

Git, GitHub, VS Code, Origin, and Upstream — One-Page Overview

Big Picture

Git is software that runs locally on your computer and tracks changes to files. A repository (repo) is a project folder with history. VS Code is a tool that lets you work with Git. Origin and upstream are names for remote repositories on GitHub.

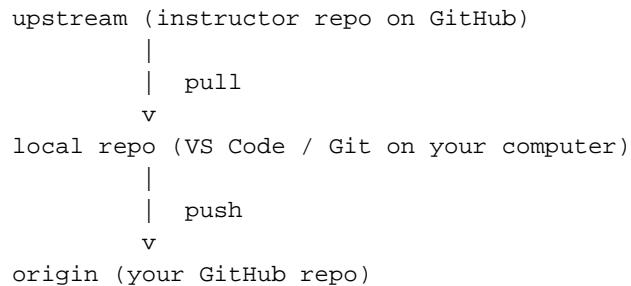
What is Git?

Git is version-control software that runs on your computer. It tracks file changes and records project history locally.

What is a Commit?

A commit is a saved snapshot of your project with a message. Commits are created and stored locally.

Repository Flow Diagram



Origin

Origin is the default name for your GitHub repository. Origin lives on GitHub's servers. You push commits to origin.

Upstream

Upstream usually refers to the instructor or class repository. You pull updates from upstream but do not push to it.

VS Code Sync

Sync sends your local commits to your GitHub repository (origin).

Important Distinction

VS Code Sync and `..\sync.ps1` are different things. VS Code Sync updates your GitHub repository (origin). `..\sync.ps1` pulls updates from the class repository and copies them into your student repository.

Key Takeaway

Git runs locally. Commits are local. Push sends commits to origin on GitHub. Pull brings changes down from upstream. VS Code Sync updates your GitHub repo. `..\sync.ps1` updates your student repo from the class repo.