

## Creating a Pull Request (PR) in GitHub

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#### Introduction

Now that you have learned how to **link, sync, and push code** to GitHub, it's time to understand one of the most important collaboration tools in GitHub—**Pull Requests (PRs)**.

A **Pull Request (PR)** is a way to notify repository maintainers that you have made changes to the code and would like them to review and merge those changes into the main branch.

This is an essential part of working on **team projects, open-source contributions, and code collaboration**.

#### What is a Pull Request?

A **Pull Request (PR)** is a proposal to merge your changes from a feature branch into the main branch of a repository. It allows team members to:

- ✓ Review code before merging.
- ✓ Discuss changes and suggest improvements.
- ✓ Ensure quality control before new features go live.

#### Steps to Create a Pull Request (PR)

##### Step 1: Push Your Feature Branch to GitHub

After making changes in your feature branch, stage and commit them as usual:

```
git add .
git commit -m "Updated Profile Page with new details"
git push origin feature-yourname
```

This pushes your feature branch (`feature-yourname`) to GitHub.

##### Step 2: Open GitHub & Navigate to Your Repository

1. Go to your **GitHub repository** where you pushed the changes.
2. You will see a prompt: "**Compare & pull request**" – Click on it.

##### Step 3: Fill in Pull Request Details

1. Select the **base branch** (e.g., `main` or `master`) where your changes should be merged.
2. Select your **feature branch** (e.g., `feature-yourname`) as the source.
3. Add a meaningful **title** and **description** explaining what changes were made.

#### Step 4: Submit the PR

Click “**Create Pull Request**” to submit it for review.

#### Step 5: Reviewing & Merging

- **If you are working in a team**, your teammates or project maintainers will review your PR, leave comments, and request changes if needed.
- **Once approved**, the PR can be merged into the main branch.
- After merging, the feature branch can be deleted.

#### Example Scenario

Imagine you are working on the **Mini Finance Project**, and you updated the **Profile Page** with your own details.

1. You create a **feature branch**: `feature-john-doe`
2. You make the changes and **push** them to GitHub.
3. You create a **Pull Request** (PR) to merge these changes into the `main` branch.
4. Your instructor reviews the PR and **approves it**.
5. You **merge the PR** and delete the feature branch.

#### Final Thoughts

Pull Requests (PRs) are the industry standard for **collaborative software development**. This is how professional teams contribute to shared repositories while ensuring high-quality code.

#### Practice this by submitting a PR for the Mini Finance Project!

Once your PR is reviewed and merged, you will have **real-world experience** in GitHub collaboration.