

- Git is a version control system.
- Git helps you keep track of code changes.
- Git is used to collaborate on code.

Learning by Examples

```
$ git --version
```

```
=> git version 2.30.2.windows.1
```

In the code above, you can see commands (input) and output.

In general, lines with \$ in front of it is input. These are the commands you can copy and run in your terminal

Git and Remote Repositories

Git and GitHub are different things.

In this tutorial you will understand what Git is and how to use it on remote repository platforms, like GitHub.

You can choose, and change, which platform to focus on by clicking in the menu on the right:

What is Git?

Git is a popular version control system. It was created by **Linus Torvalds in 2005**, and has been maintained by **Junio Hamano** since then.

It is used for:

- Tracking code changes
- Tracking who made changes
- Coding collaboration

What does Git do?

- Manage projects with Repositories
- Clone a project to work on a local copy
- Control and track changes with Staging and Committing
- Branch and Merge to allow for work on different parts and versions of a project
- Pull the latest version of the project to a local copy
- Push local updates to the main project

Working with Git

- *Initialize Git on a folder, making it a Repository*
- *Git now creates a hidden folder to keep track of changes in that folder*
- *When a file is changed, added or deleted, it is considered modified*
- *You select the modified files you want to Stage*
- *The Staged files are Committed, which prompts Git to store a permanent snapshot of the files*
- *Git allows you to see the full history of every commit.*
- *You can revert back to any previous commit.*
- *Git does not store a separate copy of every file in every commit, but keeps track of changes made in each commit!*

Why Git?

- *Over 70% of developers use Git!*
- *Developers can work together from anywhere in the world.*
- *Developers can see the full history of the project.*
- *Developers can revert to earlier versions of a project.*

What is GitHub?

- *Git is not the same as GitHub.*
- *GitHub makes tools that use Git.*
- *GitHub is the largest host of source code in the world, and has been owned by Microsoft since 2018.*
- *In this tutorial, we will focus on using Git with GitHub.*