

Git and Github

إعداد: م. زهراء مازن م.م. حسن ماهر م.م. ميس الريم عضير كمال م.م. دينا رافع أحمد

What is Version Control System?

1 Content



 Complete history tracked and available.

2. Teams



- Supports many workflows.
- Collaboration
- Quality through team communication and reviews.

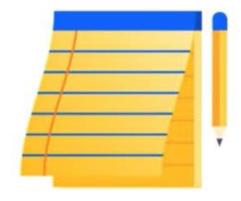
3. Agility



- Manages small changes.
- Easily test, fix, or undo ideas and changes.

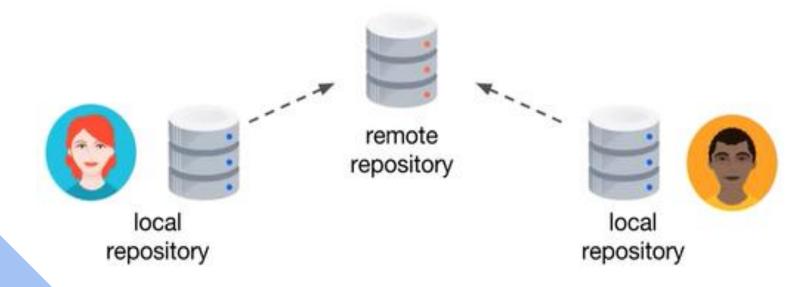
What type of content?

- Source code.
- Automated tests.
- Server configuration.
- Documentation.
- Book.
- Website content.



Distributed Version Control System (DVCS)

Usually has these characteristics:



1. Which one of the following statements about version control is true?

- With distributed version control, each user has a local copy of the project history.
- Version control only manages source code.
- You must be online to use distributed version control.

What is git?

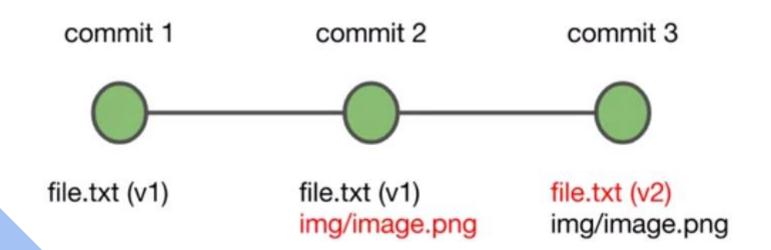
- □ It is a (DVCS).
- It is an Open Source Software Project (OSS Project).
- It has a vibrant community and eco system.
- Adapts to many types of projects and workflows.
- It works well for small and large projects.



What is a git repository?



A series of snapshots, named "commits".



2. Which one of the following statements about git is true?

- Git is owned by a single company.
- Git can be used while offline.
- A commit only holds the changes to a project since the previous commit.

Locations of git



working tree a034 fileA 73d5 dir/B

staging area



local repository



remote repository

project directory

Working tree



working tree

a single commit's directories and files a034 fileA 73d5 dir/B

staging area



local repository



remote repository

Staging area or index



working tree



staging area/index

files that are planned for the next commit



local repository



remote repository

3. Which one of these statements is true?

- The staging area contains a list of files that will be in the next commit.
- The working tree is also named "index".
- The working tree contains the history of the project.

Local repository



working tree a034 fileA 73d5 dir/B

staging area



local repository



remote repository

contains the commits of the project

Project directory



working tree a034 fileA 73d5 dir/B

staging area



local repository



remote repository

project directory

Remote repository



working tree a034 fileA 73d5 dir/B

staging area



local repository



remote repository

contains the commits of the project

4. Which one of these statements is true?

- The project directory contains the local and the remote repository.
- If you delete your project directory, you are also deleting your local repository.
- The project directory contains the remote repository.

