**CS 389**

**GitHub**

Deadline: 2/5/2014 by 23:59 pm. Use the class time to do this work and seek help from your classmates.

In CS 389 we are using GitHub for code versioning, bug tracking, project management and project documentation.

The goal of this exercise is to get you started with GitHub. Even if you are using GitHub regularly you need to do this exercise.

**Part 1:**

Install GitHub bash <http://git-scm.com/downloads> and browse the documentation. Create an account if you do not have one.

**Part 2:**

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 platform for storing and sharing source code along with version control. GitHub launched in April 2008. GitHub was founded by Tom Preston-Werner, Chris Wanstrath and PJ Hyett. Similar platforms include BitBucket.org which also uses git for source control along with other source control platforms like subversion. One would use such a platform to share code on a big project that multiple developers may need to make changes on. Also, one could post projects on GitHub and make them open source in order to share their knowledge with the community.

**Part 3:**

Go through the Git tutorial here: <https://try.github.io/levels/1/challenges/1>. While doing the tutorial, save your work in a Word file called FirstnameLastnameGitTutorial-mm-dd-yyyy.docx.

**Part 4:**

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

**Repository:** A directory where Git has been initialized to start version controlling your files

**Commit:** When send all changes in the staging area to the repository with a message describing what was changed

**Push:** When all commits you locally have on your machine are pushed to the master github branch.

**Branch:** A copy of the source code that an individual developer can make all their commits too. After they are done changing they can merge all their changes back to the master branch

**Fork:** Copying the source code of a project to make your own changes to it that would be different from the original project and be committed to your local repository.

**Merge:** The process of combining changes from a branch to the master of a repository y

**Clone**: Creating a local copy of a repository on your machine

**Pull**: Adding the latest changes to the master commit to the copy of the repository saved on your machine

**Pull Request:** A request to merge changes in your branch to the master branch of the repository that the owner of the repository must approve.

**Part 5:**

Push the Word file in your GitHub account in a repository called *cs389spring2015*. You will use this repository this semester.

**Part 6:**

Retrieve the file README.md at:

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

Add your name (firstname lastname) in the file, add a comment, and update the file README.md at: <https://github.com/paceuniversity/courses>.

List the commands and strategy you use to do this part of the exercise.

Please note that the changes must be in <https://github.com/paceuniversity/courses> (my repository).

Please note that I may have to accept the change before it appears for you.

**Part 7:**

Add an issue with title “GitHub training” in your repository called cs389spring2015. Issues will be used for tasks and bug reports.

**Part 8:**

Edit the main page of the wiki in your repository called cs389spring2015. Add the title “CS 389 Spring 2015” to the page. The wiki will be used for documenting the project.

**Part 9:**

Put the information about your GitHub account in the file here:

<https://docs.google.com/spreadsheets/d/14vYl8zjw_AX6mJZ5DzLwTObvtDs4hqCtxK6fPWWfgWY/edit#gid=0>

The link you will put should be of the form: <https://github.com/yourpseudo/cs389spring2015>.

I will check your work directly on GitHub using the information you provided.

Please note that the file needs to be organized in alphabetical order.

**Part 10:** **(only for people who had and used GitHub before this class)**

What is your experience with GitHub? Describe it in 5-10 lines.

**Part 11: (only for people who had and used GitHub before this class)**

Check what GitHub has to say about you: <http://osrc.dfm.io/>

(Unfortunately the link is broken as of now but it should be up again sooner!)

**References and more resources:**

Tutorials

<https://try.github.io/levels/1/challenges/1>

<https://help.github.com/>

<https://guides.github.com/activities/hello-world/>

<https://www.udacity.com/course/ud775>

Software  
<http://git-scm.com>

Videos

<https://www.youtube.com/watch?v=73I5dRucCds>  
<https://www.youtube.com/watch?v=0fKg7e37bQE>

<https://www.codeschool.com/paths/git>

Who are you on Git?

<http://osrc.dfm.io>