Git vs GitHub

Feature Comparison

Feature/Aspect	Git	GitHub
What is it?	Distributed Version Control System	Git Repository Hosting Platform
Primary Function	Track changes in source code	Store & collaborate on code online
Type	CLI tool installed locally	Cloud-based web service
Developed By	Linus Torvalds (2005)	GitHub, Inc. (2008)
Usage	Local code versioning	Remote repo hosting + collaboration
Works Offline?	Yes	No - Requires internet
Features	Commits, branches, merges	Pull requests, issues, CI/CD, team management
Interface	Command line (or GUI clients)	Web interface (also GitHub CLI/Desktop)

Key Takeaways

- Git is a version control system, while GitHub is a hosting service built around Git.
- Git works locally on your computer, while GitHub enables online collaboration.
- GitHub adds collaboration features like pull requests, issues, and CI/CD pipelines.
- Both Git and GitHub are integral for modern software development.

Real-Time Examples

- A developer uses Git on their laptop to track and manage code changes.
- The same developer pushes code to GitHub, where their team reviews it using pull requests.
- An open-source project like Kubernetes is hosted on GitHub, where thousands of contributors collaborate.
- A company manages private repositories on GitHub to enable teamwork across global offices.