gitnotes.md 2024-08-07

# Git and Github

## **Basics**

#### Q) What is Git?

Git is a version control system that allows you to track changes to your files and collaborate with others. It is used to manage the history of your code and to merge changes from different branches.

### Git and Github are different

#### Git

- 1. Git is a version control system that is used to track changes to your files.
- 2. Github is a web-based hosting service for Git repositories.

#### Github

- 1. It is a free and open-source software that is available for Windows, macOS, and Linux. Remember,GIT is a software and can be installed on your computer.
- 2. Github is an online platform that allows you to store and share your code with others. It is a popular platform for developers to collaborate on projects and to share code.

Alternatives: Gitlab, bitbucket, Onedev, Codeberg, Gitea, Google cloud source repositories

## Why do we need version control systems?

Version control systems are used to manage the history of your code. They allow you to track changes to your files and to collaborate with others. Version control systems are essential for software development. Consider version control as a checkpoint in game. You can move to any time in the game and you can always go back to the previous checkpoint. This is the same concept in software development.

Before Git became mainstream, version control systems were used by developers to manage their code. They were called SCCS (Source Code Control System).

.gitkeep file is kept in a folder which is empty and we want to track it (git doesn't track empty folders) For example -here both images and logs are empty folder but as we want to keep track of images we add .gitkeep file into it

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