



What Is GitHub? A Beginner's Introduction to GitHub

At a high level, GitHub is a website and cloud-based service that helps developers store and manage their code, as well as track and control changes to their code. To understand exactly what GitHub is, you need to know two connected principles:

- Version control
- Git

In this article, we'll first explain those two principles. Then, we'll dig into more about GitHub and how you can actually use GitHub to work with WordPress and/or Kinsta.

What Is Version Control?

Version control helps developers track and manage changes to a software project's code. As a software project grows, version control becomes essential. Take WordPress...

At this point, WordPress is a pretty big project. If a core developer wanted to work on one specific part of the WordPress codebase, it wouldn't be safe or efficient to have them directly edit the "official" source code.

Instead, version control lets developers safely work through **branching** and **merging**.

With **branching**, a developer duplicates part of the source code (called the **repository**). The developer can then safely make changes to that part of the code without affecting the rest of the project.

Then, once the developer gets his or her part of the code working properly, he or she can **merge** that code back into the main source code to make it official.

All of these changes are then tracked and can be reverted if need be.

What Is Git?

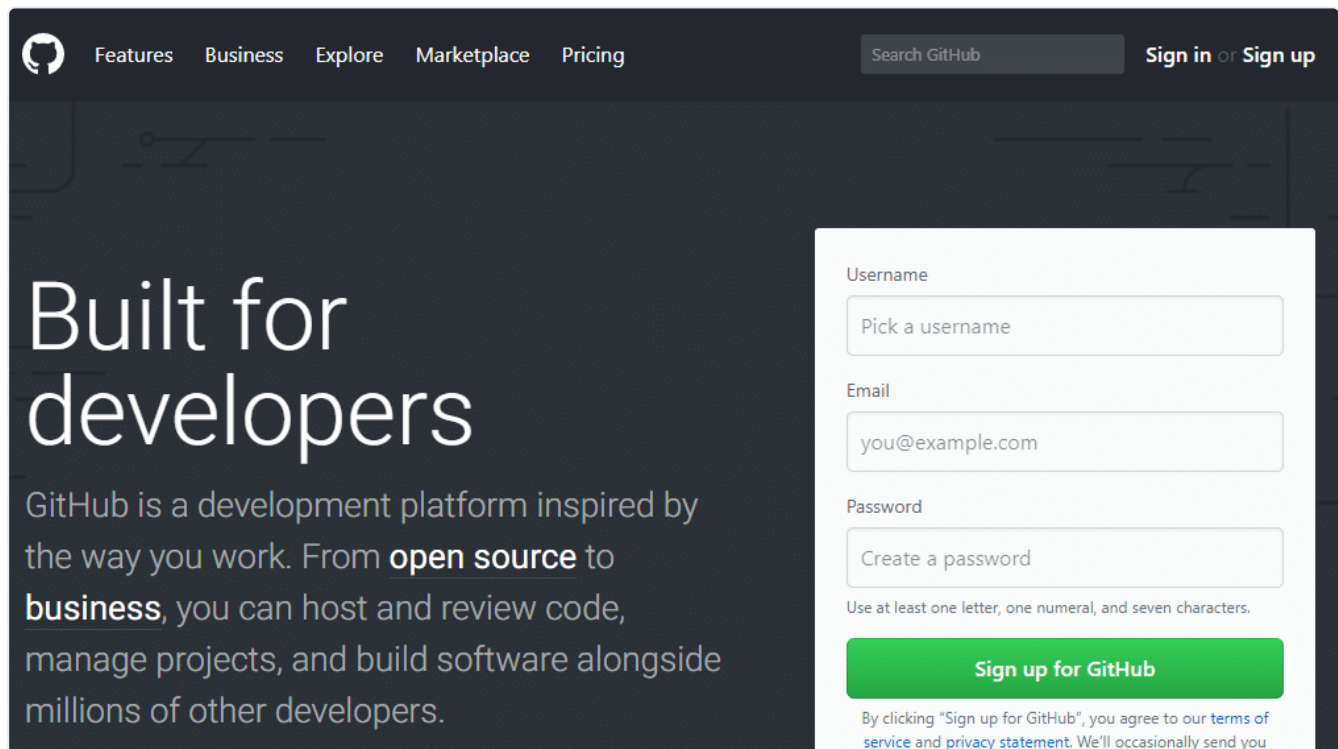
Git is a **specific open-source version control system** created by Linus Torvalds in 2005.

Specifically, Git is a **distributed version control system**, which means that the entire codebase and history is available on every developer's computer, which allows for easy

branching and merging.

According to a [Stack Overflow developer survey](#), over 87% of developers use Git.

So What Is GitHub, Then?



— The GitHub homepage

GitHub is a for-profit company that offers a cloud-based Git repository hosting service. Essentially, it makes it a lot easier for individuals and teams to use Git for version control and collaboration.

GitHub's interface is user-friendly enough so even novice coders can take advantage of Git. Without GitHub, using Git generally requires a bit more technical savvy and use of the command line.

GitHub is so user-friendly, though, that some people even use GitHub to manage other types of projects – [like writing books](#).

Additionally, anyone can sign up and host a public code repository for free, which makes GitHub especially popular with open-source projects.

As a company, GitHub makes money by selling hosted private code repositories, as well as other business-focused plans that make it easier for organizations to manage team members and security. We utilize Github extensively at Kinsta to manage and develop internal projects.

Check out our video to learn the difference between Git and Github

Exploring The GitHub Interface

To give you a basic understanding of what the GitHub interface looks like, here's the WordPress source code [hosted at a GitHub repository](#):

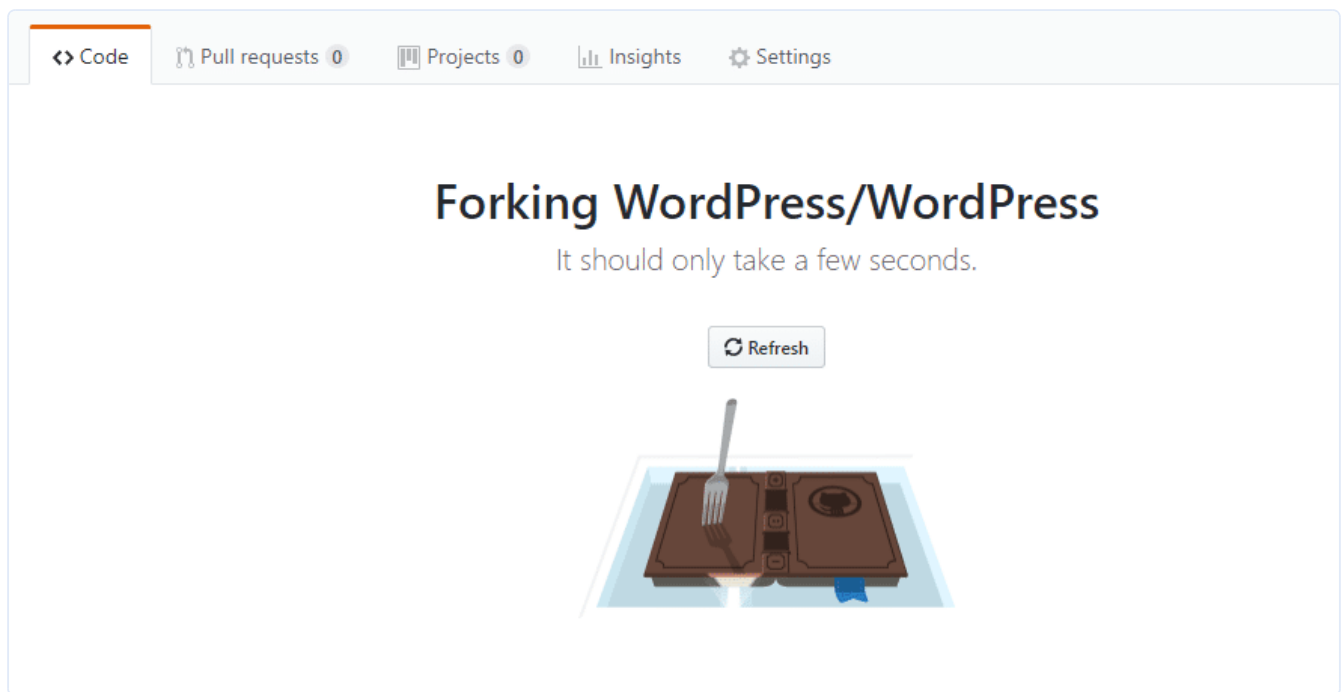
The screenshot shows the GitHub interface for the WordPress repository. At the top, the repository name 'WordPress / WordPress' is displayed, along with statistics: 1,371 watches, 10,828 stars, and 6,404 forks. Below this, navigation tabs for 'Code', 'Pull requests' (4), 'Projects' (0), and 'Insights' are visible. A descriptive paragraph states that the repository is a mirror of the WordPress subversion repository and provides links to the WordPress website and the core.trac.wordpress.org for submitting patches. A progress bar shows 38,120 commits, 31 branches, 307 releases, and 43 contributors. Below the progress bar, there are buttons for 'Branch: master', 'New pull request', 'Create new file', 'Upload files', 'Find file', and 'Clone or download'. The main content area shows a list of recent commits, with the most recent one by 'aaronjorbin' titled 'Wow. I really shouldn't try to fix the build.' followed by a list of files and their commit messages, such as 'wp-admin' (Privacy: Fix JSHint errors), 'wp-content' (Twenty Ten: Restore `max-width` on `wp-caption`), 'wp-includes' (Wow. I really shouldn't try to fix the build.), 'index.php' (Code is Poetry.), 'license.txt' (General: Update copyright year to 2018 in license.txt.), 'readme.html' (GENERAL: Update recommended PHP version to 7.2.), 'wp-activate.php' (Multisite: Use a numbered placeholder in `sprintf()` for the site URL.), 'wp-blog-header.php' (Code is Poetry.), and 'wp-comments-post.php' (Add a checkbox to the comment form so logged out users can opt-out of...).

— The WordPress code at GitHub

From here, you can view the various branches that are being worked on, as well as when someone made a **commit** (*this is kind of like “saving” a file*). Depending on how a repository is set up, you also might be able to create your own **branch** and make your own **commits** there.

And once you made some changes, you could submit that code back to a branch by making a **pull request**. A pull request is basically asking the person in charge of the branch to include your code. And it also helps that person see exactly what you’ve changed in the code.

If you wanted to edit some or all of the WordPress source code on your own account on a more permanent basis, you could also **fork** it by clicking the **Fork** button (a fork is similar in concept to a **branch**, but a fork is more permanent):



— An example of forking code

WordPress itself was [originally a fork of b2/cafeblog](#). If you want a bit more information on how you can use GitHub, [GitHub's Hello World guide](#) offers a beginner-friendly tutorial for getting started.

How To Use Git And GitHub At Kinsta

Kinsta offers a Git client so that you can [use SSH](#) to pull down your own Git repository from GitHub (*or other similar services*).

If you're interested in using Git or GitHub at Kinsta, please [read this help article for full instructions](#).

Other Ways To Use Git And GitHub With WordPress

Many WordPress theme and plugin developers host their projects' source code at GitHub. For example, you can view the [Elementor page builder code](#), the [Zerif Lite theme source code](#),

and lots more.

But there are also WordPress plugins that help you use Git with WordPress more directly.

For example, [VersionPress](#) aims to bring the power of Git to regular WordPress actions, like updating a post or installing a plugin. VersionPress adds version control for both your [WordPress database](#) and files.

The screenshot shows the WordPress dashboard with the VersionPress plugin interface. The left sidebar contains the WordPress menu with 'VersionPress' highlighted. The main content area displays a list of actions with a Git commit history diagram on the left. The diagram shows a vertical line of green dots representing commits, with a blue line branching off to the right labeled 'staging'. The actions list includes:

<input type="checkbox"/>	Date	Message	Actions
<input type="checkbox"/>	2 mins ago	Created user johnny	Undo
<input type="checkbox"/>	8 mins ago	M Merge branch master of staging	Undo Roll back
<input type="checkbox"/>	9 hours ago	Published post Live post	Undo Roll back
<input type="checkbox"/>	9 hours ago	Published post Staging post	Undo Roll back
<input type="checkbox"/>	9 hours ago	Updated option blogname	Undo Roll back
<input type="checkbox"/>	2 days ago	WordPress updated to 4.8	Undo Roll back
<input type="checkbox"/>	2 days ago	Installed theme Responsive	Undo Roll back
<input type="checkbox"/>	3 days ago	Updated post Hello World!	Undo Roll back
<input type="checkbox"/>	3 days ago	Activated VersionPress	Roll back

— VersionPress

[WP Pusher](#) is another Git-based plugin that lets you deploy themes and plugins directly from GitHub to your WordPress site.

How To Get Started With GitHub

To get started with GitHub:

- [Sign up](#) for a free GitHub account
- Follow the [GitHub Hello World guide](#) to understand the most popular actions you'll likely want to take
- Read: [WordPress Version Control \(What It Is and Best Solutions\)](#)
- Read: [Git vs Github: What's the Difference and How to Get Started with Both](#)