**Exercise on GitHub and Git**

In this course, we will be using GitHub for assignment submissions, code versioning, bug tracking, project management, and project documentation.

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!

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:**

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:**

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

**Part 3:**

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)

GitHub is a work collaboration platform that provides numerous other technological services such as bug tracking, wikis and documentation. Users on GitHub can have private and public repositories where a select number of people can contribute to a project or anyone, respectively. GitHub is a poplar place to post open source code. GitHub was launched on April 10th, 2008 by Tom Preston-Werner, Chris Wanstrath and PJ Hyett. Similar platforms to GitHub include Jira, Allura, Bitbucket, and Gitlab. GitHub is a very useful and popular product. Employers use GitHub to view an applicant’s portfolio and/or past projects. GitHub facilitates quick, efficient and seamless collaborative work in a team regardless of each member’s location.

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

**Part 4:**

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:**

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

* Repository – repository is a folder
* Commit – commit command is when we want to save our work into the repository
* Push – the push command tells Git where we want to put our commits
* Branch – a branch is a copy of the code to make changes separately
* Fork – fork allows one to clone a branch on the server side.
* Merge – incorporates changes from branches listed as parameters
* Clone – copies a repository into a newly created repository.
* Pull – the pull command incorporates changes from remote branch into the current branch
* Pull request – creates a request for changes

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

**Part 6:**

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

**Part 7:**

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/CSXXX2016>.

Please note that I may 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:**

Add an issue with title “GitHub training” in your repository called CSXXX2016. Issues will be used for tasks and bug reports.

**Part 9:**

Edit the main page of the wiki in your repository called CSXXX2016. Add the title “CS XXX 2016” to the page. The wiki will be used for documenting your work.