

Introduction to GitHub

The Main Branch

In Git, the main project is completed on the `main` branch. Making your first commit in a new git repository will automatically create a `main` branch. Create new branches from the `main` branch to develop new features for a project. These branches can be merged into `main` at a later time to incorporate the new features. You can use `git branch` to check what branch you're on.

```
$ git init
Initialized empty Git repository in
/home/ccuser/new-project/.git/
$ echo "Hello World!" >> hello.txt
$ git add hello.txt
$ git commit -m 'initial commit'
[master (root-commit) bb0e565] initial
commit
1 file changed, 1 insertion(+)
create mode 100644 hello.txt
$ git branch
* master
```

Committing Your Code

The `git commit -m "log message here"` command creates a new commit containing:

- The current contents of the staging area
- A log message describing the changes to the repository

A commit is the last step in our Git workflow. A commit permanently stores changes from the staging area inside the repository. This command is almost always used in conjunction with the `git add` command as `git add` is used to add files to the staging area.

```
$ git commit -m "Added About section to
README"
[master 9d63f80] Added About section to
README
1 file changed, 10 insertions(+),
1 deletion(-)
```

Deleting a Branch

In Git, the `git branch -d branch_name` command is used to delete the `branch_name` branch. It's good practice to delete a branch after it has been merged into the `master` branch.

Pull Requests on GitHub

A pull request is a feature of GitHub and other source code management tools that allow a repository's collaborators to review and give feedback on proposed code changes before they are accepted and merged to another branch, usually the main branch. Each pull request creates a discussion forum that can be used by reviewers and authors alike to highlight or add comments to a single line of code or chunk of code, add videos or images, etc.

Going through the pull request process can increase group knowledge, improve product quality, and develop professional skills through group critique.