Assignment 2
DSE 511

Assigned 2022-9-26 — Due 2022-10-3 11:59pm

Prepare your answers in a presentable document (Word, LaTeX, pdf generated from markdown, . . .). When you are completed, submit your final document on Canvas.

For this homework, please keep your discussions among each other minimized. Everything you need is in the lecture slides. You can also refer to the Flight Rules for git. You should not need any other resources.

Reminder that you **may not** copy code from each other. Doing so will be considered academic dishonesty; please refer to the syllabus.

Comprehension (10% total)

1. (5%) One of the following is true about git; which?
    a. It is a tool for code organization.
    b. It is a distributed version control system.
    c. It is a tool for code correctness.
2. (5%) One of the following is true about GitHub; which?
    a. It is a web service that offers cloud hosting/backups and add-on features for git.
    b. It is a necessary tool used in conjunction with git.
    c. It is a service used to create git.

Basic Commands (40% total)

1. (5%) Give the command(s) for showing the status of the local git repository.
2. (10%) Give the command(s) to stage and then commit a new file named `new_file` (choose a reasonable commit message).
3. (5%) Give command(s) for unstaging a file named `modified_file` that has been modified and then staged.
4. (5%) Give the command(s) to create a branch named `my-new-branch`.
5. (5%) Give the command(s) to delete a branch names `my-new-branch`.
6. (5%) Give the command(s) to send local changes on branch `my-branch` to the remote named `origin`.
7. (5%) Give the command(s) to retrieve remote changes on branch `my-branch` from the remote named `origin`.

GitHub (50% total)

Please read all of the instructions carefully before proceeding.

1. (10%) Create a GitHub repo on your account titled `dse511_homework`. It should **not** be private. If it is private, you get a 0 for this entire section. ***DO NOT MAKE IT PRIVATE***.
2. (15%) Add a readme.
    * The readme file should be at the root directory of the repo, and be named `README.md`. You can create it locally (use whatever text editor you want) or you can create it on GitHub (careful with primary branch naming if you do!).

- Add some basic markdown-formatted text explaining what the repo is.
- Commit the readme to your primary branch (and if working locally, push it to GitHub).
3. (15%) Create a feature branch
    1. Branch off of your primary branch (this should include the readme). Call the feature branch `new-feature`.
    2. Add a file called `new_feature` that contains some text (you choose), and commit this to your feature branch.
    3. Push your feature branch to GitHub.
4. (10%) Create (**BUT DO NOT MERGE**) a PR from the feature branch of your repo into the primary branch of your repo.

Once the homework is graded, you may delete the repo. But do not delete it until you have received your grade.