HW 3A: Version Control with Git, part A

Submit Assignment

Due Friday by 11:59pm **Points** 20 **Submitting** a file upload

Homework 3 will introduce you to the concepts and software behind version control, using the example of Git.

The assignment consists of several parts.

Part A

Part A focuses on installing Git and becoming familiar with its basic concepts and commands.

There's no question that installing software can be tricky. If you run into problems, first Google them. If that doesn't help, post them on Piazza with as much detail as possible, and help will soon be on the way.

1. Read **Pro Git** (http://www.git-scm.com/book/en/), (**http://www.git-scm.com/book/en/**) (http://www.git-scm.com/book/en/)) by Scott Chacon. Read all of chapter 1 except 1.5 and 1.6. Read sections 2.1-2.4 of chapter 2.

2. Choose how you will use Git:
   - Install Git on your Windows computer. Download the installer from http://git-scm.com/downloads and run it. For the rest of the homework, use the Git Bash option (aka the Git Bash shell), not the Git GUI option. All your Git commands are entered in the "Git Bash" window, and all output will appear there.
   - Install Git on your Mac computer. Download the installer from http://git-scm.com/downloads and run it. For the rest of the homework, access git through Terminal.
   - SSH (for example, using **PuTTY** (http://www.putty.org/) (http://www.putty.org/)) to openlab.ics.uci.edu to remotely access Git on the computer lab's Linux environment.
   - Go to the ICS computer lab. The Linux machines should have Git installed.

3. Note: Bash and Terminal (on a Mac) are examples of a "shell", a Unix concept that has proved quite durable. In a shell (or command prompt window) you can enter commands which cause actions, such as listing, creating, and deleting files. Some useful commands that work in the Git Bash shell and in Terminal:
   - cd *(change directory)*
   - pwd *(print working directory)*

- ls -al *(list all, one per line)*

4. Now run the command **git help > git_A_<SID>.txt**. (The **>** is a shell command that redirects the output of the program on **>**'s left to the file named on **>**'s right.) **<SID>** is your 8 digit student id. For example, if your student number is 12345678, then the output of **git help** must be written in **git_A_12345678.txt**.

5. GitHub is a widely used location to store git repositories. You'll probably need a GitHub login name in your later courses or in your software engineering career. If you don't have an account on GitHub.com, create one at **https://github.com/ (https://github.com/)** . Open **git_A_<SID>.txt** (that you created in the last step) with a text editor. Add a new line at top of the file and write your GitHub username. **Do not forget this step! You will lose points if you do!**

6. Upload the text file to Canvas by the deadline.

Git-A Rubric

Criteria	Ratings		Pts
Submission is a text file	**10.0 pts** **Full Marks**	**0.0 pts** **No Marks**	10.0 pts
Has github username (first line)	**5.0 pts** **Full Marks**	**0.0 pts** **No Marks**	5.0 pts
Contains git help	**5.0 pts** **Full Marks**	**0.0 pts** **No Marks**	5.0 pts
			Total Points: 20.0