GitHub:

Git is a program that was developed for the unix/linux OS. There is now a port over to the Windows OS that can be used as well. Git is used for Software Code Management, SCM, and revision control. This should help us maintain our project with documents, scripts, code, etc. GitHub is the service we will use to store all of our files for our project. This is where our repository will be located. Git can be used to get the repository from GitHub so that we can work on the project. For more information of SCM and revision control here are a few links that will help:

<http://en.wikipedia.org/wiki/Software_configuration_management>

<http://en.wikipedia.org/wiki/Revision_control>

This tutorial will just go through the basic control of using Git on the repo located on GitHub. Follow the tutorial to add a file to the repo.

Tutorial for Windows:

* Download the GitHub program for windows: <http://windows.github.com/>
* Open up the GiHub program and enter the user information for the group to sign in.
* Email: [ec772.aes@gmail.com](mailto:ec772.aes@gmail.com)
* Username: ec772AES
* Password: Group6-AES
* Once logged in, on the left hand side you have local and github repos. Click github repos to see the aes repo.
* Click clone next to ec772AES/aes then right click on repo name and click “Open in explorer”. Cloning will download an exact copy of the repo to your computer.
* Go under the tutorial folder and add <name>.txt. You can leave this file blank or add anything you want.
* Go back to the GitHub program and right click on the repo name again and click “Open”
* The next screen shows your changes that need to be committed to the repo. On the right hand side enter a message describing what the change is, can be brief. Use this format: <brief message>, <initials>. When done hit the commit button. A commit will register your changes with the git database so it can keep track of the changes.
* Click the sync button on top to do a pull from the repo and then push your changes back into the main repo on the GitHub server. A pull will download any changes that are different between the main repo and your clone since the last time you either did a clone or pull.
* You can view that your changes have been pushed to the main repo by logging into GitHub.com and viewing the aes repo. You should see your file under the tutorial folder. You can also click on the commits button to look at the latest commits. Additionally if you were to do another clone of the repo your changes would be in the new clone.
* For more info check out the following terms for git: Clone, Commit, Push, Pull. Those are the main features that will be used to interface with the repo.

Online view of Repo

* Log in to GiHub: <https://github.com/>
* Email: [ec772.aes@gmail.com](mailto:ec772.aes@gmail.com)
* Username: ec772AES
* Password: Group6-AES
* On the bottom right of page is a listing of our repo, “ec772/aes” click on this to go to the repo.
* This is the main screen for the repo. There are a lot of features that you can use such as doing everything that has been said in the “tutorial for windows” plus looking at the management tools such as commits, tags, usage, wiki pages, graphs and settings for the repo.

Overview of Git commands for Unix/Linux

* git clone <url> <directory\_name>
* Checkout a working version of the repository.
* git add <New\_file>
* Begin tracking changes on <new\_file>
* git commit
* Commit all your local changes into a record to be tracked.
* git pull
* Fetch and merge any new changes from the current repo that was cloned from.
* git push origin master
* Push all changes that have been committed to the main repo. “origin” and “master” have been set up during the clone to point to the remote server.

References for more information:

* <http://git-scm.com/book/en/>
* <http://rogerdudler.github.com/git-guide/>
* https://github.com/blog/1127-github-for-windows