

ASSIGNMENT 02 GIT AND GITHUB

Q1.What is Git?

Ans.Git is a popular version control system. It was created by Linus Torvalds in 2005, and has been maintained by Junio Hamano since then.

It is used for:

Tracking code changes

Tracking who made changes

Coding collaboration

Q2. What do you understand by the term ‘Version Control System’?

Ans.Version control systems are a category of software tools that helps in recording changes made to files by keeping a track of modifications done in the code.

Q3. What is GitHub?

Ans.Git is not the same as GitHub.

GitHub makes tools that use Git.

GitHub is the largest host of source code in the world, and has been owned by Microsoft since 2018.

In this tutorial, we will focus on using Git with GitHub.

Q4. Mention some popular Git hosting services.

Ans.

GitHub

GitLab

Bitbucket

Q5. Different types of version control systems.

Ans.

Types of Version Control Systems:

Local Version Control Systems

Centralized Version Control Systems

Distributed Version Control Systems

Q6.What benefits come with using GIT?

Ans.

.Security

.Easy to access to your code.

.Flexibility

.Open Source

Q7. What is a Git repository?

Ans.

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. A VCS or the Version Control System is used to create these versions and store them in a specific place termed a repository. The process of copying the content from an existing Git Repository with the help of various Git Tools is termed cloning. Once the cloning process is done, the user gets the complete repository on his local machine. Git by default assumes the work to be done on the repository is as a user, once the cloning is done. Users can also create a new repository or delete an existing

repository. To delete a repository, the simpler way is to just delete the folder containing the repository. Repositories can be divided into two types based on the usage on a server. These are:

Bare Repositories: These repositories are used to share the changes that are done by different developers. A user is not allowed to modify this repository or create a new version for this repository based on the modifications done.

Non-bare Repositories: Non-bare repositories are user-friendly and hence allow the user to create new modifications of files and also create new versions for the repositories. The cloning process by default creates a non-bare repository if any parameter is not specified during the clone operation.

Q8. How can you initialize a repository in Git?

Make a directory to keep the project in.

Go to the newly created directory.

Type `git init` to get started.

Make a program.

To add the files, use `git add` (see the typical use page).

`git commit` is the command to use.