**What is GitHub?**

GitHub is a service we will use this semester to keep track of course files, submit assignments, and ask for help. Essentially GitHub will allow you to have a copy of all files on your own computer, with an easy way to update them from or to the “server” at any time! It will also make it really easy for you to submit your projects and digital homeworks, or ask for help on a programming problem. GitHub is a service that many programmers use for their collaboration, and will be a useful skill if you decide to continue in programming after this course.

**How to Install GitHub on Your Computer**

1. Sign up for a FREE github account at [www.github.com](http://www.github.com) . Please choose a username that has either your First or Last name obviously as part of it! A great username would be your Loyola username (like “mmolsen”).
2. Download the installer for your operating system:
   1. Mac: <https://mac.github.com/>
   2. Windows: <https://windows.github.com/>
3. Run the installer (if you get a message asking if it is safe to run, the answer is “Yes”)
   1. After it completes installing, log in using the username and password you chose in step 1

**How To Get Course Files Onto Your Computer**

After installing GitHub, you will be in the application. If you closed it, go ahead and open it again. Assuming you are logged in, you can start cloning repositories. But what does that mean??

Think of a repository as a group of related files. You currently have access to two repositories: Course Handouts, and Class Notes. Everything for this course will be listed under the course name LUMCS201. To make a copy of these repositories (“groups of files”) on your own computer, follow these steps:

1. Click on the + symbol in the upper left corner
   1. Choose “Course Handouts” under LUMCS201
   2. Click “Clone” – this means “make a copy on your own computer”
   3. Choose a location on your computer to save the files. I suggest a folder in your Documents folder called “CS201-Github”, but wherever you like to keep course files is fine.
2. Repeat step 4, but for “Class Notes” instead.
3. Go to the location on your computer where you saved the files, and check that both folders were created and contain files. Once you have both repositories on your computer, you are done for now!

**How to Get Updates**

Each time I add or update a file on GitHub (i.e. add the next day’s lecture notes), you will need to “sync” that repository on your computer. If you click on the repository in the GitHub app, you will see a “Sync” link. Click on that, and the newest version of the files on GitHub will download to your computer! BEWARE – this will overwrite the files.

**What’s Next?**

For each programming assignment and some homeworks, a new repository will appear for you to view the assignment AND submit your files. You can submit files as often as you want, and should consider this as a way to back up your files, share your files between multiple computers, and keep track of old versions of your code. We’ll talk more about these processes soon!