Git and GitHub

# Create a Git Depository

To create a Git depository:

* Click on ‘**Start A Project**’
* Enter a name for ‘**Repository Name**’
* Leave the project as ‘**Public**’
* Check ‘**Initialize this repository with a README**’
* Click ‘**Create a repository**’

**Note: Within the README, you can click on it in the repository and type whatever you want to describe the project.**

To clone a repository:

* Click on the ‘**Clone or Download**’ button’
* Copy the Git url to the repository within the text field
* Within your terminal program ‘cd’ (change directory) into the directory on your  
   computer, in which you would like to clone the repository.
* Run ‘**$ git clone** “**url to repository**”
* Copy your files to the newly to newly created local git reposity folder on your   
   machine

To get the status of modified files on your local machine:

* Run ‘**git status**’. This will display of modified files in **red**; which needs to be  
   ‘added’ for tracking

To add files to be tracked:

* Run ‘**$ git add**’ + **filename** or **folder** or ‘**$ git add -A**’

To commit the modifications of the tracked files:

* Run ‘git commit -m ‘**add a descriptive message here**’
* If account validation is returned run:
* **$ git config --global user.email** ‘**you@your email.com**’
* **$ git config --global user.name** ‘**repository name**’
* Re-run the ‘**commit**’ script

To push your commit files to your GitHub repository:

* **$ git push**

To get the latest version of any changes:

* **$ git pull**

### Branching

In real-world situations, use ‘branching’ to make edits/changes to files for approval before

merging them to the master branch.

To create a new branch, make changes and push:

* **$ git branch NewBranchName**
* **$ git checkout NewBranchName**
* Make your changes
* **$ git add .**
* **$ git commit -m ‘your message’**
* **$ git push**

From within GitHub, you can view branch changes under ‘Your recently pushed branches’. To view updates and changes, click the green button, ‘**Compare and pull request**’. From here you can enter a message to alert other users to open a pull request to view your updates for approval.

Under ‘Open a pull request’:

* Enter your message to the user(s) to approve changes.
* Click the green “**Create pull request**” button

As an approver, to view changes and merge pull requests from within GitHub:

* Click on the **Pull Request** tab
* View changes/updates
* If approved, enter a message and click the green ‘**Merge pull reques**t’ button
* From within the terminal, on the Master branch, run **$ git pull** to get the latest updates