

# Git and Git-Hub Assignment

## **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.

## **Q2- What do you understand by the term 'Version Control System'?**

**Ans-**A version control system, tracks the history of changes as people and teams collaborate on projects together.

## **Q3- What is GitHub?**

**Ans-**To provide internet hosting for version control and software development, Git-Hub makes use of Git.

## **Q4-Mention some popular Git hosting services?**

**Ans-**This is some popular git hosting services.

- 1: -GitHub
- 2: -GitLab
- 3: -Git Bucket
- 4: -Beanstalk

## **Q5- What benefits come with using GIT?**

**Ans- performance:** Git provides the best performance when it comes to version control systems. Committing, branching, merging all are optimized for a better performance than other systems.

- **Security:** Git handles the algorithm manages my versions, files, and directory securely so that we work is not corrupted.

- **Branching Model:** Git branching model lets we have multiple local branches which are independent of each other.

- **Staging Area:** Git has an intermediate stage called "index" or "staging area" where commits can be formatted and

modified before completing the commit.?

### **Q6- Different type of version control system?**

#### **Ans- Types of Version Control Systems:**

- Local Version Control Systems (LVCS).
- Centralized Version Control Systems (CVCS).
- Distributed Version Control Systems (DVCS).

### **Question 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.

#### **Types of Git Repository: -**

1. Bare Repositories.
2. Non-Bare Repositories.

### **Q8-How can you initialize a repository in Git?**

**Ans-**First we create a folder in any drive in our computer file manager.

Then-

**Go into a project folder and initialize git.**

```
$ cd /Users/PW_JAVA/java_skill
```

```
$ git init
```

**We have initialized an empty git repository in a .git folder**

```
$ cd /Users/PW_JAVA/java_skill(master).
```

**To add a file to the staging area**

- \$ git add story1.txt

**To commit the changes**

- \$ git commit -m "Added first commit"

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