

## Git

Git is a piece of software that makes it simpler to manage different versions of your own software in a software repository.

## GitHub

GitHub is a place to share software repositories and collaborate with other developers. Github is a website where you host all of your Git repositories.

These tools make it easier for multiple people to work on the same software project.

To create bullet points in Markdown on GitHub, start each line with an asterisk (\*), hyphen (-), or plus sign (+), followed by a space, and then the text for the bullet point.

In this course you will learn about:

- common terms
- installing Git
- creating a Git repository
- cloning a Git repository
- adding and removing from a Git repository
- using GitHub
- creating pull requests
- branching repositories
- merging repositories
- and more

What is Version Control?

## What is Git?

A: Free and open source version control system.

## What is Version Control?

A: The management of changes to documents, computer programs, large web sites, and other collections of information.

VC is basically a way **programmers track their code changes**. They can look back at **all of their code changes** they have **made over time**. It helped them

- **to see and understand what they did**
- **Track down bugs**
- **Go back to previous versions of the code if they need to**

## Terms

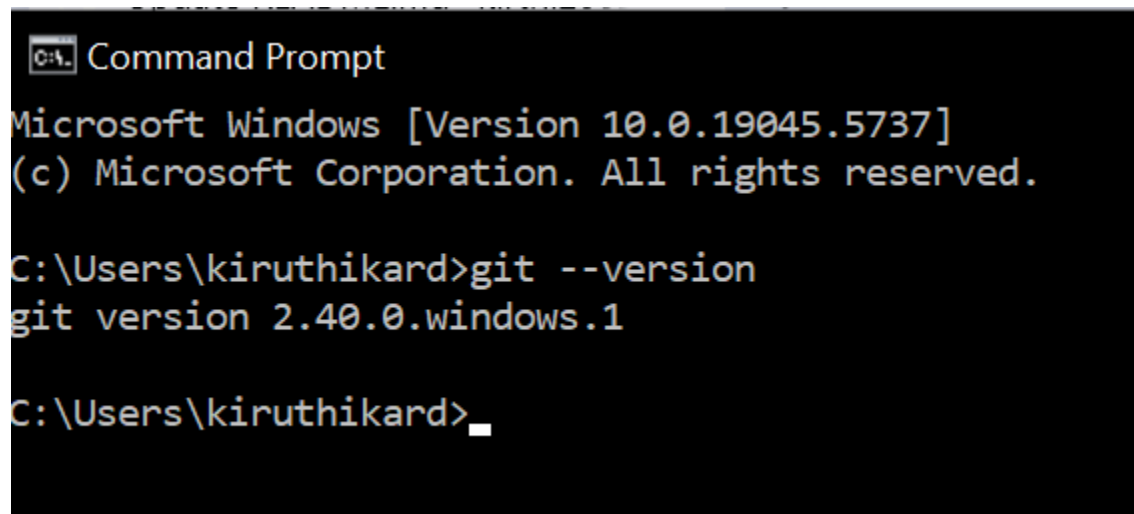
- Directory -> **Folder**
- Terminal or Command Line -> **Interface for Text Commands**
- CLI -> **Command Line Interface**
- cd -> **Change Directory**
- Code Editor -> **Word Processor for Writing Code**
- Repository -> **Project, or the folder/place where your project is kept**
- Github -> **A website to host your repositories online**

## Git Commands

### Git Commands

- Clone -> Bring a repository that is hosted somewhere like Github into a folder on your local machine
- add -> Track your files and changes in Git
- commit -> Save your files in Git
- push -> Upload Git commits to a remote repo, like Github
- pull -> Download changes from remote repo to your local machine, the opposite of push

How to find Git version in command prompt?



```
C:\> Command Prompt
Microsoft Windows [Version 10.0.19045.5737]
(c) Microsoft Corporation. All rights reserved.

C:\Users\kiruthikard>git --version
git version 2.40.0.windows.1

C:\Users\kiruthikard>
```

Link to install Git

<https://www.atlassian.com/git/tutorials/install-git>

Link to install Visual Studio

<https://www.code.visualstudio.com>