

# The Simple Quick Guide on:



and

# GitHub

# Why Git and GitHub?

Otago Polytechnic is using Git and GitHub more and more frequently to hand in things like graded labs and assignments!

Showing that you can use Git effectively can give you extra marks in certain assignments!

Learning Git now will save you ripping out your hair later as the program is used in the industry by companies such as Microsoft, Google, Facebook and Netflix.

# Getting and cloning a repository:

The 'folder' where you put your files

- Log onto Github @ <https://github.com>
- If you need to create a repository, just click the 'New Repository' button on the right side of the screen



New repository

- If you have a repository already, it will be in the list under the button
- Go into the repository and click 'Clone or Download' on the right side of the screen



Clone or download ▼

- Copy the URL given

# Finishing the clone:

Getting your local copy

Install Git at <https://git-scm.com/>

- Open the Start Menu in Windows and search for Git and open it. It should look something like this



- Use the command 'cd' to switch between directories (e.g cd Desktop)
- Find a place for your repository to be placed in your computer
- Then type 'git clone [the repository's URL]'
- If everything went well, you should see something like this

```
$ git clone https://github.com/bit-Pro/individual-deliverables-AscendingAnthem.git
Cloning into 'individual-deliverables-AscendingAnthem'...
remote: Counting objects: 12, done.
remote: Total 12 (delta 0), reused 0 (delta 0), pack-reused 12
Unpacking objects: 100% (12/12), done.
```

- You now have a folder to place your files into which will be named the same as your repository!

# Add, Commit, Push:

## Adding, Saving, and Pushing Files

- To add new files to the repository, drag them into your folder and type  
`'git add *'`
- This will add ALL new files to the repo
- Now you want to save the files with a message, which lets others see what the files have changed
- Type  
`'git commit -m "Add a Commit Message"'`
- Make sure to add a short but descriptive commit message to the commit.
- Finally, we want to push our local files back to the GitHub server so they all have the same files
- Type  
`'git push'`
- This will synchronize the local files and the server files together

# Working from somewhere else?

Need those files on a different computer?

- If you need the repository on a different computer, it's easy. Just clone the repository again to the different computer and continue working!

But what about updating the old files  
on other computers?

- Open Git
- Use `cd` to change into the repository folder
- Type  
`'git pull'`
- This will update the old files with the newer ones from the GitHub server

## **Tips:**

- Don't forget that you have control over how many commits you do and when. Commit often as these are used as marks in assignments
- When you write commit messages, make them short, but descriptive. 'Added file' or 'Removed file' are NOT good commit messages
- Git is super strange to pick up and learn so if you come across something unexpected, or are just lost, ask for help!
- Remember: Add, Commit, Push.