#### Learning goals:

- Check your work for the GitHub portion of A1.
- Walk through problems from A1.
- Learn how to write your own tests.

# Assignment 1

COGS 108 Fall 2020 Sidharth Suresh Discussion 2 sisuresh@eng.ucsd.edu OH: Wed 12pm-1pm on Zoom

#### Last time...

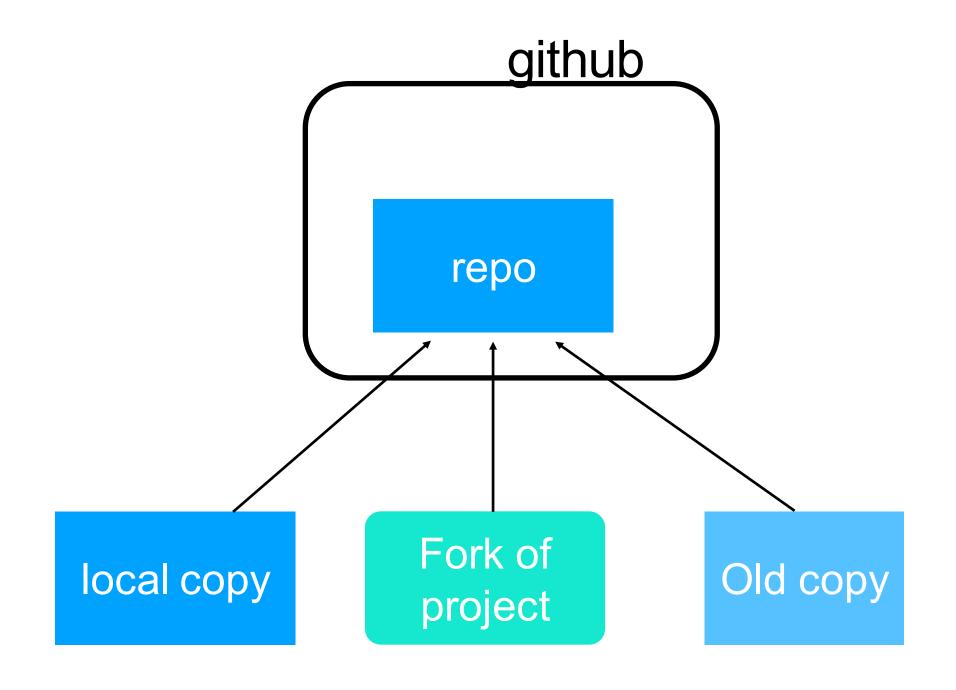
 We fetched assignments from datahub and started work on A1

# Before we begin...

- Answer the poll
- If you haven't found a team mate, this is the perfect time to begin (Use Piazza as well!!)
- Project Proposals are due next week

#### What is Git + GitHub?

- Somewhere online to store a copy of a project (Github)
- Plus a tool to interact with this copy (Git)
  - Command line and desktop versions
- A way of keeping track of changes you make to this project



## Why use Git + GitHub?

- Git allows you to work on code **projects with other people**. It's the preferred tool for many projects, like:
  - Python: <a href="https://github.com/python/cpython">https://github.com/python/cpython</a>
  - Jupyter: <a href="https://github.com/jupyter/">https://github.com/jupyter/</a>
  - COGS 108: <a href="https://github.com/COGS108/">https://github.com/COGS108/</a>
- Backup
- Version control (undo on a large scale)
- Code reuse

## Part 1 Walkthrough

- Complete walkthrough of Part. (Go through all Questions of Part 1)
  - I'm going to do this quickly, so you have to do it yourself
- I'll also show you how to check your work.

# Git Stage, Commit and Push (Demo)

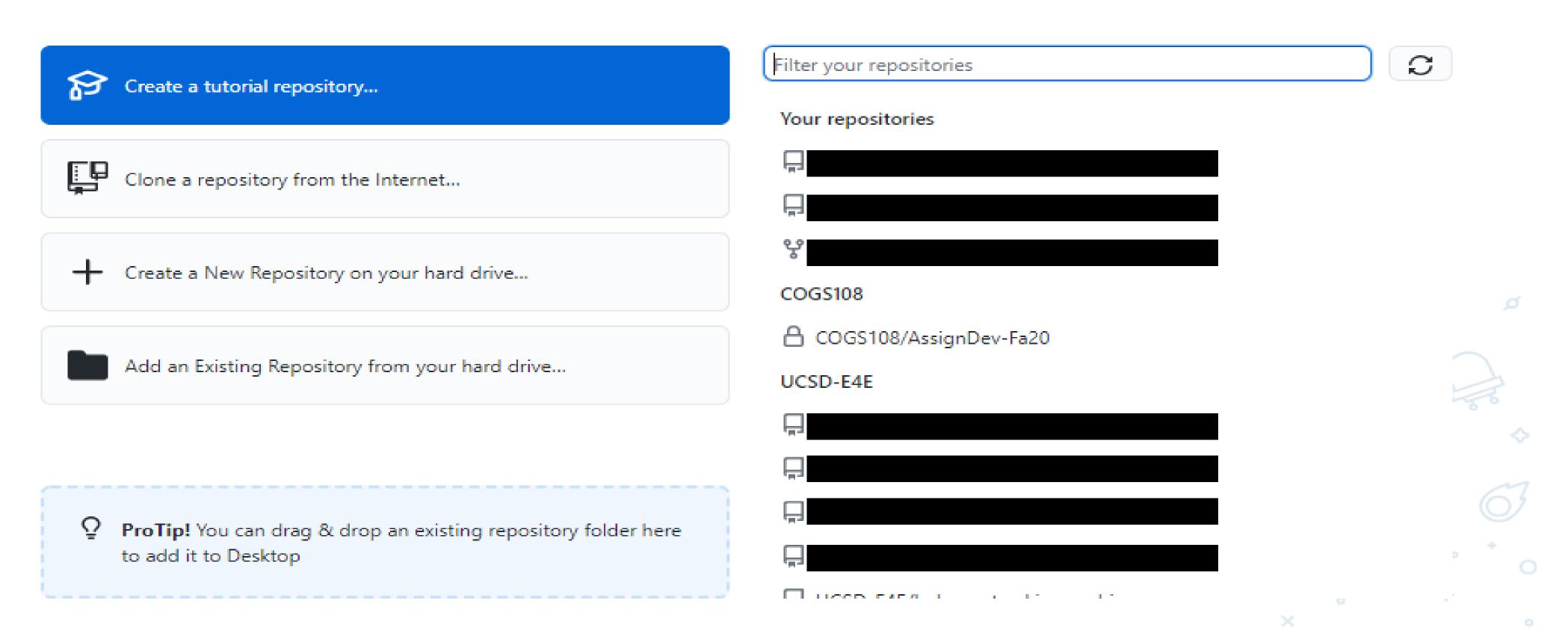
- Cloning a repo on your local machine
- Working on you remote repo (making changes to files)
- Stage, commit and push these changes to your Github repo

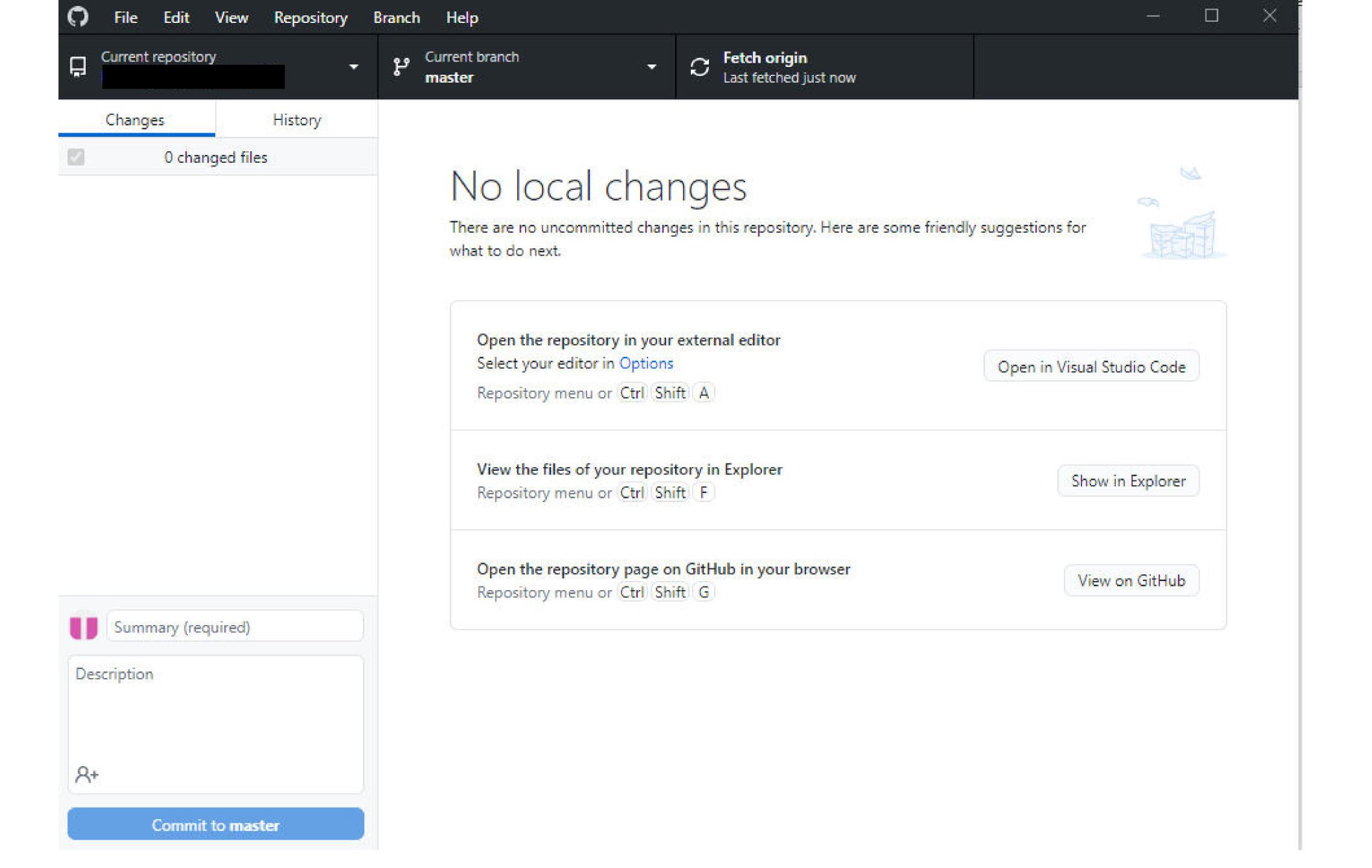
#### Edit View Repository

#### Let's get started!

Add a repository to GitHub Desktop to start collaborating







## Checking your work for Part 1

- Check that your COGS108\_Repo has a README and a .gitignore file. (Repo must be on your account.)
- Go to COGS108/MyFirstPullRequest, click Pull requests.
  - Make sure your PR shows up in that list.
  - Make sure your PR has the right title.
  - Make sure your PR has the right file.

## Questions 5 and 9 Walkthrough

- Usage of .items() and enumerate methods
- Usage of assert statements
- Discuss each question
- But feel free to take notes if that helps you remember things

#### Checking your work (in general on datahub)

- The tests built into the notebook are (very) minimal.
  - To write your own tests, add a cell with assert statements below your code.
- Make sure to click Validate before turning in your notebook!
  - This replicates what our autograder will do.
  - Hidden tests on the autograder aren't validated.
- Make sure to click submit once you're ready to submit.
  - And don't click submit after the deadline unless you mean to submit late.

## How to google for python help

- People have done ~everything in python, and it's all online.
  Finding it is the tricky part
- Q10:
  - 'loop through key-value pairs dictionary python'
  - '.items dictionary python'
- Find code snippets that do roughly what you want
  - Pick out the useful patterns/syntax and write your own code

## Your Turn: Work on A1

#### Resources

- https://github.com/COGS108/Section-Fa20
- https://github.com/COGS108
- https://github.com/COGS108/Overview

## Next week

- Time to work on your Project Proposals.
- Example of final project using baby names.

