

**Today's goals:**

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

# Assignment 1

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**COGS 108 Fall 2020**  
**Sidharth Suresh**  
**Discussion 2**

**sisuresh@eng.ucsd.edu**  
**OH: Wed 12pm-1pm on Zoom**

# Last time...

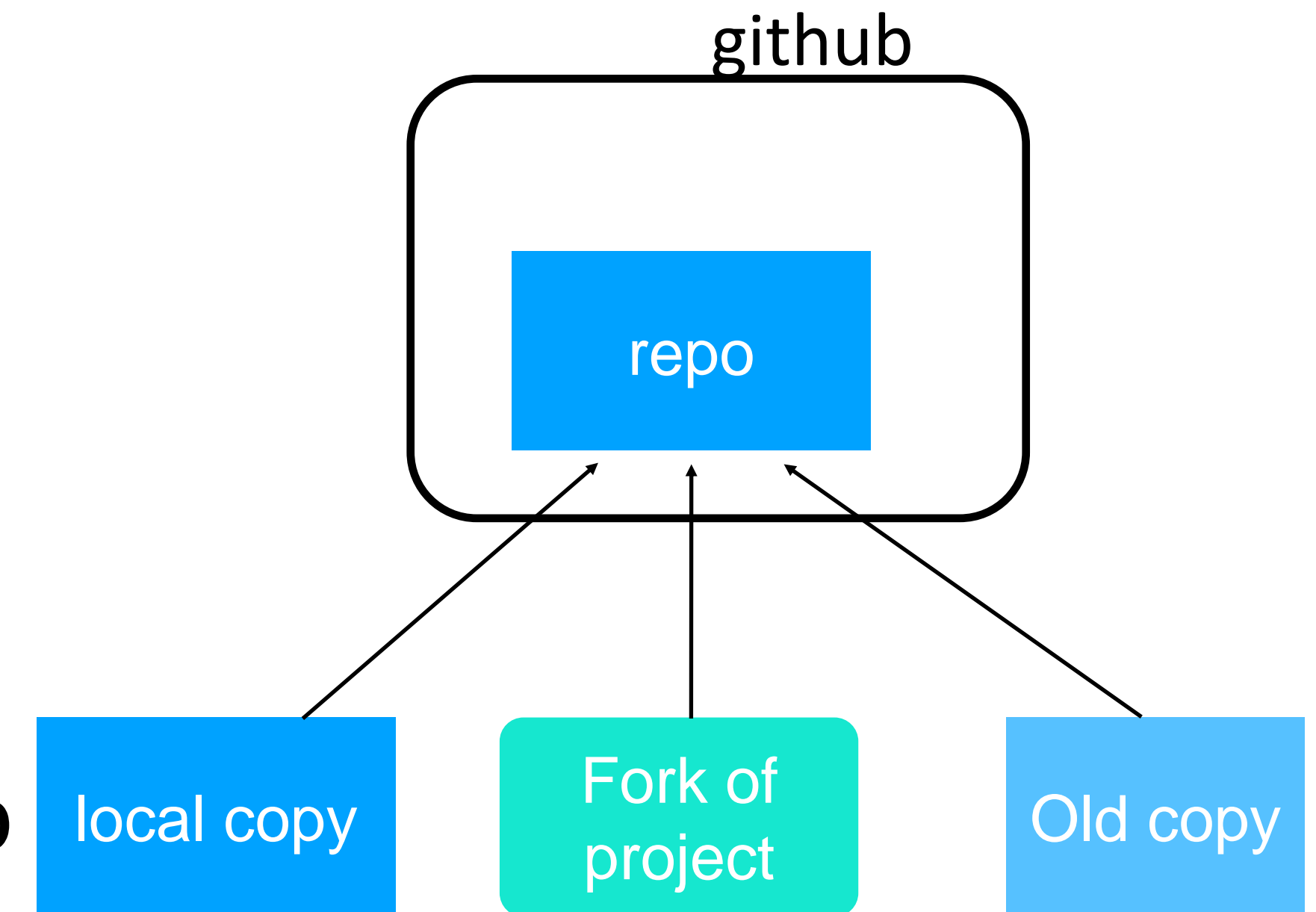
- **Installed Git, Anaconda**
- **Got familiar with Jupyter notebooks**
- **Learned how to fetch assignments from datahub and started work on A1**

# Before we begin...

- **Answer the poll**
- **Discussion sections are the only place you interact with you classmates. (Use Piazza as well!!)**
- **Project Proposals are due next week (10/23) – Proposal will take time!**
  - Research Problem
  - Datasets
  - Prior Work
  - Hypothesis

# 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: <https://github.com/python/cpython>
  - Jupyter: <https://github.com/jupyter/>
  - COGS 108: <https://github.com/COGS108/>
- **Backup**
- **Version control** (*undo* on a large scale)
- **Code reuse**

# Part 1 Walkthrough

- Based on the polls, we will use demo.
- Questions regarding the Git part?

# 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
- **Commands you should know:**
  - Git clone
  - Git status (not really needed – but really helpful)
  - Git add
  - Git commit
  - Git push



File

Edit

View

Repository

Branch

Help



# Let's get started!

Add a repository to GitHub Desktop to start collaborating



Create a tutorial repository...



Clone a repository from the Internet...



Create a New Repository on your hard drive...



Add an Existing Repository from your hard drive...



**ProTip!** You can drag & drop an existing repository folder here to add it to Desktop



## Your repositories



[REDACTED]



[REDACTED]



[REDACTED]

COGS108



COGS108/AssignDev-Fa20

UCSD-E4E



[REDACTED]



[REDACTED]



[REDACTED]




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ChangesHistory

☒ 0 changed files

Summary (required)

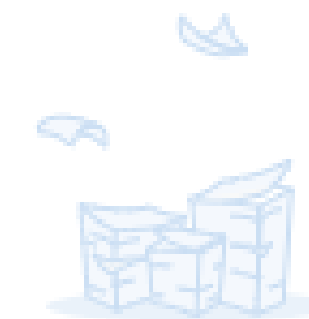
Description



Commit to master

# No local changes

There are no uncommitted changes in this repository. Here are some friendly suggestions for what to do next.



Open the repository in your external editor

Select your editor in [Options](#)

Repository menu or Ctrl Shift A

Open in Visual Studio Code

View the files of your repository in Explorer

Repository menu or Ctrl Shift F

Show in Explorer

Open the repository page on GitHub in your browser

Repository menu or Ctrl Shift G

View on GitHub

# 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.

