CECS 282 - Homework 0 - Getting Started with GitHub

Git is a tool used in the software industry for "revision control": allowing multiple people to contribute changes to a set of project files, while managing conflicts in changes, allowing reverts to previous versions, and generally hosting and coordinating all files (called a "**repository**") related to the development of a software project. Git draws inspiration from older software like Subversion ("SVN") and Concurrent Versions System ("CVS"). As a professional developer, you will be expected to know how to use at least one revision control system, and in that spirit we will use Git this semester to distribute lecture, lab, and project files.

GitHub is a website that uses Git and allows the public to host public code projects for free. Many sites use Git like this, and GitHub is the largest of the bunch, home to the largest collection of FOSS ("free open source software") projects on the Web. Anyone can make a free account and publish their code to GitHub's website for others to see and use.

Assignment

Getting Started:

If you do not have a GitHub account, register one for free at `www.github.com`. Use a respectful user name that you would be fine sharing with a potential employer.

Once you are registered, download and install a Git client if you do not have one. Most of you will not. For now, a very easy client will be the official GitHub for Windows and GitHub for Mac clients, available here: `https://windows.github.com/` and `https://mac.github.com/`.

Your First Fork:

Go to the GitHub page for this course: `https://github.com/csulb-cecs282-2015sp`. Click on the link titled "syllabus". Find the button in the upper right corner labeled "Fork", and click it. This will duplicate the "syllabus" repository to your account, allowing you to (if you want) modify any of the files in your copy of the repository. **Do not fork the "lectures" repository.**

Downloading Lecture Notes:

After you fork the syllabus repository, I will invite you to join the class GitHub "organization" as a member. (Please allow up to 24 hours to receive the invitation.) Once you accept the invitation, you will be able to download the semester's lecture notes to your personal computer.

After accepting the invitation, load your Git client. Log in if you need to, then find the option to Clone a repository from your GitHub account. (In GitHub for Windows/Mac: click the "+ sign, then click "Clone".) Clone the repository `csulb-cecs282-2015sp/lectures`, and choose a local directory to save the files to. When the operation completes, you will have a set of C++ code files

If you use another Git client, you will need to use your GitHub credentials to clone the URL `https://github.com/csulb-cecs282-2015sp/lectures.git`.

Moving Forward

As the semester progresses, I will upload more lecture notes and make fixes to existing notes. By simply launching yout Git client and choosing to "Sync" your Cloned copy of the lectures repository, you will receive all these updates automatically. Pretty cool, eh? :)