



"Every expert was once a beginner. Embrace the journey of learning web development, for it holds the power to shape your future and unlock endless possibilities."





# Today's Agenda

Today we aim to provide you with the necessary knowledge and skills like

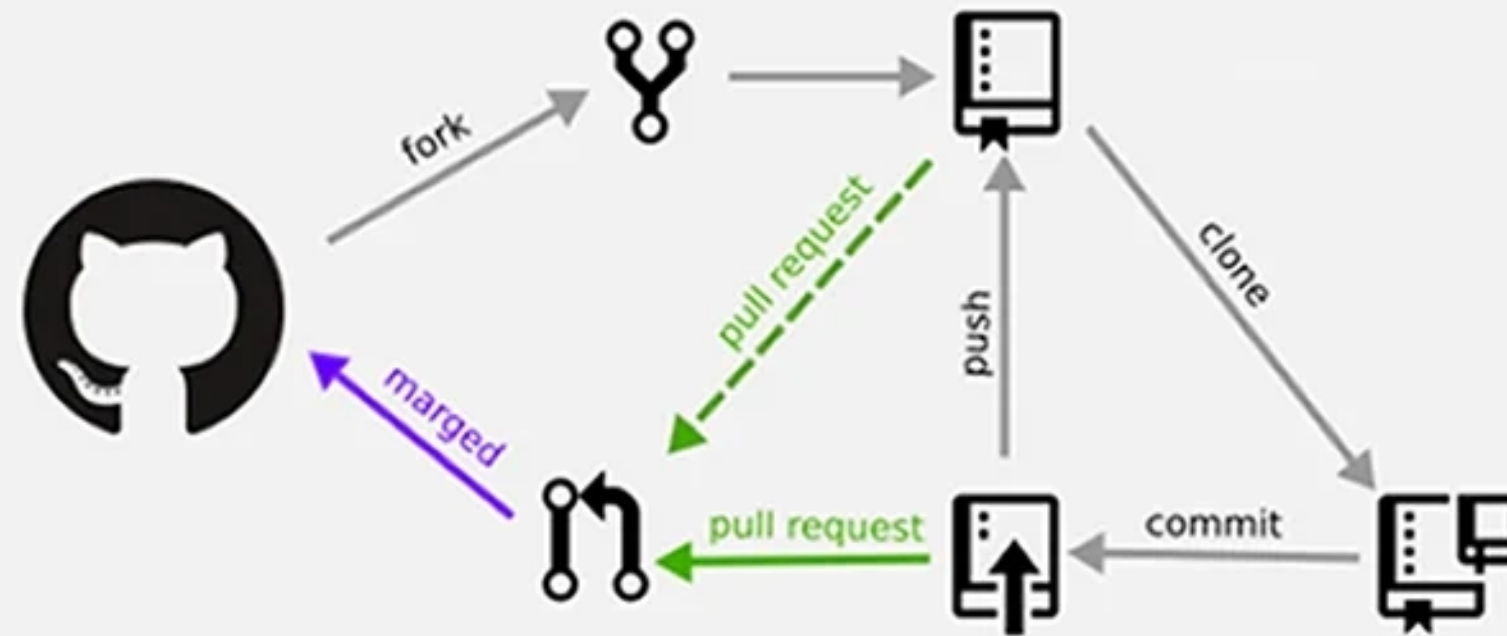
- Git
- navigate the command line, work with files and directories

# Version Control System



Version control is a system that tracks and manages changes to files and code over time, allowing multiple people to collaborate, revert to previous versions, and maintain a history of modifications.

## All about Version Control – Git



# Git



Git is a distributed version control system used for tracking changes in source code during software development. It allows multiple developers to collaborate, manage different versions of code, and easily merge changes.

# Install Git-Bash



Git Bash is a command-line tool that provides a Unix-like environment on Windows. It allows users to execute Git commands and perform tasks from the command line, making it easier to work with Git on Windows systems.

# Command Line



Understanding the basics of the command line helps you navigate their file systems, execute commands, and perform common tasks within each environment.

# Current working directory

The directory that the user is presently working in is known as the current working directory.



# Navigating directory



You can switch folders with the `cd` command. You are in your home directory when you launch a terminal.



# Making Directory



The command that allows you to create directories is `mkdir`.

# List files and directories



The `ls` command is used to list files or directories. Just like you navigate in your File explorer or Finder with a GUI, the `ls` command allows you to list all files or directories in the current directory by default,

# Creating file



Its is a very simple to create file in git bash at first write touch then file name with extension.

# Copy file



The command `cp` followed by the name of the file you want to copy and the name of the directory to where you want to copy the file (e.g. `cp filename directory-name`)

# Rename file



We use the `git mv` command in git to rename and move files. We only use the command for convenience. It does not rename or move the actual file, but rather deletes the existing file and creates a new file with a new name or in another folder.

# Moving file and directory



The `mv` and `cp` commands can be used to put files into a directory. The `cp` moves the copy of the file or the folder to another folder, however, `mv` just move it without copying.

# Delete file and directory



To delete (i.e. remove) a directory and all the sub-directories and files that it contains, navigate to its parent directory, and then use the command `rm -r` followed by the name of the directory you want to delete (e.g. `rm -r directory-name` ).

# Git and GitHub



**Git:** Distributed version control system for tracking code changes and managing versions.

**GitHub:** Web-based hosting service for Git repositories with collaboration features and a user-friendly interface.

We would be learning about github in detail upcoming class



# Before using Git we should know why we need it



- Git makes it easy to contribute to open-source projects
- Documentation.
- Integration Option.
- Track changes in your code across versions
- Deployment.



# Configure your name and your email



```
git config --global user.name "Your Name"  
git config --global user.email "youremail@yourdomain.com"
```



# Create a local git repository



```
mkdir project_name  
cd project_name
```



# Create a local git repository



```
mkdir project_name  
cd project_name
```



# Git Basics Exercises

- Create a folder called `learn_with_geekster`.
- `cd` into the `learn_with_geekster` folder.
- Create a file called `first.txt`.
- Display the file content in terminal.
- Configure your name and your email



# Git Basics Exercises

- Create a folder called learn\_with\_geekster.
- cd into the learn\_with\_geekster folder.
- Create a file called first.txt.
- Display the file content in terminal.
- Configure your name and your email

```
Geekster
|
├── Css
|
├── Html
|   └── img.html
|
├── Javascript
|
└── React
```



- Below is a breakdown of the folder structure. Geekster, the parent directory, contains the directories React and Angular. F1.txt should be placed in the component folder.

```
Geekster
|
├── React
|   |
|   └── Component
|       |
|       └── img.html
|
└── Angular
    |
    └── Services
        |
        └── TS
            |
            └── f1.txt
```



# Happy Learning