Git

A short introduction

3 What's

Git is a
distributed version control system

It's a software installed locally on the machine.

It's a command line tool.

& for Git

3 Why's

It helps software developers manage changes in source code files

It helps software developers collaborate on projects.

It has features such as free, distributed, security, local repository

Basic git lingo

- **Repository (repo)**: A repository is the storage space where all your project's files, history, and versions live.

- **Commit**: Saves a snapshot of your project's changes, like a bookmark in its development history.

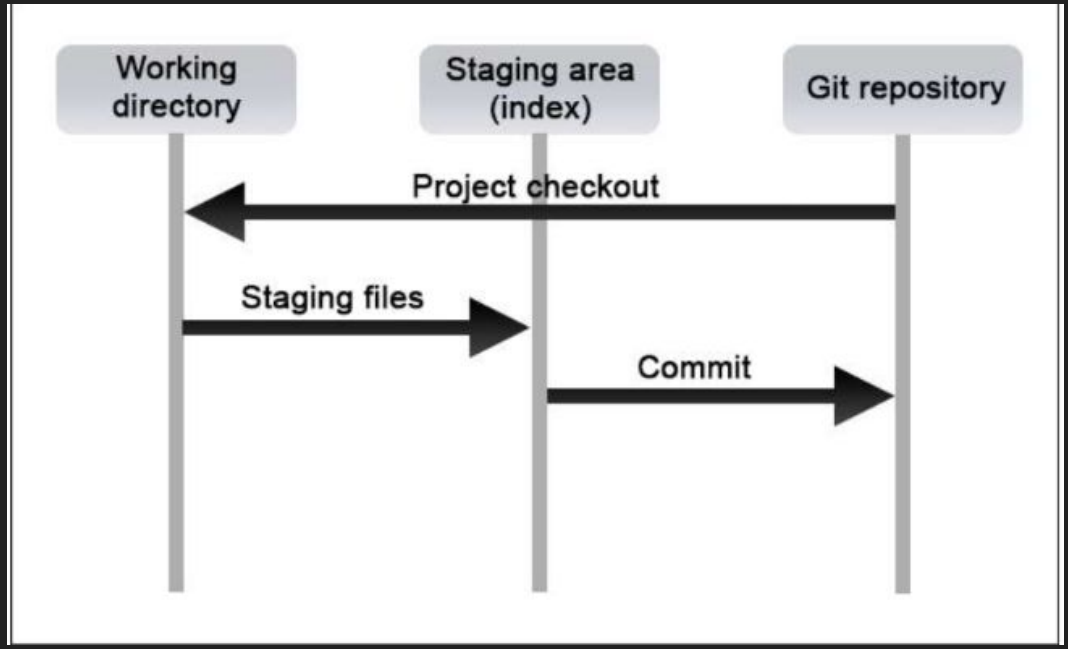
- **Branch**: A branch is a separate line of development that lets you work on changes without affecting the main code.

- **Merge**: Merging combines changes from one branch into another, integrating different lines of work.

How does it work?

A git project resides in three sections:

- The working directory
- The staging area
- The git repository



Remember! Git is not Github

Github is a website that hosts git repository’s.

Adds a nice GUI and makes it easy to collaborate.

Live demo of git use cases

Going through the 3 examples in
the git_intro.md file.

Exercises

On the Compsys github go to tools/masterclass/git/

Here you'll find:

1. git.pdf (Slides)
2. git_intro.md (Explanation of most common git commands)
3. git_exercises.md (Exercises for you to try)