**GIT TUTORIAL**

Git is used for :

* Source Control
* Versioning of Files
* Improved development process
* Historical views
* Work with a team

Download GIT from website : <https://git-scm.com/>

**Untracked Files**

$git add filename.txt

Staging Area

$git add commit

**Node Creation**

**GIT COMMAND LINE:**

|  |  |
| --- | --- |
| $cd /e/repos |  |
| $git init | Make present folder as GIT repository |
| $git init demo | Creates a folder called demo in /e/repos and makes it a repository |
| $notepad README.md | Create notepad file in target folder  .md = Mark Down |
| $git status | To know which branch and state of files |
| $git add Readme.md | Add readme.md to staging area |
| $git add -all | Add all files to staging area |
| $git commit | Commits the files.  Creates node on the commit(node number).  Pop up for commit message |
| $git commit -m “commit message” | Commits the files  Creates node on commit (node number)  Commits with commit message |
| $git branch | Shows current branch |
| $git branch [branch\_name] | Create a new branch with branch name.  Exclude square brackets. |
| $checkout [branch\_name] | Change to another branch |
| $git branch -d [branch\_name] | On Master  Try to delete branch |
| $git branch -D [branch\_name] | On Master  Delete the branch |
| $git checkout -b [branch\_name] | Creates a branch and switches to it. |
| $git merge [branch\_name] | Pulls branch and merges with current branch |
|  |  |

**Online Repository:**

Projects and files can be stored on online repository for availability and team collaboration. Some examples of online repositories are :

* https://bitbucket.org/  
  <https://github.com/>

1. Create a repository on these sites
2. Give a repository name, e.g. “Git-Bit”
3. Navigate to Master branch in local GIT.

|  |  |
| --- | --- |
| $remote add origin <https://imran.mdkhan@bitbucket.com/git-bit> | Any name can be given to the central repository (origin or any name)  URL is the path of the remote repository |
| $git remote | Shows the repositories present |
| $git push -u origin master | -u : track changes, use only first time  Origin: Remote repository name  Master: Local repository branch name |
| $git pull [alias] [branch]  $git pull origin master |  |
| $git push origin master |  |

**Transfer from Remote Repository to local GIT:**

1. Go into the online repository
2. Click on clone and copy the remote URL
3. Go to common folder

$git clone <https://imran.mdkhan@bitbucket.com/git-bit>

To remove GIT from local repository, delete .git file present in the folder.

**Remove changes or undo staging area changes**

$git clean -df

$git checkout --