress.org/plugins",
        "slug": "hello-dolly"
      }
    },
    {
      "step": "mkdir",
      "path": "/wordpress/wp-content/plugins/hello-from-the-dashboard"
    },
    {
      "step": "writeFile",
      "path": "/wordpress/wp-content/plugins/hello-from-the-dashboard/plugin.php",
      "data": "<?php\n/*\nPlugin Name: \"Hello\" on the Dashboard\nDescription: A custom plugin"
    },
    {
      "step": "activatePlugin",
      "pluginPath": "hello-from-the-dashboard/plugin.php"
    }
  ]
}
```

Demos





PR Previews

Doom



A WordPress page load

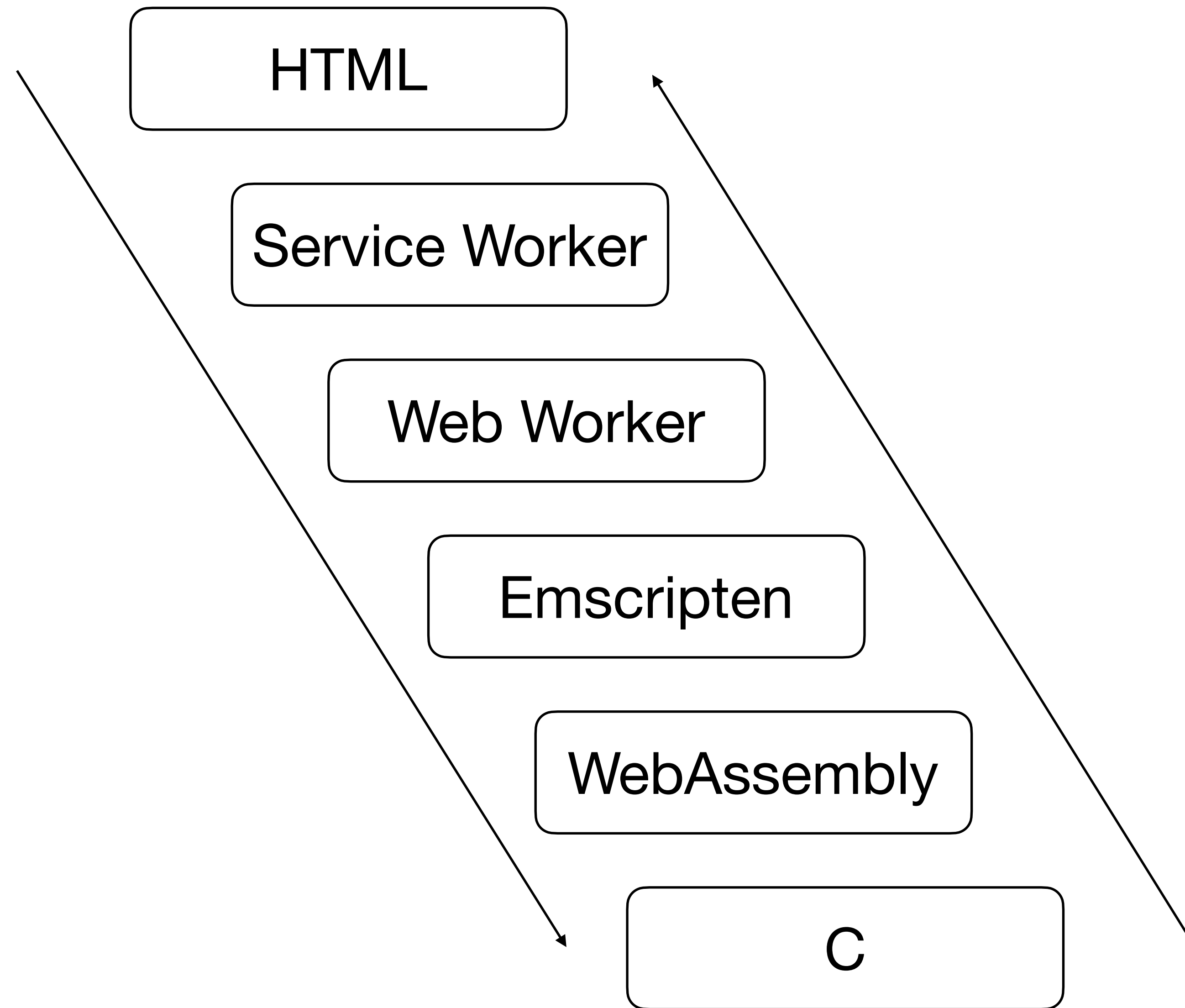
JavaScript

- `<iframe>` URL changes in the browser
 - **Service Worker** intercepts the request
 - **Web worker** processes the PHP request
 - The request is sent to **WebAssembly** by **Emscripten**

A WordPress page load

JavaScript > WASM

- **PHP.WASM** accepts the request
 - **Server API** is prepared
 - **PHP** script is is executed using **C**
 - SQL requests run on **SQLite**
 - **HTTP** requests are processed by **browser** using **fetch**
 - **Asyncify** and **JSPI** enable async function calls

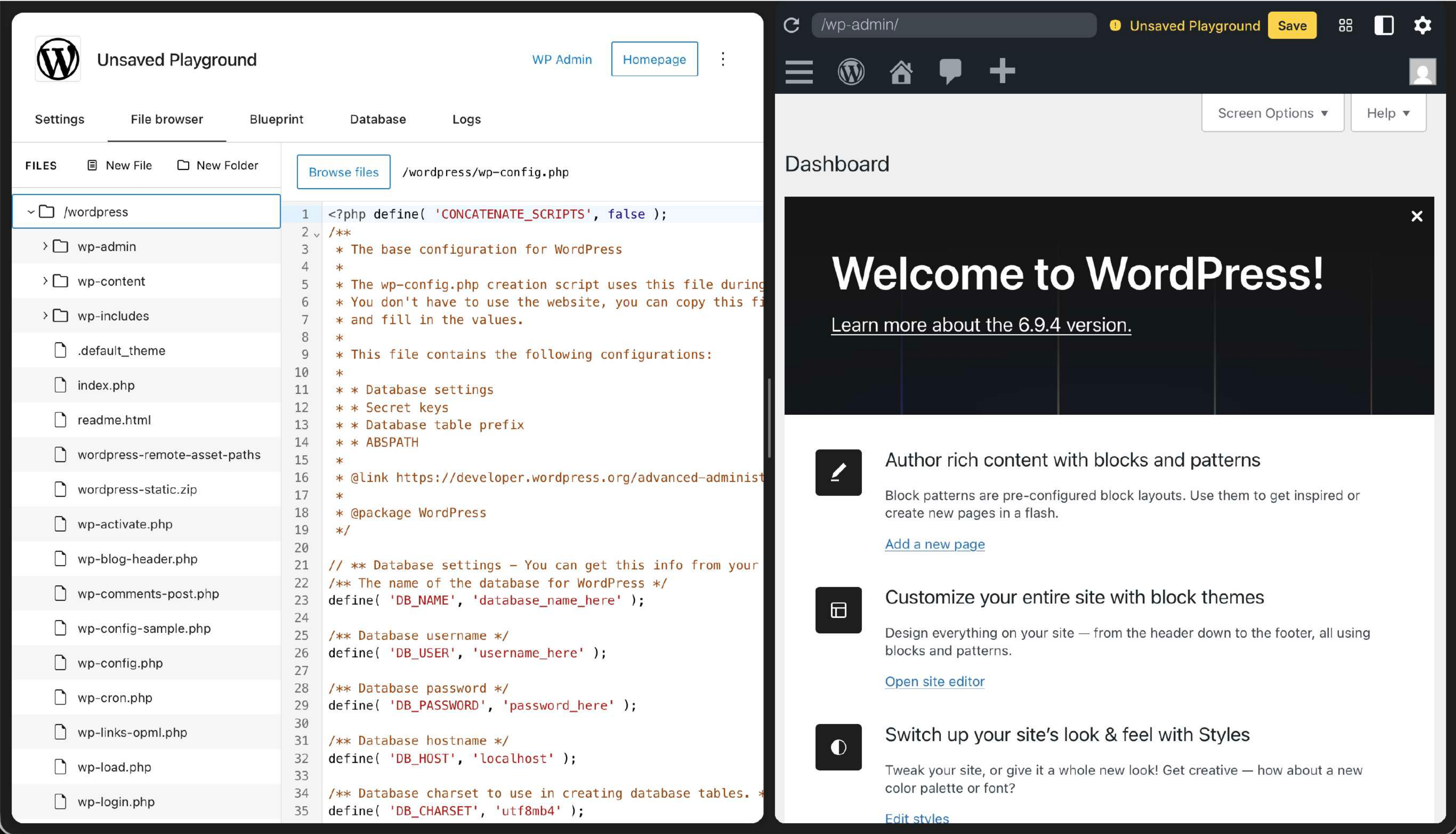


Playground is going to change everything

Matt Mullenweg

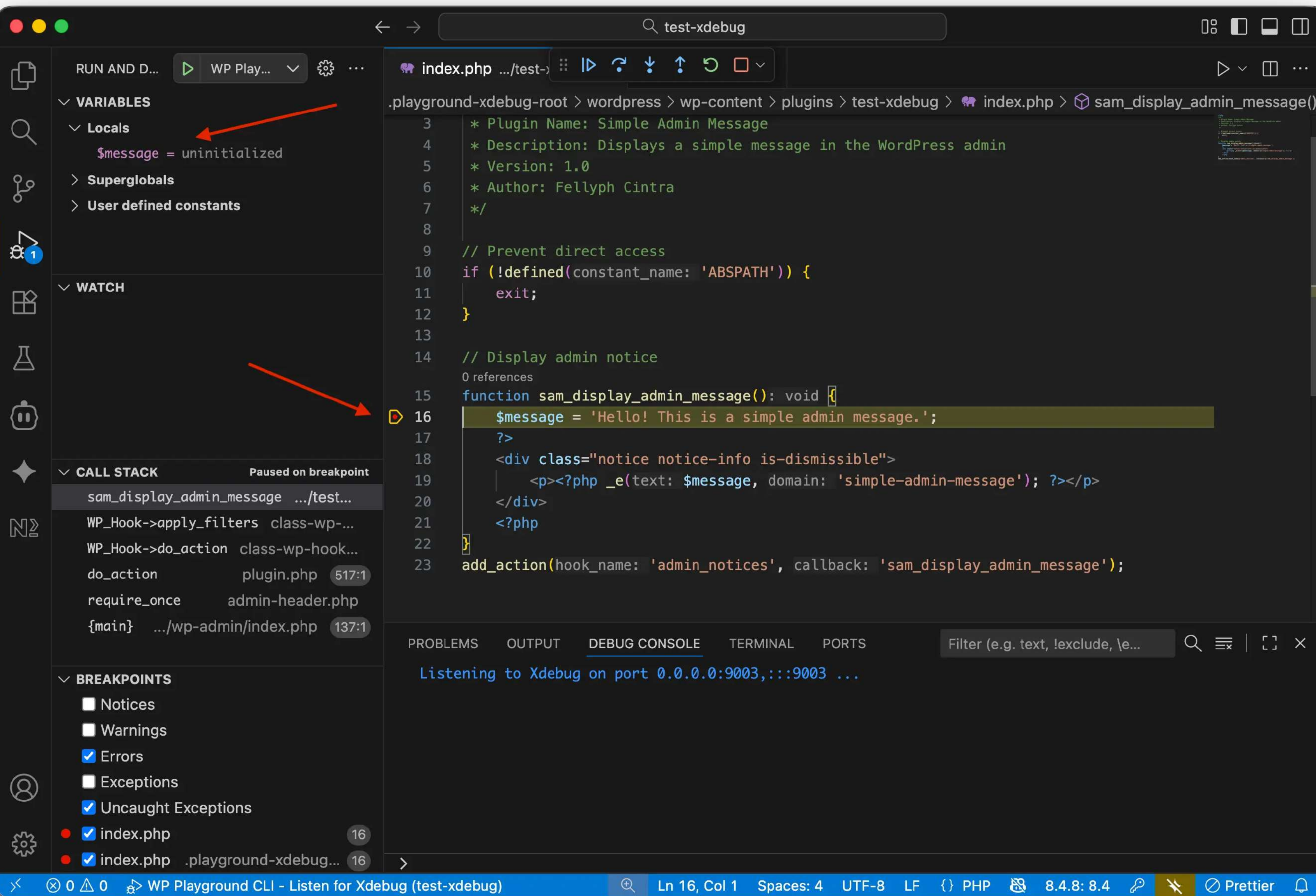
What's new?

Developer platform



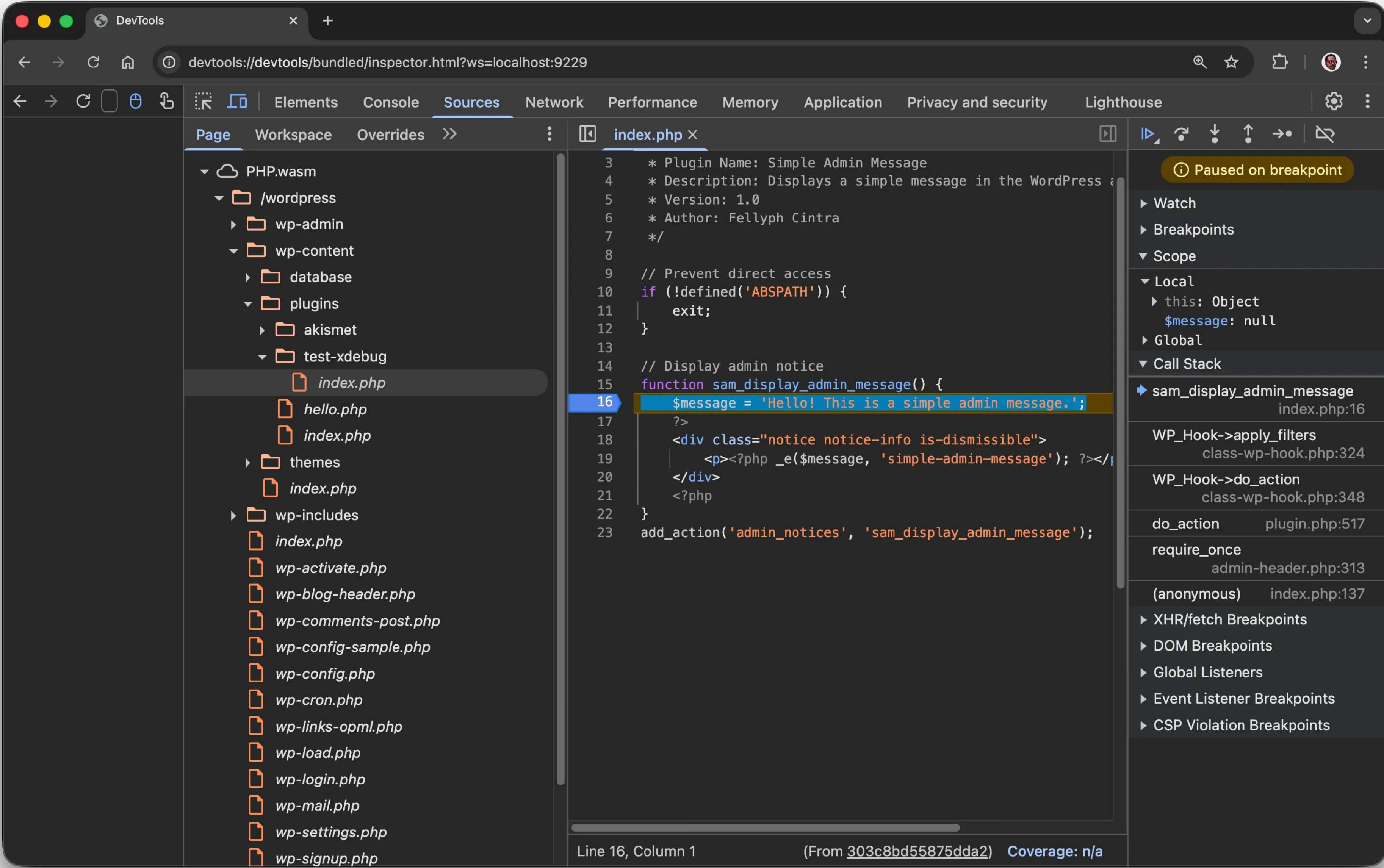
MySQL compatibility

PHP extensions

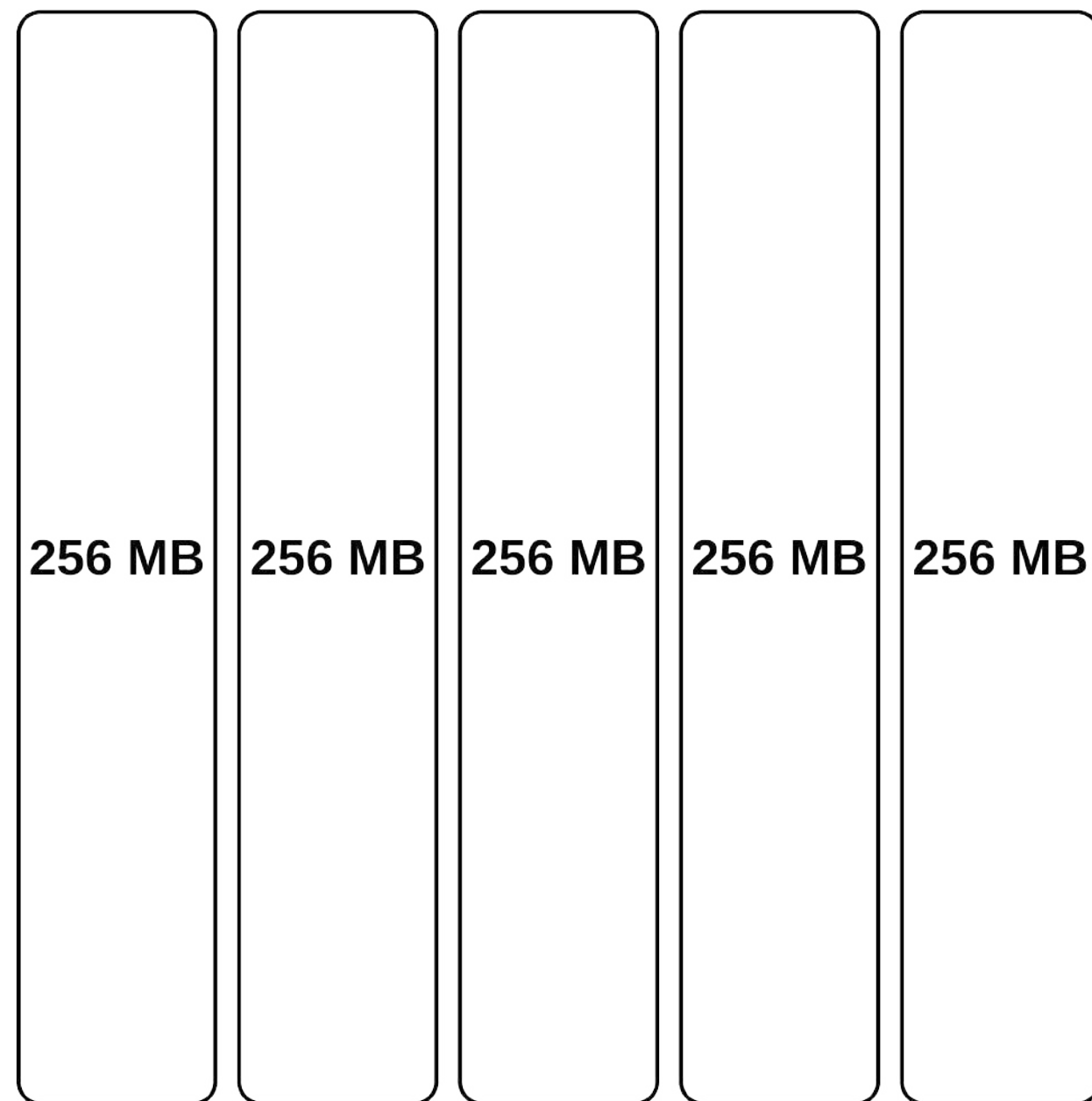


Xdebug

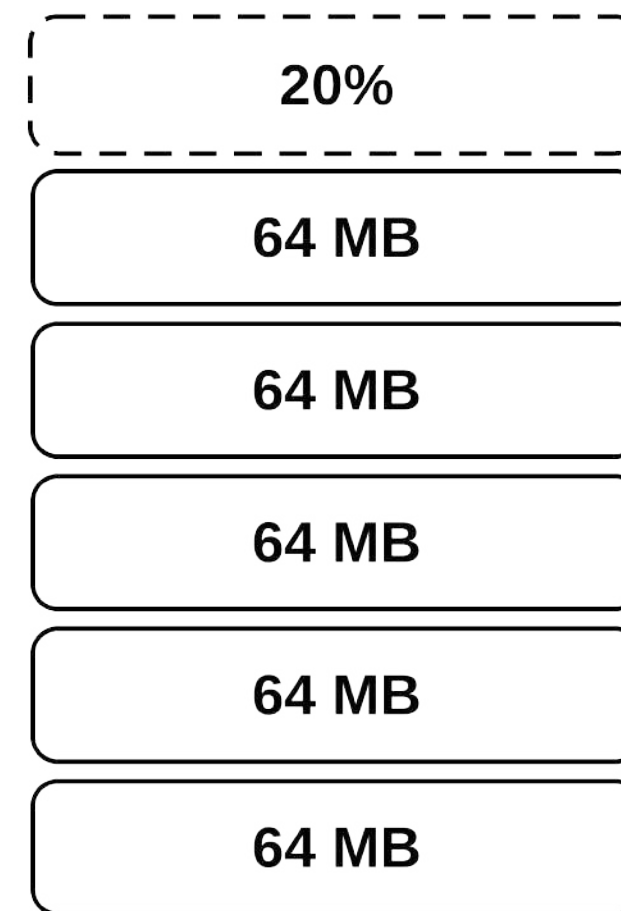
Dev tools



1.28 GB



320 MB



Performant

Posix kernel

DEMOS

Simple Programs

nginx

PHP CLI

nginx + PHP-FPM

MariaDB

Redis

WordPress (LEMP-but-SQLite)

WordPress (LEMP)

Shell

Python

Perl

Ruby

Erlang

WordPress (LEMP) on wasm-posix-kernel

Full LEMP stack: nginx + MariaDB + PHP-FPM + WordPress, all running inside a POSIX kernel compiled to WebAssembly

Start WordPress (LEMP)

Reload page

LEMP stack running!

Kernel Log

```
127.0.0.1 - - [15/May/2026:09:06:58 +0000] "GET /wp-admin/css/forms.min.css?ver=6.7.2 HTTP/1.1" 200 28448 "-" "-"
127.0.0.1 - - [15/May/2026:09:06:58 +0000] "GET /wp-admin/css/l10n.min.css?ver=6.7.2 HTTP/1.1" 200 3200 "-" "-"
127.0.0.1 - - [15/May/2026:09:06:58 +0000] "GET /wp-admin/css/install.min.css?ver=6.7.2 HTTP/1.1" 200 5067 "-" "-"
127.0.0.1 - - [15/May/2026:09:06:58 +0000] "GET /wp-includes/js/jquery/jquery.min.js?ver=3.7.1 HTTP/1.1" 200 87553 "-" "-"
127.0.0.1 - - [15/May/2026:09:06:58 +0000] "GET /wp-includes/js/jquery/jquery-migrate.min.js?ver=3.4.1 HTTP/1.1" 200 13577 "-" "-"
127.0.0.1 - - [15/May/2026:09:06:58 +0000] "GET /wp-includes/js/clipboard.min.js?ver=2.0.11 HTTP/1.1" 200 9009 "-" "-"
127.0.0.1 - - [15/May/2026:09:06:58 +0000] "GET /wp-includes/js/zxcvbn-async.min.js?ver=1.0 HTTP/1.1" 200 351 "-" "-"
127.0.0.1 - - [15/May/2026:09:06:58 +0000] "GET /wp-includes/js/dist/hooks.min.js?ver=4d63a3d491d11ffd8ac6 HTTP/1.1" 200 4776 "-" "-"
127.0.0.1 - - [15/May/2026:09:06:58 +0000] "GET /wp-admin/js/password-strength-meter.min.js?ver=6.7.2 HTTP/1.1" 200 1123 "-" "-"
127.0.0.1 - - [15/May/2026:09:06:58 +0000] "GET /wp-includes/js/dist/i18n.min.js?ver=5e580eb46a90c2b997e6 HTTP/1.1" 200 9141 "-" "-"
127.0.0.1 - - [15/May/2026:09:06:58 +0000] "GET /wp-includes/js/wp-util.min.js?ver=6.7.2 HTTP/1.1" 200 1426 "-" "-"
127.0.0.1 - - [15/May/2026:09:06:58 +0000] "GET /wp-includes/js/underscore.min.js?ver=1.13.7 HTTP/1.1" 200 18878 "-" "-"
127.0.0.1 - - [15/May/2026:09:06:58 +0000] "GET /wp-includes/js/dist/ally.min.js?ver=315
```

WordPress (MySQL)



Welcome

Welcome to the famous five-minute WordPress installation process! Just fill in the information below and you'll be on your way to using the most extendable and powerful personal publishing platform in the world.

Information needed

Please provide the following information. Do not worry, you can always change these settings later.

Site Title

Username

Usernames can have only alphanumeric characters, spaces, underscores, hyphens, periods, and the @ symbol.

Password

Repeat Password (required)

Your Email

Double-check your email address before continuing.

Search engine visibility

☐ Discourage search engines from indexing this site

It is up to search engines to honor this request.

Install WordPress

Terminal

```
\w$\ls -la
total 1
drwxr-xr-x  2 user user  24 May 15 09:06 .
drwxr-xr-x 11 user user 132 Jan  1 1970 ..
\w$\
```

shell ready

/wp-admin/post.php

⚠

Unsaved Playground

Save

⌵

☰

⚙

WordPress

Post

Edit

Categories

Links

Users

Options

Templates

My Profile

View site

Logout (admin)

Create New Post

Title

Categories

☐ Uncategorized

Post

Save as Draft

Save as Private

Publish

Advanced Editing »

WordPress bookmarklet

You can drag the following link to your links bar or add it to your bookmarks and when you "Press it" it will open up a popup window with information and a link to the site you're currently browsing so you can make a quick post about it. Try it out:

WordPress 1.0

ChatCoworkCode

WordPress site for Playground MCP demo

Create a WordPress site to demonstrate Playground MCP capabilities

Strategized systematic WordPress site construction using available tools >

Let me start by loading the Playground MCP tools and checking what's available.

Searched available tools >

All 17 tools loaded. Let me discover the available site and start building.

List Available Sites >

I'll use the active site. Let me save it first so we don't lose progress, then gather site info.

Orchestrated WordPress configuration and content creation strategy >

Now let me configure the site settings and create the demo content. I'll set up the site title, tagline, and create a rich front page.

Devised demo content and custom plugin to showcase capabilities >

Now let me create some blog posts and a custom plugin to showcase more capabilities.

Devised custom plugin demonstration for file system operations >

Now let me create a custom plugin to demonstrate the file writing capabilities.

Mobilized resources to demonstrate WordPress integration capabilities >

Now let me activate the plugin and verify everything.

Verified API functionality and catalogued created resources >

Let me verify the REST API works and check the file structure we've built.

Orchestrated site cleanup and navigation refinement >

Let me clean up the default content and navigate to the front page.

Orchestrated WordPress site construction and contemplated user exploration strategy >

The demo site is live in your Playground tab. Here's a summary of what was built using **12 of the 16 Playground MCP tools**:

Site setup — list_sites → save_site (persisted to OPFS) → rename_site ("Playground MCP Demo") → get_site_info (WP 6.9.3 / PHP 8.3.30)

Content created via execute_php :

A rich front page with a hero cover block, three-column tool overview, build checklist, and environment details table

3 blog posts covering file system operations, PHP execution, and use cases

A dedicated blog page, nav menu, and cleaned-up defaults

Custom plugin via mkdir + write_file :

We will record a live demo now

Opus 4.6 Extended

Claude is AI and can make mistakes. Please double-check responses.

WordPress Playground

playground.wordpress.net/?site-slug=creative-cozy-forest

WordPress Playground

Playground MCP Demo

Blog Playground MCP Demo

Playground MCP Demo

WordPress Playground MCP

This entire site was built programmatically by an AI agent — no browser clicks required.

What is Playground MCP?

The WordPress Playground MCP server exposes 16 tools that let AI agents create, configure, and manage WordPress sites through the Model Context Protocol. Every element on this page was created using those tools.

File System

Read, write, list, and delete files in the WordPress virtual filesystem. Create plugins, themes, and templates on the fly.

PHP Execution

Run arbitrary PHP with full WordPress bootstrap. Create posts, manage options, install plugins — anything PHP can do.

Site Management

Navigate pages, get site info, manage multiple sites, save and persist sites across sessions.

playground_read_file

playground_write_file

playground_list_files

playground_mkdir

playground_delete_file

playground_file_exists

playground_execute_php

playground_request

playground_navigate

playground_get_site_info

playground_list_sites

playground_save_site

playground_rename_site

playground_open_site

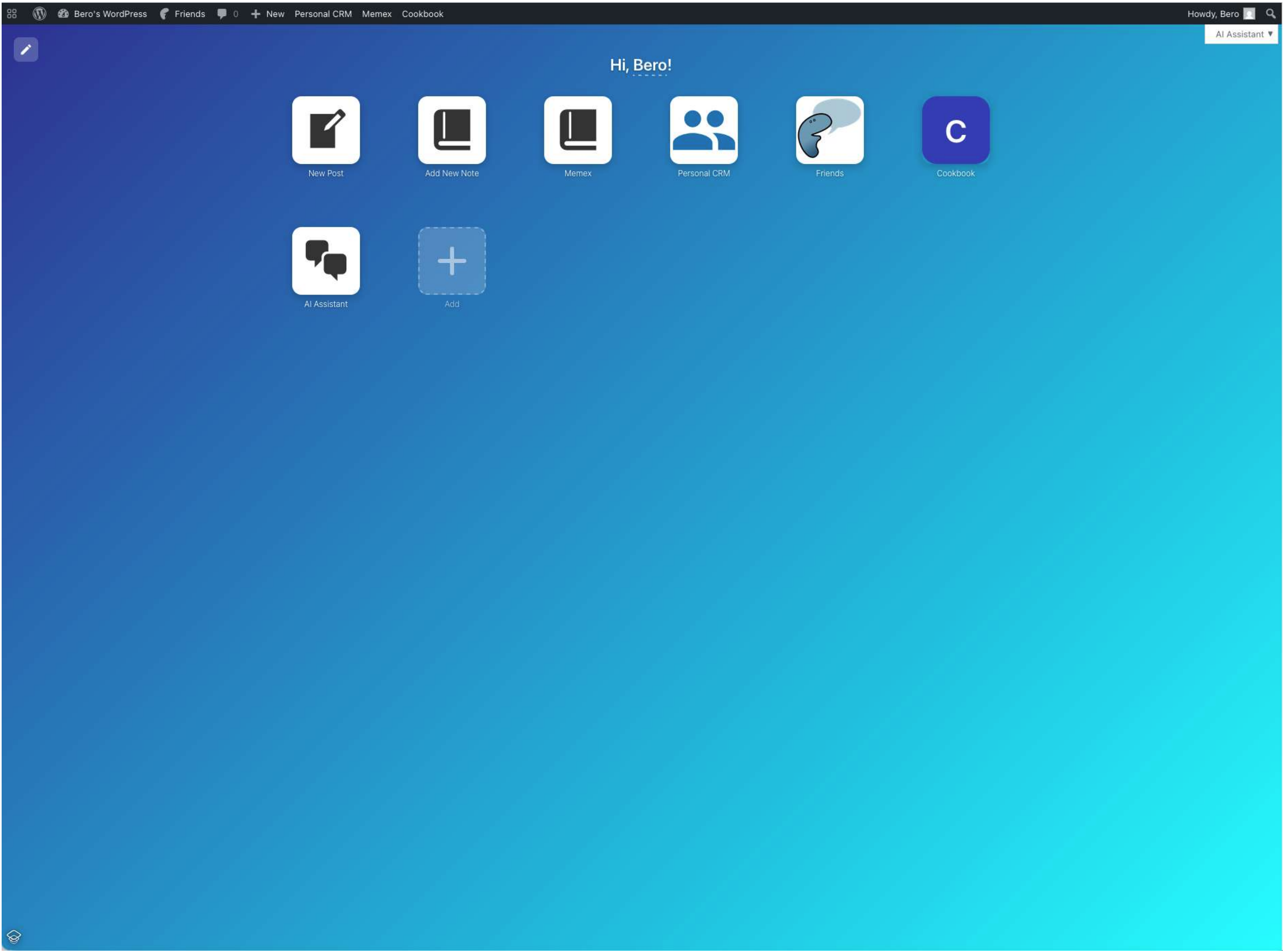
playground_get_current_url

playground_get_website_url

What was demonstrated to build this site

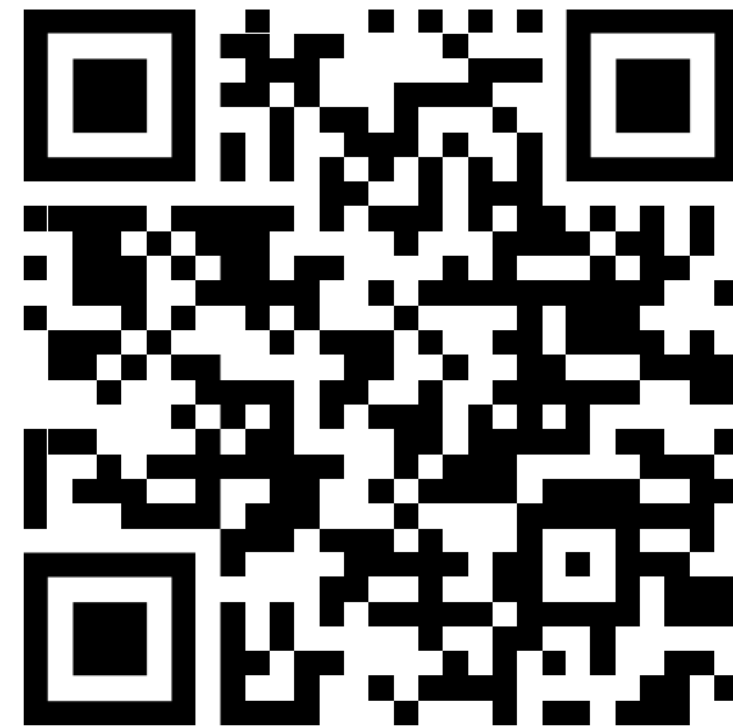
AI

My WordPress



Play!

Questions?



GitHub @bgrgicak