**Exercise on GitHub and Git**

**Rohana Sosa CS 389 September 17, 2018**

In this course, we will be using GitHub for assignment submissions.

The goal of this exercise is to get you started with Git and GitHub. Even if you are using Git and GitHub regularly you need to do this exercise and submit it. If you already did it, you still need to create the required repositories and fill out the required forms!

Please follow the instructions completely. Work that does not follow the instructions (including naming conventions) will NOT be accepted and will result in a grade of 0.

**Part 1: (Done)**

Create a GitHub account (if you do not have one)

<https://github.com>

Submit your GitHub username in the required form.

The file should be organized alphabetically by last names.

In the future I will check your work directly from your GitHub account.

**Part 2: (Done)**

Install Git bash <http://git-scm.com/downloads> and browse the documentation.

**Part 3: (Done)**

Answer the following questions.

What is GitHub? When was it created? Why? By who? What similar platforms exist? Why would you use such a platform? (Answer between 5 and 10 lines)

**Answer:** GitHub is a free development platform for collaborating with programmers on coding projects and saving code in repositories online. By using the Git language, this hosting service provides distributed version control and source code management and has additional features. Github was created in 2008 by Tom Preston-Werner because this was an efficient way to allow developers to work remotely to share code through a web-based GUI, have access to version control, and have basic task management tools for any project. Other platforms such as Bitbucket and GitLab are similar to GitHub (<https://technologyadvice.com/blog/information-technology/github-alternatives/)>. You could use Bitbucket to connect a maximum of five users to the platform for free and integrates Atlassian products like Jira, Bamboo, and HipChat; Bitbucket deploys in the cloud, on a local server, or a company’s data center. A purpose for using GitLab would be for continuous integration (CI) capabilities to automate testing and delivery of code so this saves time and increases productivity.

Answer these questions in a Word file called *LastnameFirstnameGitTutorial-mm-dd-yyyy.docx*. Please respect the naming conventions!

**Part 4: (Done)**

Go through the Git tutorial here: <https://try.github.io>. While doing the tutorial, save your work the *LastnameFirstnameGitTutorial-mm-dd-yyyy.docx* file.

**Part 5: (Done)**

Define the following terms in the context of Git (2 lines maximum):

* Repository – place for storing code
* Commit – action for storing a new update or change in code of a project’s state in the Git history.
* Push – transfer commits from your local repository to a remote repository
* Branch – a new state of current code being worked on without affecting the main state of the code
* Fork – copy of a repository
* Merge – to bring the contents of another branch into the current branch
* Clone – create a local copy of the code provided by the developer
* Pull – fetch (get) and merge a branch
* Pull request - notifying others about changes you’ve pushed to a repository so interested team members can review the code

Answer these questions in the *LastnameFirstnameGitTutorial-mm-dd-yyyy.docx* file.

**Part 6: (Done)**

Push the Word file in **YOUR** GitHub account in a repository called ***CSXXX20XX***. Please respect the naming conventions! You will use this repository this semester. Your repository will be accessible at: [https://github.com/yourpseudo/CSXXX20XX](https://github.com/yourpseudo/CSXXX2016).

**Part 7: (Done)**

Retrieve the README.md file at:

<https://github.com/paceuniversity/courses>

Add your name (lastname, firstname) in the file, **add a comment (date and time) (REQUIRED)**, and update the README.md file at: <https://github.com/paceuniversity/courses>. Your name should appear at the provided <https://github.com/paceuniversity/courses>. Please check the work of previous students.

List the commands and strategy you use to do this part of the exercise in the *LastnameFirstnameGitTutorial-mm-dd-yyyy.docx* file and push it to: [https://github.com/yourpseudo/CSXXX20XX](https://github.com/yourpseudo/CSXXX2016).

**Steps for Completing Part 7 of the Exercise:**

Forked the Pace University repository: <https://github.com/paceuniversity/courses>

Edited the README.md file with my name.

Selected the “Commit Changes” button.

Selected “Pull Request” button in the Pace University Repository.

Added a comment stating that I added my name.

Committed the changes.

Please note that I WILL have to accept the change before it appears for you. Hint: I will have to merge your pull request and you will get an email when I will do it.

**Part 8: (Done)**

Add an issue with title “GitHub training” in your repository called CSXXX20XX. Issues will be used for tasks and bug reports.

**Part 9: (Done)**

Edit the main page of the wiki in your repository called CSXXX20XX. Add the title “CS XXX 20XX” to the page. The wiki will be used for documenting your workin the class.