Week 1 Day 1 Notes:

• Welcome

• Syllabus Review

Prof: Matthew Desjardins

Classroom: T-115 Th-120

• Understanding GitHub and Github Classroom

First Lab- Github tutorial

GitHub Classroom allows prof to edit/markup code and documents easily

Can use own account on GitHub (Probably use professional account)

GitHub-cloud repository (is a Version Control System-VCS)

VCS--------------------------------------------------------------

* Helps manage files/directories
* Tracks changes
* Recall previous version
* Source Control subset of VCS

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Git-operation to access cloud repository system

* Created by Linus Torvalds
* Replaced BitKeeper to manage Linux Kernel changes
* Command line version control program
* Use checksum to verify data integrity
* Cross-platform
* Open-source and free
* Most companies use

Git Distributed Version Control (DVC)

* Doesn’t need internet connection
* No central server
* No single point failure
* Developers work independently
* Every copy can be client/server
* History of changes

Repository--------------------------------------------------

* Used to organize a project
* Can have folders, files, images, anything

Branching-Break off of features/ideas from main branch, gets merged back eventually if kept (imagine a splitting timeline from a show/movie)

Best to make a development branch off main so as few pulls/pushes to main as possible

Commit-adds/edits/deletes use commits to add to branch

* Keeps track of progress and acts as a history of the work
* Best to work in small segments to allow rollback of changes in needed

Pull Request- Discussion about commits

Merge and Deploy

* After pull request reviewed and branch passes test, deploy changes for production
* If branch causes issues, rollback with existing main branch

GitHub-hosts git repos