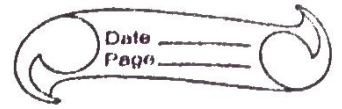Naitik Pratap Singh

Assignment - 2

Q1 What is Git?

→ Git is an open-source distributed version control system. It is designed to handle minor to major projects with high speed and efficiency.

→ Git is developed to co-ordinate the work among the developers.

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

→ 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 change to source code over time.

Q3. What is GitHub?

→ GitHub is a for profit company that offers a cloud-based Git respository hosting service. Essentially, it makes it a lot easier for individuals and teams to use Git for version control and collaboration.

→ GitHub's interface is user friendly enough so even novices coders can take advantage of Git.

4. Mention some popular Git hosting services.

The some best Git hosting solutions and service

- Bitbucket
- Gitlab
- Perforce
- Beanstalk
- Amazon AWS code Commit
- Codebax
- Microsoft Azure DevOps
- Sourceforge.

5. Different types of version control systems.

There are two types of Version control Systems

(i) Centralized
(ii) Distributed

Centralized Version control.
With Centralized version control systems, you have a single "central" copy of your project on a server and commit your changes to this central copy

Distributed Version control
With distributed version control systems (DVCS), you don't rely on a central server to store all the versions of a project's files. Instead, you clone a copy a repository locally so that you have the full history of the project. Two common distributed version control systems are Git and Mercurial

6. What benefits come with using GIT?

→ One of the biggest advantages of Git is its branching capabilities. Unlike centralized version control systems. Git branches are cheap and easy to merge.

It makes it easy to contribute.

→ Good distributed model as each developer gets a local repository with a full history of commits which makes git fast compared to other v

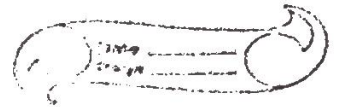→ The object model is very simple and minimizes push/pull data transfers.

7. What is a Git repository?

→ Repositories in GIT contains a collection of files of various different verisons 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.

→ Repos Repositories can be divided into two types based on the usage on a server. These are:

• Bare Respositories: These of repositories are used to share the changes that are done by different developers.

• Non-bare Respositories: Non-bare respositories are user-friendly and hence allow the user to create new modifications of files and also create new versions for the respositories.

(8). How can you initialize a repository in Git?

1. Create a new repository on GitHub.com.
2. Open Terminal Terminal Git Bash.
3. Change the current working directory to your local Project
4. Use the init command to initialize the local directory asc.
5. Add the files in your new local repository.
6. Commit the files that you've staged in your local repository.