

## Github Manual

### How-To

This section starts the how-to guide for working with our repository. A quick lookup of commands is provided below. Before you start working on code, check to see if there are any pull requests. If there is, go into the master branch `*git checkout master*` and `*git pull*`. The changes have now been made to your local master, but NOT your working branch.

#### **-Pulling & Merging-**

To pull changes from master into your branch, either:

1. Create a pull request on github with base set to your working branch and the compare set to the master. Fill in the rest. After merge: `*git checkout branch_name*` `*git pull*`
2. `*git checkout branch_name*` `*git merge master -m "local_merge_message_here"*` `*git push origin branch_name*`.

To merge your branch into master, either:

1. Create a pull request on github with base set to master and the compare set to the branch\_name (Note: All of your branch commits need to be pushed online before you create a pull request). Fill in the rest. After merge: `*git checkout master*` `*git pull*`
2. `*git checkout master*` `*git merge branch_name -m "local_merge_message_here"*` `*git push origin master*`.

#### **-Conflicts-**

When pushing or pulling if you have a merge conflict (Need to pull changes if you were originally pushing), manually edit conflicting code. This includes moving code to different lines, editing lines, and choosing which line to use where the conflict began. After you've made changes:

- `*git add -A*`
- `*git commit -a -m "message_about_fixing_conflict"`
- `*git push origin branch_name`

### **-Pushing-**

Now that your machine is up to date you may start making changes. Once you are happy with the changes you made and want to add them to the online repository:

- `*git add -A*` Stages all the files (old/new) to the commit
- `*git commit -a -m "message_about_commit"*` Commits all changes locally
- `*git push origin branch_name*` Pushes commit to online repository

The changes will now be viewable on github where collaborators can review changes.

## Commands

### **Branches:**

- `git branch branch_name`
- `git checkout branch_name`
- `git branch`

### **Pushing:**

- `git add -A`
- `git commit -m "comment_about_changes"`
- `git push origin branch_name`

### **Pulling:**

- `git pull` (while in whatever branch)

## Notes

-Be very careful when making changes to files you know are going to be edited by someone else. Your files may be overwritten and/or you will run into many merge conflicts.