**Quick reference for github via terminal**

This guide provides usage scenarios and commands for using github for version control of the project.

**Global username and email**

1. Use the following commands to add your github email address and username.
   1. $ git config --global user.name “your name”  
      $ git config --global user.email your@email.com

**Initial setup**

1. Create a gr-scan directory and cd into it:
   1. $ mkdir gr-scan
   2. $ cd gr-scan
2. Initialize a git repository:
   1. $ git init
3. Add remote origin:
   1. $ git remote add origin <http://github.com/RileyHL/gr-scan>
   2. The above URL is used as an example. Contact your mentor for the correct repository URL.
4. Test remote URL:
   1. $ git remote -v
5. Pull the latest version of gr-scan from the master branch
   1. $ git pull origin master
   2. Or pull from a desired branch
      1. $ git pull origin <desired\_branch\_name>

**Working with branches**

1. Change to a different branch
   * 1. $ git checkout <desired\_branch\_name>
2. Create your own branch (if you will be making changes)
   * 1. $ git checkout -b <your\_branch\_name>

**Maintaining your branch**

1. After you make changes and you are ready to commit them to your branch, run these commands:
   1. $ git add .
   2. $ git commit -m “<brief description>”
   3. $ git push origin <your\_branch\_name>
2. If you change something from the browser or your local repository is outdated compared to the remote one, you’ll have to pull the changes before pushing more:
   1. $ git pull origin <your\_branch\_name>
3. If someone else changes your branch, you need to pull the upstream changes before you can push yours:
   1. $ git stash
   2. $ git pull origin <your\_branch\_name>
   3. $ git stash pop
   4. Now push your changes by following item 1 in this section.

**Merge conflicts and other errors**

Merge conflicts occur when git cannot automatically merge files. These conflictions must be resolved manually through a text editor of your choice. The conflicting sections will be annotated in the file. If local changes are not important, you can start over again by renaming or deleting the current gr-scan directory, form its parent directory, and repeating the Initial Setup section.

* Delete gr-scan directory
  + $ rm -rf gr-scan

Or

* Rename gr-scan directory
  + $ mv gr-scan gr-scan-backup

For any other errors, google the issue and/or use the documentation for github.