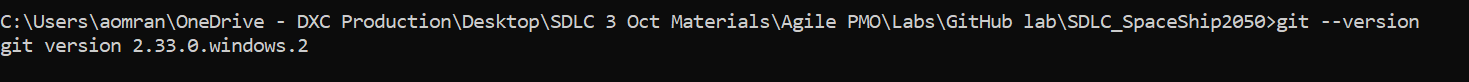
Git and Github Lab

1. Download git from the following link

[Git - Downloading Package (git-scm.com)](https://git-scm.com/download/win)

1. Install Git to your machine
2. Run the command git --version to make sure that the git is being installed.



1. To configure the user that will be associated to all commits to the git repository we should run the following command

git config --global user.name “my name”

git config --global user.email “my email”

1. To show if the configuration has been configured correctly run the following

git config user.name

git config user.email

1. To Create a local Git repository, create a folder then cd to it and then run the following command

git init

this will create an empty local repository

1. To make sure that the local repository has been created run the following commands

cd .git

tree /f

1. Create files into the project folder
2. To check the status of the repository run the following command

git status

1. To add these files to the local repository

git add .

1. Then check the status again, you will find that the files started to be tracked by the Git repository.
2. To commit the changes in these files into the local repository, run the following command

git commit –m “this is my first commit”

1. To Create remote repo, create an account on the Github
2. Create a remote repository
3. To check if the local repository has been linked to a remote repository or not, navigate to the project folder and then run the following command

git remote -v

If there is no output, this means that the local repository does not have been linked to a remote repository

1. To link the local repo and remote repo, you should run the following command

git remote add origin https\_url\_to\_ur\_remote\_repo

then push the local changes to the remote repository using the following command:

git push origin master

Then a pop-up window will appear asking you to enter your email and password of Github.

1. To check the differences between the staged and committed versions of a file run the following commands

git add new\_file

git diff –staged

1. To log all commits that have been done, you can run the following command

git log 🡪 show all commits

git log -n 🡪 n is the most recent number of commits

git log –stat 🡪 log more details about commits

1. There are a fun tool to visualize the git branches, you access it from this link

<http://git-school.github.io/visualizing-git/>

1. To create new branch and switch the head of the git to the new branch, run the following command

git checkout -b new\_branch\_name

1. To delete file from a repository, run the following command

git rm file\_name 🡪 will delete it from the repo and working directory

git rm --cached file\_name 🡪 will delete it from the repo, but let it in the working directory

1. To switch between branches

git checkout branch\_name

1. To merge

git merge branch\_name