4/24

Git and GitHub

Key Words

> *SSH protocol* - a method for secure remote login from one computer to another
> *Repository* - The folders of your project that are set up for version control
> *Fork* - A copy of a repository
> *Pull request* - The process you use to request tha someone reviews and approves your *changes before* they become final
> *Working directory* - a directory on your file system, including its file and sudirectories

Basic Git Commands

- create a new local repository using `git init`
- create and add a file to the repo using `git add`
- commit changes using `git commit`
- create a branch using `git branch`
- switch to a branch using `git checkout`
- check the status of files changed using `git status`
- review recent commits using `git log`
- revert changes using `git revert`
- get a list of branches and active branch using `git branch`
- merge changes in your active branch into another branch using `git merge`

Member of Project

Developer

> Git-clone from the upstream to prime the local repository
> Git-pull/Git-fatch from origin to keep up to date with the upstream
> Git-push to shared repository
> Git-format-patch to prepare email submission

Integrator - responds to pull request and publish the result for others to use

> Git-am to apply patches emailed in from your contributors
> Git-pull to merge from your trusted lieutenants
> Git-format-patch to prepare and send suggested alternative to contributors

GitHub Repository Admin

> Git-daemon to allow anonymous download from repository
> Git-shell can be used as a restricted login shell for shared central repository users
> Git-http-backend

```
git checkout -b <name of branch>
git add .
Git log --onelinels
```

```
1.git clone <HTTP>
2.Navigate to our repository using cd <repository name>
3.git checkout -b <name> to create a new branch
4.You can check that you are in the new branch by using the git status
5.git add . to add commit of change file
6.git config --global user.email "email@example.com"
6.git config --global user.name "Your Name"
7.git commit -sm "Changing the height and the width of the circle"
8.git branch for checking branch
9.git checkout master
10.git merge <branch name>
11.git push origin main
```