

# **Assignment 2**

## **1. What is GIT and GitHub?**

**Git :** Git is a version control system that allows developers and operations teams to collaborate and keep track of the changes made on a project. Git is software for tracking changes in any set of files, usually used for coordinating work among programmers collaboratively developing source code during software development.

**GitHub:** GitHub is a web-based Git repository hosting service, which offers all of the distributed revision control and source code management (SCM) functionality of Git as well as adding its own features.

## **2. What is a git repository?**

Repository is the centralized storage location. Repositories in GIT contain a collection of files of various different versions of a Project. These files are imported from the repository into the local server of the user for further updations and modifications in the content of the file.

Git uses a version control system to track all changes made to the project and save them in the repository. Users can then delete or copy existing repositories or create new ones for ongoing projects.

## **3. What are the branches in GitHub?**

Branches allow you to work on different part of projects without impacting the main branch. Branches allow you to develop features, fix bugs, or safely experiment with new ideas in a contained area of your repository.

You always create a branch from an existing branch. Typically, you might create a new branch from the default branch of your repository. You can then work on this new branch in isolation from changes that other people are making to the repository. A branch you create to build a feature is commonly referred to as a feature branch or topic branch.

## **4. What do you mean by commit?**

The git commit command captures a snapshot of the project's currently staged changes. Committed snapshots can be thought of as “safe” versions of a project—Git will never change them unless you explicitly ask it to.

## 5. What is the command used to delete a branch?

`git branch -d <branchname>`

If the branch contains un-merged changes, though, Git will refuse to delete it. If you're sure you want to do it, you'll have to force the deletion by replacing the `-d` parameter with an uppercase `D`:

`git branch -D <branch-name>`

## 6. What is the git-clone command used for?

Git clone is used to copy an existing Git repository into a new local directory.

## 7. What is the difference between git pull and git fetch?

**Git Fetch** is the command that tells the local repository that there are changes available in the remote repository without bringing the changes into the local repository.

**Git Pull** on the other hand brings the copy of the remote directory changes into the local repository.

