Git and GitHub

Assignment Questions-2

1.what is Git ?

Ans: Git is **a free and open source distributed version control system** designed to handle everything from

small to very large projects with speed and efficiency.

2. What do you understand by the term 'Version control System' ?

Ans: Version control, also known as source control, is the practice of tracking and managing changes to

software code. Version control systems are **software tools that help software teams manage**

changes to source code over time.

3. What is GitHub ?

Ans: GitHub is a for-profit company that offers a cloud-based Git repository hosting service. Essentially, it

makes it a lot easier for individuals and teams to use Git for version control and collaboration.

4. Mention some popular Git hosting service ?

Ans: Git is a version control system, a tool or engine that anyone can download to their device. It's a free

and very fast VCS. GitHub/GitLab etc. – hosting services, **allow you to host projects that use Git**.

- Bitbucket.
- GitLab.
- Perforce.
- Beanstalk.
- Amazon AWS Code Commit.
- Codebase.
- Microsoft Azure DevOps.

- Source Forge.

5. Different types of version control Systems ?

Ans: **The types of VCS are:**

- Local Version Control System.
- Centralized Version Control System.
- Distributed Version Control System.

6. What benefits come with using GIT ?

Ans: One of the biggest advantages of Git is its **branching capabilities**. Unlike centralized version

control systems, Git branches are cheap and easy to merge.

- Performance. Git performs very strongly and reliably when compared to other version control systems. ...
- Security. Git is designed specially to maintain the integrity of source code. ...
- Flexibility. ...
- Wide acceptance. ...
- Quality open source project.

7. What is a Git repository ?

Ans: A Git repository **tracks and saves the history of all changes made to the files in a Git project**. It

saves this data in a directory called . git , also known as the repository folder. Git uses a version

control system to track all changes made to the project and save them in the repository.

8. How can you initialize a repository in Git ?

Ans: To create a new repo, you'll use the git init command. git init is a one-time

command you use during the initial setup of a new repo. Executing this

command will create a new .git subdirectory in your current working directory.

This will also create a new main branch.