**Git & GitHub**

1. Remote Repository:
   1. Repository => Repo => Project Folder/package
   2. Remote Repo is nothing but store a project on Server. For ex., Github is one example of remote repository hosting service. There are many remote repository hosting services like Bitbucket, Perforce, Gitlab, etc.
2. Local Repository:

* It is a local computer storage where our project stores

1. Staging area:
   1. Area where changes are yet to be committed
   2. Required files pushed to staging area and then pushed to local repository.
   3. From working directory to staging area, single files only can be pushed. But from staging to local or local to remote repo, all files could be sent.
2. Working Directory:

Untracked files in git is called Working Directory. (i.e, After creating files or folders, not saving in local repo).

**git init**

Working Directory

**git add**

**git clone**

Staging Area

**git commit**

Local Repository

**git push**

Remote Repository

(GitHub)

* 1. **git init** => initializing a project or folder to git repository.
  2. **git status** => to know the status of repository.
  3. **git add**  => to add single files from working depository to staging area.
     1. **git add .** => used to add all files in the folder
     2. **git add “file Name”** => used to add specific file in the folder
  4. **git commit** => to push files to local repo from staging. **-m** “comments” is used for commenting your code
     1. for example: git commit -m “Changes done by DGS”
  5. **git branch** => to know which branch we are working/coding our files
     1. **git checkout -b :**

- checkout command is used to jump between branches.

- “-b” is used to create new branch. (eg git checkout -b dgs)

* 1. **git push**=>
     1. only git push shows an error if many branches with master in remote repo
     2. git push – “which branch”. This command is used to create a new branch/ add files to mentioned branch.
  2. **git pull** =>

pull request has to give to push files/project from branches to main. This has to be done by Team lead. After review, check the comments if TL mentioned

* 1. **git clone** => used to download the required projects/files from remote repository to working directory.
     1. **For eg:** git clone HTTPS or SSH directory
  2. **git conflicts** =>
  3. **git merge** =>