**GitHub:-**

GitHub is a web based platform widely used for version control and collaboration. And it used to store data,it allows developers to host,share and manage code repositories.

**Key features:-**

**1.Collaboration:**

Teams can work together on projects from different places.

**2.Open Source:**

Any one can have access of github as it is open source.

**3.Storage:**

It is also used to store the data of different files and folders.

**4.Community Support:**

git has vast community for help and collaboration.

**5.Repository:**

A storage location for all project files which track changes.

* Public repository are accessible to everyone whereas private only for owner and authorized people.

**6.Code Security:**

Provides Security features to protect your code.

**7.Version Control:**

Uses git for tracking changes in source code during development.

**8.Code Backup:**

Ensures code is safely backed up.

**Git (global information tracker):--**Git is a distributed version control system that helps developers track changes in their code and collaborate with others effectively.It is the backbone for platforms like Github.

**Key Features of Git:**

**1.Version Control:**

Changes to files over time Allows us to revert to previous version of project.

**2.Collaboration:**

Teams can work on the same project without overwriting each other’s work.

**3.Branching and Merging:** Enables creation of branches for new features,Experiments or fixes.

**Three Components of Git:**

The three areas of Git refer to the three main Components where git manages and store data internally.

**Working Directory:**

The working directory is a directory on our system where we will manipulate files.

**Staging Area:** Staging area acts as a medium between our working directory and repository.

**Repository:** It is referred as git repository where you will track and commit changes.

**Steps of dragging files to github with commands :**

1.Git init:

It will initialize the folder in local folder.By this we are providing a link to github.

2.ls:

it is one of the commands in git to know the number of files in the folder.

3.Git add:

This command tells git to start tracking changes in a file.

4.Git status:

This command shows the current state of working directory whether it is modified or anything newly added

5.Git commit -m:

Saves the changes to the local repository with a message.

6.Git remote add origin:

This command sets the link of remote repository (github) as the origin for our local repository.

7.Git branch -M main

:create new branch called main in git repository.

8.Git push -u origin:

push local main branch to remote repository.