Git basics

Github Tutorial for Beginners (18:53)

https://www.youtube.com/watch?v=0fKg7e37bQE

Notes

Advantages

- Multiple people can work on the same project simultaneously.
    - *Source control* - You can track the changes made by yourself, and other users.
    - *Conflict resolution* - You do not lose changes you make to documents, and other people do not lose theirs either.
    - *No need for meetings* - You do not need to be in the same room as your team to collaborate on a project.

How the process works

- With the use of about five commands this simple yet powerful process takes place.
- The group connects to a repository at github.com. The repository stores all of the information for the project, including files and folders.
- Users connect to the repository to add their changes, or view the changes that others make to the files.

Step by step

`git clone` to get a copy of the repository downloaded to your computer or sandbox

`git status` to see if there are any changes between your version of the repository, and the repository on github

`git add` to add the files with your changes to the commit.

`git commit` to create the commit with your changes.

`git push` to push the commit to the github repository.

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git clone

A user creates a repository.

The user uploads their files to the repository.

The group clones repository to their sandbox.

When a user runs:

`git clone https://github.com/Griffith22/TestRepo.git`

It copy the contents of the repository to a folder on thier sandbox.

git status

If a user creates, changes, or deletes a file, then their local version of the repository (branch?) differs from the repository on github.

If the user runs:

`git status`

They will get a message describing any differences.

git add

After a user completes their changes to a file, they will run:

```
git add <file>
```

This will essentially let your git know you want to add this file to your next commit.

git commit and git push

After you add your file, you need to create a commit for that change.

Run the following command:

```
git commit
```

Insert a message

Example Message

"Updated github Tutorial

CASE CM-1857"

This will create a commit that you will upload.

Run `git push` to upload the commit to the github repository, which contains the changes that you made.