

Git Commands

Here are 15 Git commands along with their brief descriptions and use cases:

1. **git init**

- ✓ **Description:** Initializes a new Git repository.
- ✓ **Use Case:** Used to create a new, empty Git repository in a project directory.

2. **git clone <repo-url>**

- ✓ **Description:** Clones an existing repository.
- ✓ **Use Case:** Used to create a local copy of a remote repository.

3. **git add <file>**

- ✓ **Description:** Stages changes for the next commit.
- ✓ **Use Case:** Used to add file changes to the staging area in preparation for a commit.

4. **git commit -m "message"**

- ✓ **Description:** Records changes to the repository with a message.
- ✓ **Use Case:** Used to save staged changes in the local repository with a descriptive commit message.

5. **git status**

- ✓ **Description:** Displays the state of the working directory and the staging area.
- ✓ **Use Case:** Used to see which changes have been staged, which haven't, and which files aren't being tracked by Git.

6. **git log**

- ✓ **Description:** Shows the commit history.
- ✓ **Use Case:** Used to view the history of commits in a repository.

7. **git branch**

- ✓ **Description:** Lists all branches in the repository.
- ✓ **Use Case:** Used to see all branches in the repository and the current active branch.

8. **git checkout <branch>**

- ✓ **Description:** Switches to the specified branch.
- ✓ **Use Case:** Used to switch to another branch in the repository.

9. **git merge <branch>**

- ✓ **Description:** Combines the specified branch's history into the current branch.
- ✓ **Use Case:** Used to merge changes from one branch into another branch.

10. **git pull**

- ✓ **Description:** Fetches and integrates changes from the remote repository into the current branch.
- ✓ **Use Case:** Used to update the local branch with the latest changes from the remote repository.

11. **git push**

- ✓ **Description:** Uploads local branch commits to the remote repository.
- ✓ **Use Case:** Used to send local commits to a remote repository.

12. **git remote -v**

- ✓ **Description:** Shows the remote repositories for your project.
- ✓ **Use Case:** Used to see the URLs of the remote repositories configured in the local repository.

13. **git fetch**

- ✓ **Description:** Downloads objects and refs from another repository.
- ✓ **Use Case:** Used to fetch updates from the remote repository without merging them into the local branch.

14. **git reset <file>**

- ✓ **Description:** Removes the specified file from the staging area.
- ✓ **Use Case:** Used to unstage a file, keeping the changes in the working directory.

15. **git diff**

- ✓ **Description:** Shows changes between commits, commit and working tree, etc.
- ✓ **Use Case:** Used to view the differences between the working directory and the index or between the index and the last commit.

Git commands used for the assignment:

1. `git init`

2. `git checkout -b nafis`

3. `git remote add origin git@github.com:md-nafis-sadik/ba-mico-hospital.git`

4. `git add .`

5. `git commit -m "Mico Hospital"`

6. `git push`

7. `git checkout main`

8. `git merge nafis`