Describe what git is used for, what basic actions and commands it performs.
Готував матеріл студент *Кошіль Владистав*

Git is a distributed version control system used to manage source code and track changes made to it. It allows multiple developers to work on a project simultaneously, with each developer's changes being integrated into a single codebase.

Basic actions and commands in Git include:

Initializing a repository: `**git init**`
Checking the status of files: `**git status**`
Adding files to the stage: `**git add <file>**`
Committing changes: `**git commit -m "commit message"**`
Viewing commit history: `**git log**`
Undoing changesv:`**git checkout**`
Comparing changes: `**git diff**`
Pushing changes to a remote repository: `**git push**`
Pulling changes from a remote repository: `**git pull**`
Creating branches: `**git branch <branch-name>**`
Switching between branches: `**git checkout <branch-name>**`

These are just a few of the many commands that Git offers, and there are many more advanced features available for use in larger projects.

What is a commit and how does it allow you to track changes in files?
Готував матеріл студент Фещенко Євгеній

A commit in Git is a way to save changes made to a project's files and track those changes over time. When you make changes to a file in a Git repository, you stage those changes using the `**git add**` command. Once you have staged the changes, you can then commit them using the `**git commit**` command.

Each commit in Git has a unique identifier (a SHA-1 hash) and a message that describes the changes made in that commit. When you view the commit history of a repository using the `**git log**` command, you can see a list of all the commits made to that repository, along with the commit messages and the date and time each commit was made.

By tracking changes in this way, Git allows you to see the entire history of a project and revert to previous versions of the code if necessary. Commits also make it possible to

collaborate with others on a project by allowing you to share your changes with others and merge their changes with yours.