**Git**

"Git" is a distributed version control system that allows you to track changes in your code locally on your computer

**Git Hub**

"GitHub" is a web-based platform that hosts your Git repositories, enabling collaboration and sharing of code with others online; to push your code from your machine to GitHub, you would use Git commands.

* **Functionality:**

Git is the core software that manages your code versions locally, while GitHub is a service that allows you to store and share those Git repositories online.

* **Access:**

You install Git on your computer and use it directly through the command line, while you access GitHub through a web interface.

Basic Git Workflow:

1. 1. **Initialize a repository:**

Navigate to your project directory and run git init to create a new local Git repository.

1. 2. **Add changes:**

Use git add <file> to stage the files you want to include in your next commit.

1. 3. **Commit changes:**

Run git commit -m "Descriptive commit message" to save your changes with a message explaining what you modified.

1. 4. **Connect to a remote repository (GitHub):**
   * Create a new repository on GitHub.
   * Get the repository URL from GitHub.
   * Use git remote add origin <repository\_url> to link your local repository to the remote GitHub repository.
2. 5. **Push changes to GitHub:**

Run git push origin <branch\_name> to send your committed changes to the specified branch on your GitHub repository.

Important Git Commands:

* git status: Shows the current state of your working directory, including which files are staged and which are not.
* git diff: Shows the differences between the current version of a file and the last committed version.
* git pull: Fetches changes from a remote repository and merges them into your local working directory.
* git branch: Lists all local branches.
* git checkout <branch\_name>: Switches to a different branch in your local repository.

Git Work-Flow

