Git

**Three Stages:**

Committed – data is safely stored in local db

Modified – file has been altered since last committed file (work in progress)

Staged – altered files to be committed

These stages only apply to files in the project. Untracked files – you can add to project and it will go as staged and be committed with next snapshop

**Git project**

.git directory (repository) – origin of project and pulled down from server. Stores metadata

Working directory – checkout VERSION OF THE PROJECT FROM ORIGIN

Staging area (index) – build changes or changes by taking a snapshot (stage fixes for next commit)

**Using the command line**

* Run commands by typing commands and hitting enter to execute (dependent on directory location)
  + Win – command prompt or powershell
  + Mac and linux – terminal
* pwd = print working directory (returns current file location)
* cd = change directory (change working directory) cd .. or cd {subfolder} or cd ~ to jump home
* dir = list files in directory
* copy con = create a new empty file
* mkdir = create new empty folder

**Install Git**

<https://git-scm.com/download/win>

git –version = returns version

git config –global user.name “name” = set name

git config –global user.email “email” = set email

--global is global, if you want to change in project, use the other

Git config –list

Git config user.name

Git help

**Initialize a new repository**

Virtual storage of project

Go to file path (cd)

Git init – initialize

GitHub, GitLab, Bitbucket – online hosting service where you can access at any time with internet access

* adds collaboration and integrates seamlessly with git repository