Git and GitHub, while often mentioned together, are distinct tools that work in tandem for software development:

**Git:**

* **Function:** A **version control system (VCS)**. It tracks changes in computer files and folders over time, allowing you to revert to previous versions, collaborate with others, and maintain a project's history.
* **Installation:** Locally installed software on your computer.
* **Focus:** Version control and code management.
* **Open-source:** Free and publicly available to use and modify.

**GitHub:**

* **Function:** A **web-based hosting service** for Git repositories. It provides a platform to store your code, collaborate with others, share projects publicly or privately, and access features like issue tracking and project management.
* **Access:** Online service requiring an account (free and paid plans available).
* **Focus:** Centralized source code hosting and collaboration.
* **Ownership:** Owned by Microsoft, with a freemium pricing model.

**Git Commands:**

Here are some essential Git commands to get you started:

* git init: Initializes a Git repository in your current directory.
* git add <filename>: Adds a file to the staging area for the next commit.
* git commit -m "<message>": Creates a new commit with a descriptive message.
* git status: Shows the status of your working directory and staging area.
* git log: Displays the commit history of your repository.
* git clone <url>: Clones a Git repository from a remote server (like GitHub) to your local machine.
* git branch <branch\_name>: Creates a new branch to work on a specific feature or bug fix.
* git checkout <branch\_name>: Switches between different branches in your repository.
* git push origin <branch\_name>: Pushes your local branch changes to a remote repository (like GitHub).
* git pull origin <branch\_name>: Pulls changes from a remote branch to your local branch.