



GitHub

- Cloud storage of codes.
 - Millions of contributors editing/using/sharing code.
 - Tracks versions and allows users to refer to previous versions.
 - Part of a coder's resume is their activity on GitHub
- Teams use GitHub to collaborate: GitHub will track contributions and communications and facilitate sharing, even when working asynchronously and in different locations.

Your Computer

GitHub Desktop

GitHub Desktop

- One of many ways to interact with GitHub
 - If you "Clone" a repository, GitHub Desktop will keep track of all the repo files on your computer and compare them with the cloud version
- Facilitates your "pulls" (downloads) and "pushes" (uploads) from/to repos
 - Encourages you to take notes on your pushes for your future self, collaborators, and maybe strangers interested in your code

VS Code (or other code text editor)

PlatformIO

VS Code

- Keeps track of libraries needed to run code
- Syntax highlighting, auto completion, etc. to make code easier to read/write
- Debugging, or error finding
- Packages code to be useable by the microcontroller
- Facilitates upload of code to microcontroller
- Can track changes in your files relative to GitHub (not supported in this tutorial)
- Much, much more.

PlatformIO

- Speaks Arduino
- Manage and edit your personal code

Microcontroller (e.g. Mayfly)

- Runs your sensors
- Logs data
- Etc, depending on hardware