

Working With branches in Git

What is main/master branch?

- The main branch — the one where all changes eventually get merged back into, and is called master. This is the official working version of your project, and the one you see when you visit the project repository at github.com/yourname/projectname.
- One word: the master branch is deployable. It is your production code, ready to roll out into the world. The master branch is meant to be stable, and it is the social contract of open source software to never, ever push anything to master that is not tested, or that breaks the build.

What is feature branch?

- A feature branch is a copy of the main codebase where an individual or team of software developers can work on a new feature until it is complete.

How to Create a Branch in Git

- `git branch <new-branch-name>`

How to Rename a Branch in Git

- If you want to rename your current HEAD branch, you can use the following command:
- `$ git branch -m <new-name>`
- In case you'd like to rename a different local branch (which is NOT currently checked out), you'll have to provide the old and the new name:
- `$ git branch -m <old-name> <new-name>`

Note :These commands, again, are used to work with local branches. If you'd like to rename a remote branch, things are a little bit more complicated - because Git doesn't allow you to rename remote branches.

How to Switch Branches in Git

- `$ git checkout <other-branch>`

How to Publish a Branch in Git

For the first time you have to use this command to publish the branch to remote repository

```
-git push -u origin <local-branch>
```

From next time onwards we can directly use

```
-git push
```

How to Delete a Branch in Git

- `$ git branch -d <branch-name>`
- This will delete the local branch.
- To delete a remote branch, we cannot use the git branch command. Instead, git push will do the trick, using the --delete flag:
- `$ git push origin --delete <branch-name>`

How to Merge Branches in Git

- Merging is probably the most popular way to integrate changes. It allows you to bring all of the new commits from another branch into your current HEAD branch.
- One of the great things about Git is that merging branches is so simple and stress-free. It requires just two steps:
- # Step-(1) Check out the branch that should receive the changes
- \$ git checkout main
- # Step-(2) Execute the "merge" command with the name of the branch that contains the desired changes
- \$ git merge feature/contact-form

Thank You