San Jose State University

Spring 2022

CS161-01

Lecture Week 1

Agenda

- Teams
- Project Theme
- Git Crash Course

Teams Discussion

Teams

- There will be 4 people per team
- There will be about 7 teams

Team Tasks Today

- Meet with your teammates (~15 minutes)
  - Introductions
  - Talk about what technical stuff that you like working with
- As a team
  - Exchange contact information (have one person collect all info, and have it sent to the whole team later)
  - Thank/Choose a team name
    - Good to know why the chosen name?
  - Designate a representative i.e. (Project Team Lead) for this week and next week

Team Lead Responsibilities

- This is a rotational task every two weeks
    - Ensures that team meets at least two times a week to discuss topics and progress
    - Ensures that deliverables are on track
    - Still holds responsibilities for any assigned coding tasks
    - Submits a team report at the end of the weekend i.e. Sunday night on Canvas
        - The team report:
            - Include dates/times and where meet ups occurred (in person or via Zoom)
            - Will list down what action items were committed to since the previous meetup
            - Indicate what action items were completed and include next steps if any
            - Indicate who will be the next assigned team lead.
    - During team meetings, opens up conversation using SCRUM updates

SCRUM quick crash course

- It’s a framework for project management
- It typically starts off with a story which more of milestone goal
- Each story can be made up a of certain number of sprints
- Sprints are work activities that last about 2 weeks (typically)
- During each sprint, each individual is assigned 4 to 5 tasks that are to be completed before the end of the spring
- The team lead will work on gathering this information for the team

Project Theme

- Just Like KAHOOT!

GitHub Crash Course

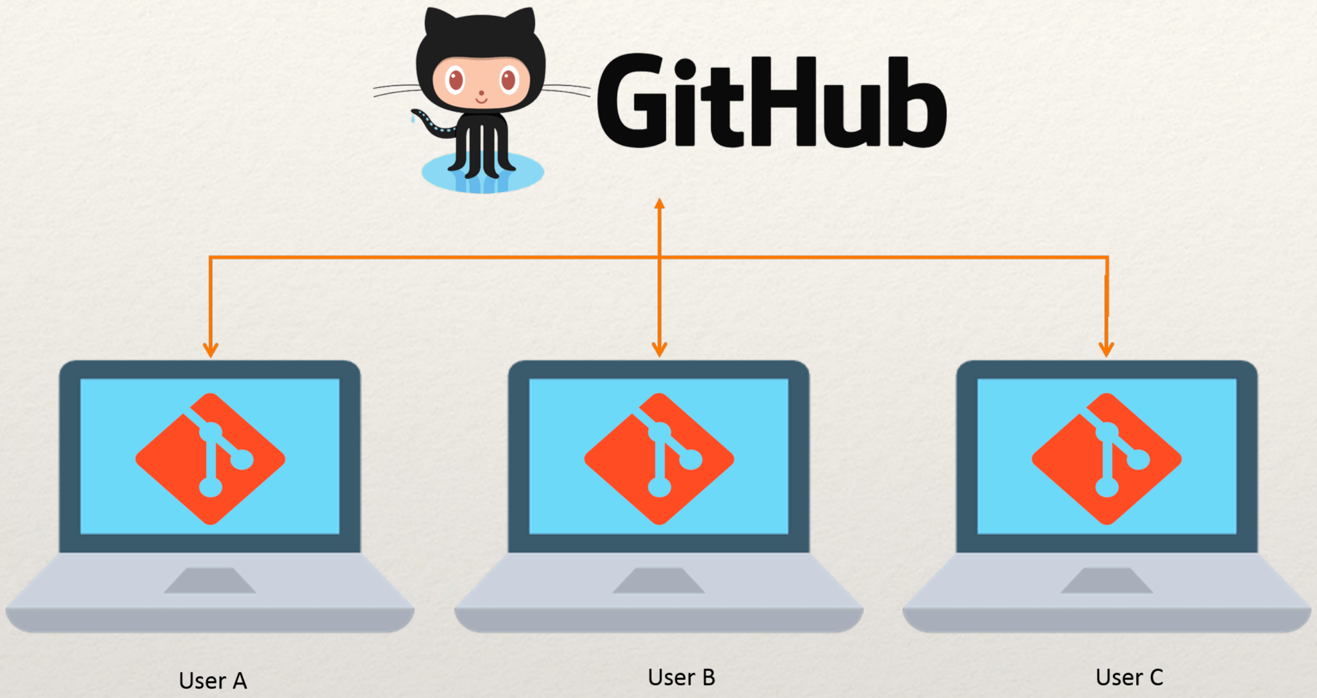
What is GitHub?

- Provides an archive of files that anyone can access
- Provides a way to do version control of files
- Provides a way to work with others
- Provides a way to give feedback to others
- A web based host service that allows others to share a Git repository

What is Git?

- Git is a tools version control service that resides on developers local machines
- It allows developers to use Git commands to i.e. create branches, commit to a repository, etc.

GitHub and Git



- GitHub and Git complements each other

Let's talk about GitHub

- Where is it and how do I work with it?

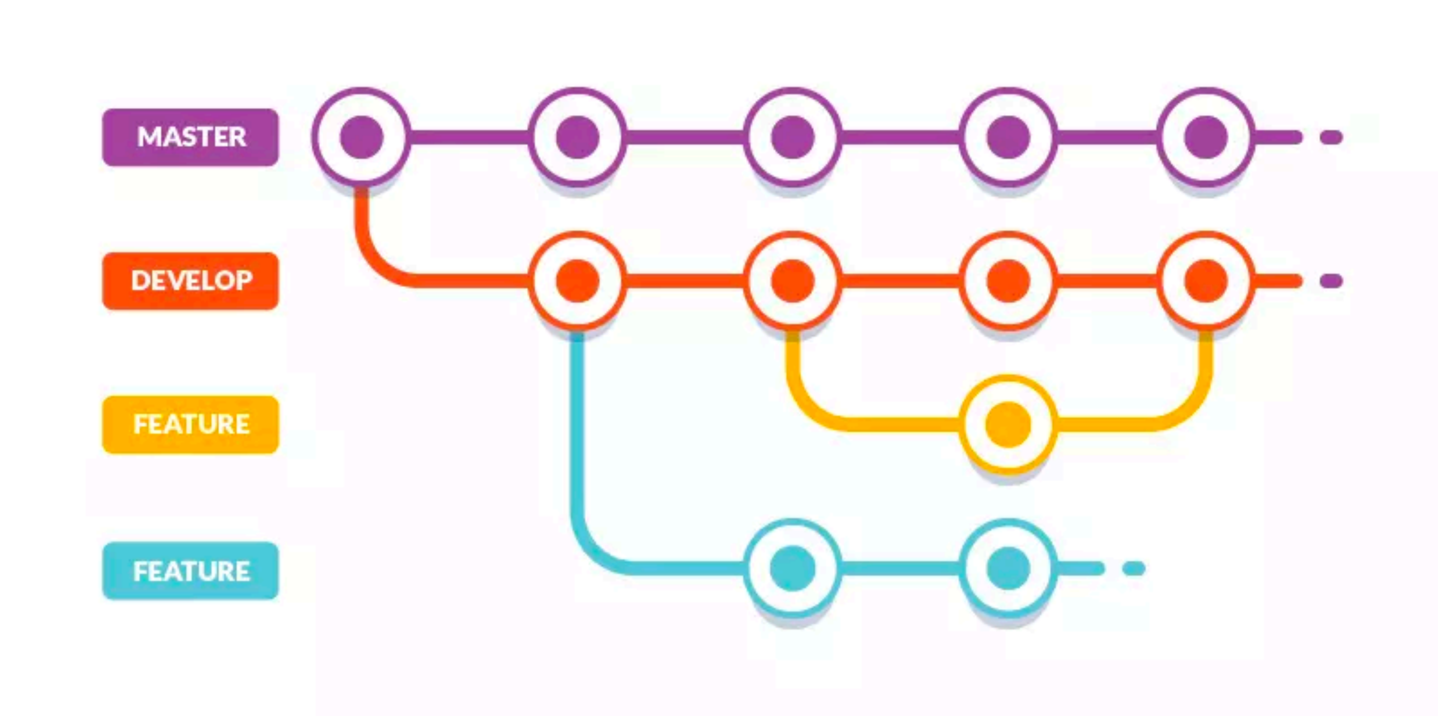
GitHub

- Create a GitHub Account
- Download “GitHub Desktop”
  - Google it and download your installation on to your laptop

Getting Started With A Repository

- I need space!!!
- Yes, you will need some space to host your project files
- A repository is one that provides this kind of space
    - Think of it as an open storage space
- Let's talk about how to create a repository (see live example)

Creating A Branch



- A branch is unique route for the evolution of your project files
- Starts off with a Master (main) branch where developers pull files from this branch and then they initiate their own branch where they then apply the changes to those files

Commiting Files

- A commit basically takes a snapshot of your latest changes
  - Think of it as putting things on a preparation stage
  - The files are not officially saved in the branch
- When you are satisfied and confident with your changes, you can finalize those changes using the pull request command

Pull Requests

- Informs other developers that you made a recent change to a branch
- It's mainly for reviewing the changes with others
- Again, the file has not been totally saved into the appropriate branch because a review should be done first

Let's talk about Git