

### **Table of Contents**

- 1. What is GitHub
- 2. Setting Up Software
- 3. How it Works
- 4. Example

#### What is GitHub?

(And why is it useful?)

**GitHub** is the most popular online repository for open source projects.

It uses **Git**, which is the version control system working in the backgrounf that tracks versions of files.

**Developers** (and all kinds of creators) use GitHub for:

Code Hosting: Store and manage code repositories.

Collaboration: Work with others through pull requests, issues, and code reviews.

Version Control: Track and manage changes to code over time.

### **Setting Up Software**

- Sign up to GitHub with your personal email. https://github.com/signup
- Download GitHub Desktop (available on Windows, Mac and Linux). https://desktop.github.com/download
- Download Git if it isn't automatically installed by the GitHub Destop app. https://git-scm.com/downloads







### **How it Works**

- Local files
- Local Git repository
- Online (GitHub) repository
- Commits
- Push and Pull

#### Filesystem

- file1.txt
- file2.txt
- directory/

Local Git Repo

Commit

Filesystem

- file1.txt
- file2.txt
- directory/



Local Git Repo

#### Filesystem

- file1.txt
- file2.txt
- directory/

Local Git Repo

Main GitHub Repo

#### Filesystem

- file1.txt
- file2.txt
- directory/

Push

Local Git Repo



Main GitHub Repo

#### Filesystem

- file1.txt
- file2.txt
- directory/

Local Git Repo

Main GitHub Repo



Filesystem

• file1.txt
• file2.txt
• directory/

Pull