Git and GithubAssignment Questions

Assignment Questions

Q1. What is Git?

A.1

Git is a [free and open source](https://git-scm.com/about/free-and-open-source) distributed version control system designed to handle everything from small to very large projects with speed and efficiency.

Q.2 What do you understand by term ‘Version Control System'?

A 2. 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?

A3. GitHub is a Git repository hosting service. GitHub also facilitates with many of its features, such as access control and collaboration. It provides a Web-based graphical interface.

Q4. Mention Some Git hosting Services ?

A4.Some Git Hosting Services are :

1. BitBucket
2. Github
3. Beanstalk
4. Gitlab

Q5. Different Types of Version Control System ?

A5. Types of Version Control System :

1. Distributed Version Control System.
2. Centralized Version Control System.
3. Local Version Control System.

Q6 . What are the benefits of using Git?

A6 . Benefits of Git

1. **Free and open-source:** No need to purchase and can be used anywhere.
2. **Fast and small:** No need to connect to the central server. All the operations can be performed on the local copy stored on the developer machine making it really fast.
3. **Implicit backup:** Every checkout is a full backup of the repository, hence multiple copies are available.
4. **Security:** Git uses SHA1 algorithm to secure the data stored within the repository.
5. **Easy branching:** Git branches are easy and cheap to merge. Every small change to your code creates a new branch.

Q7 . What is a Git Repository ?

A7. 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 updates and modifications in the content of the file .

Q8 .How can you initialize a repository in Git ?

A8 .The git init command creates a new Git repository. It can be used to convert an existing, unversioned project to a Git repository or initialize a new, empty repository.

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