Version Control Systems (VCS)

Version control systems (VCS) are tools used in software development to track changes to source code over time.

There are two types of version control systems

1. Centralized version control system (CVCS):

In a CVCS, there is a central server that stores all versions of a file and allows multiple users to check out and commit changes.

1. Distributed version control system (DVCS):

In a DVCS, each user has a local copy of the entire repository, including its full history. This allows users to work independently and make changes offline. Examples include Git, Mercurial, and Bazaar.

What is Git?

Git is a distributed version control system used for source code management. It is a free and open-source version control system used to handle small to very large projects efficiently. Git is used to tracking changes in the source code, enabling multiple developers to work together on non-linear development.

What is GitHub and why it is used?

GitHub is an online software development platform. It's used for storing, tracking, and collaborating on software projects. It makes it easy for developers to share code files and collaborate with fellow developers on open-source.

Steps to install git.

* Open the EC2 service and Launch the instance.
* Now connect the instance.
* Login with root user.
* Now we need to install git.
* Hit command “yum install git -y”
* We need to create a directory to make it a local repository.
* After creating a directory enter the directory using cd.
* Now we need to initialize the directory.
* Hit command “git init”.
* Now the local git repository has initialized.
* Now create a file.
* The the file is in workspace.
* We need to add the file in the staging area.
* Hit command “git add filename”.
* Now the file is in the staging area.
* We need to commit the changes to add the file in the local repository.
* Hit command “git commit -m “comment”.