Day-3

Git and Github

Assignment Questions

1). What is a Git?
Git is a popular distributed version control system .It was created by LINUS TORVALDS in 2005.it is used for tracking code changes done in source code basically who made changes in the code like we get the history of all files, used for coding collaboration , and we can make repository here so that in future our data is corrupt so we get back by the help of repository,share our code with others etc.

2).What do you understand by the term version control system?
It is a system that records changes to a file or set of files overtimes, so that we can recall specific version later , i.e., for every source code changes in a file a new version is created.And if we not like that version we can restore our code and it also help for to store the all code files at one place and all developers connected to that code are able to see and share the code.
Version control system are of two types mainly
    1) Centralised version control system
    2) Distributed version control system

3).what is github?
Github is a server basically git has two parts git client and git server is the largest host of source code in the world it is used to maintain the source code of the project it is most used git server after 2018.

4).Mention some popular Git hosting services.
Some popular git hosting services are Bitbucket, git lab, Github, Git blit , sourceforge,amazon aws code commit etc.

5).Different types of version control System.
Version control system are of two types mainly Centralised version control system and Distributed version control system.
1).Centralised version control system- it does not have any local repository we directly commit the code from workspace to main repository it has a disadvantage when we get network failure so we unable to get update from main repo (what the other developer make changes in code)to our workspace . and all the dependency made on main repo i.e., it is not mostly not used in current time.

6). What benefits come with using Git?

There are many benefits like
1).we get a local repo and a remote repo in git server so that where our code is corrupt we get back from main repo and if main repo is corrupt so that we already have a backup in form of local repo.
2). It creates the collaborate environment so that coders get benefit they can share, track ..etc the code with others.
3). We store all the codes at one place so that we can use it as a resume in companies.
4).if we want to make a project and we dont know its code we face some problems so we can get code of others codes in git server.

7).what is a git repository?
Git repository is a main repository which we also called it remote repository here we import the code which means push . pull or clone the code from local repo to main or main repo to local repo . It helps to store the code and this code is shareable.

8).How can you initialiize a repository in Git?
We have to give the command i.e.,
$ git init
It will create .git file in the folder because of this we can get git environment like workspace , staging area , and a local repo. And we able to use git client

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