Lesson 02 Demo 03

Creating a Pull Request in Git

Objective: To create a pull request for merging the local changes into a remote Git repository
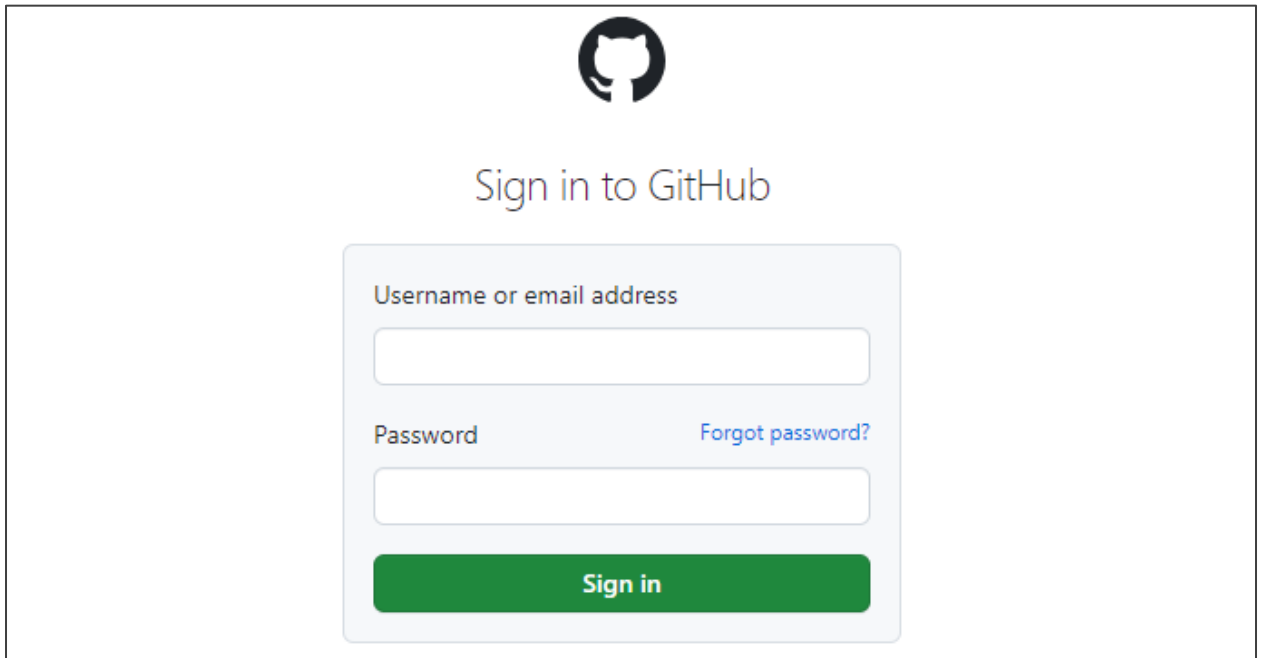
Tools required: Git and GitHub

Prerequisites: You need to have Git installed to proceed with this demo.

Steps to be followed:
1. Create a fork
2. Clone the fork
3. Sync the fork with the original repository
4. Push changes to the GitHub fork
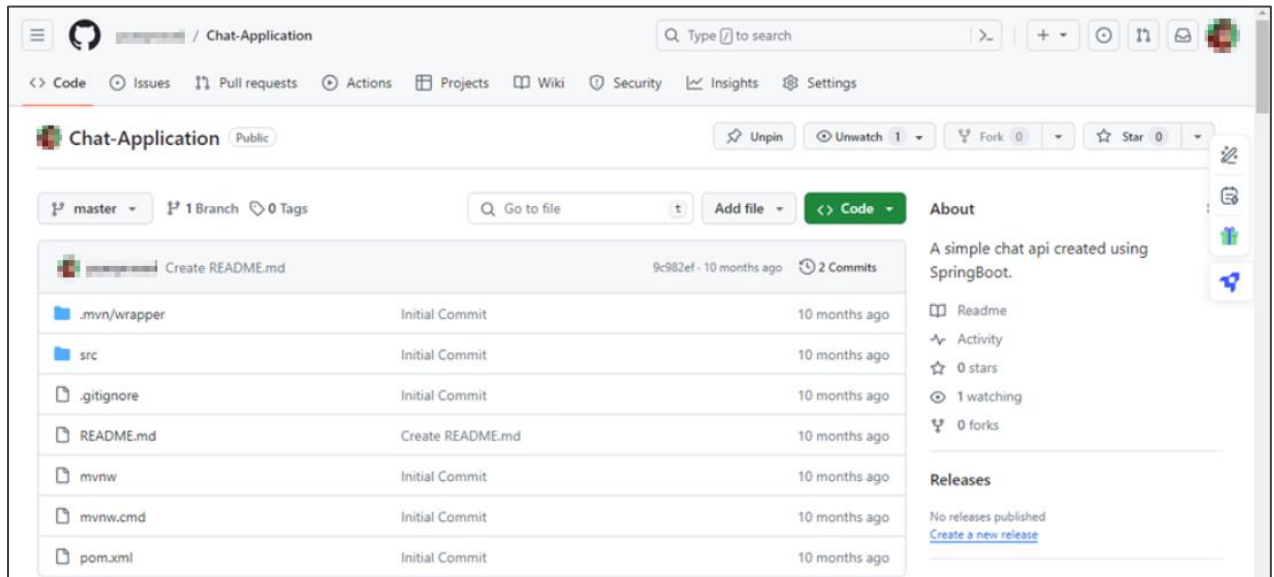5. Create a pull request

Step 1: Create a fork

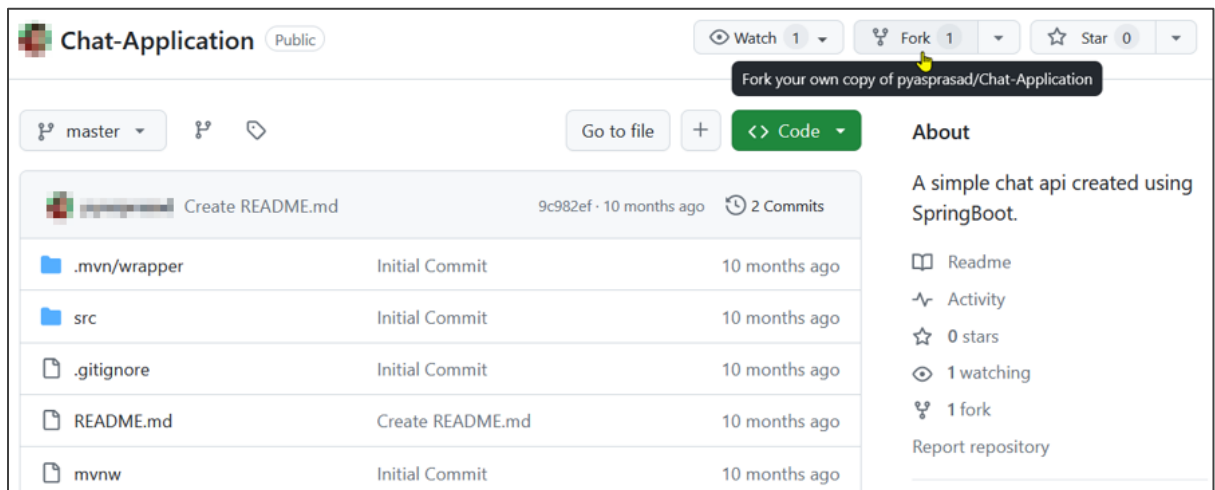1.1 Open the browser in your lab, go to **github.com**, and log in to your account

> **Note**: If you do not have a GitHub account, visit the official website at https://github.com/signup and create a new account

1.2 Navigate to the following repository in your browser:
https://github.com/GithubResources1/Chat-Application

1.3 Click the **Fork** button in the top-right corner of the page

1.4 In the **Create a new fork** page, enter the name and description of the forked repository, then click on **Create fork**

Create a new fork

A *fork* is a copy of a repository. Forking a repository allows you to freely experiment with changes without affecting the original project.

Required fields are marked with an asterisk (*).

Owner *

[icon] / Repository name *

Chat-Application

✓ Chat-Application is available.

By default, forks are named the same as their upstream repository. You can customize the name to distinguish it further.

Description (optional)

A simple chat api created using SpringBoot.

☑ Copy the `master` branch only

Contribute back to pyasprasad/Chat-Application by adding your own branch. Learn more.

ⓘ You are creating a fork in your personal account.

Create fork

Step 2: Clone the Fork

2.1 Click on the **Code** button in the forked repository page

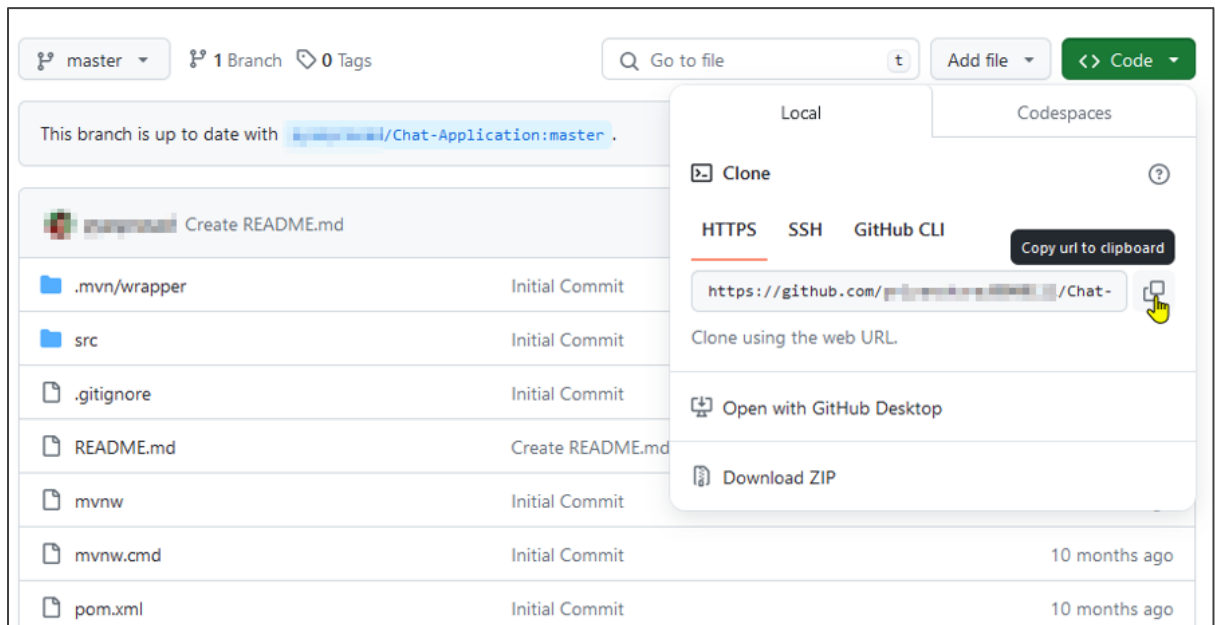| master ▾	⑂ 1 Branch ⬙ 0 Tags		Q Go to file	t	Add file ▾	<> Code ▾

This branch is up to date with /Chat-Application:master .

⇅ Contribute ▾   ⟳ Sync fork ▾

[icon] Create README.md   9c982ef · 10 months ago   ⏱ 2 Commits

| 📁 .mvn/wrapper | Initial Commit | 10 months ago |
| 📁 src | Initial Commit | 10 months ago |

2.2 Click on the copy icon to copy the **HTTPS URL** of the forked repository to clone it

2.3 Open the terminal tab on your lab and use the following command to clone the forked repository inside the local project directory:
git clone <URL>

Note: Replace the URL with the copied HTTPS URL from the repository

Step 3: Sync the fork with the original repository

3.1 Navigate to the directory where the fork has been cloned using the following command in the terminal:
cd Chat-Application

3.2 Run the following command to view the configured remote repository for your fork:
git remote -v

```
priyanshurajsim@ip-172-31-28-201:~/Pyas/Chat-Application$ git remote -v
origin  https://github.com/priyanshuraj0000111/Chat-Application.git (fetch)
origin  https://github.com/priyanshuraj0000111/Chat-Application.git (push)
priyanshurajsim@ip-172-31-28-201:~/Pyas/Chat-Application$
```

3.3 Add the original repository as a remote upstream using the following command:
git remote add upstream <URL>

```
priyanshurajsim@ip-172-31-28-201:~/Pyas/Chat-Application$ git remote add upstream https://github.com/priyanshuraj0000111/Chat-Application.git
t
```

Note: Replace the URL with the copied URL from the repository

3.4 Execute the following command to verify the new upstream repository:
git remote -v

```
priyanshurajsim@ip-172-31-28-201:~/Pyas/Chat-Application$ git remote -v
origin    https://github.com/priyanshuraj0000111/Chat-Application.git (fetch)
origin    https://github.com/priyanshuraj0000111/Chat-Application.git (push)
upstream       https://github.com/priyanshuraj0000111/Chat-Application.git (fetch)
upstream       https://github.com/priyanshuraj0000111/Chat-Application.git (push)
priyanshurajsim@ip-172-31-28-201:~/Pyas/Chat-Application$
```

Step 4: Push changes to the GitHub fork

4.1 After making changes in the local code repository, execute the following command to push the changes to your GitHub fork:
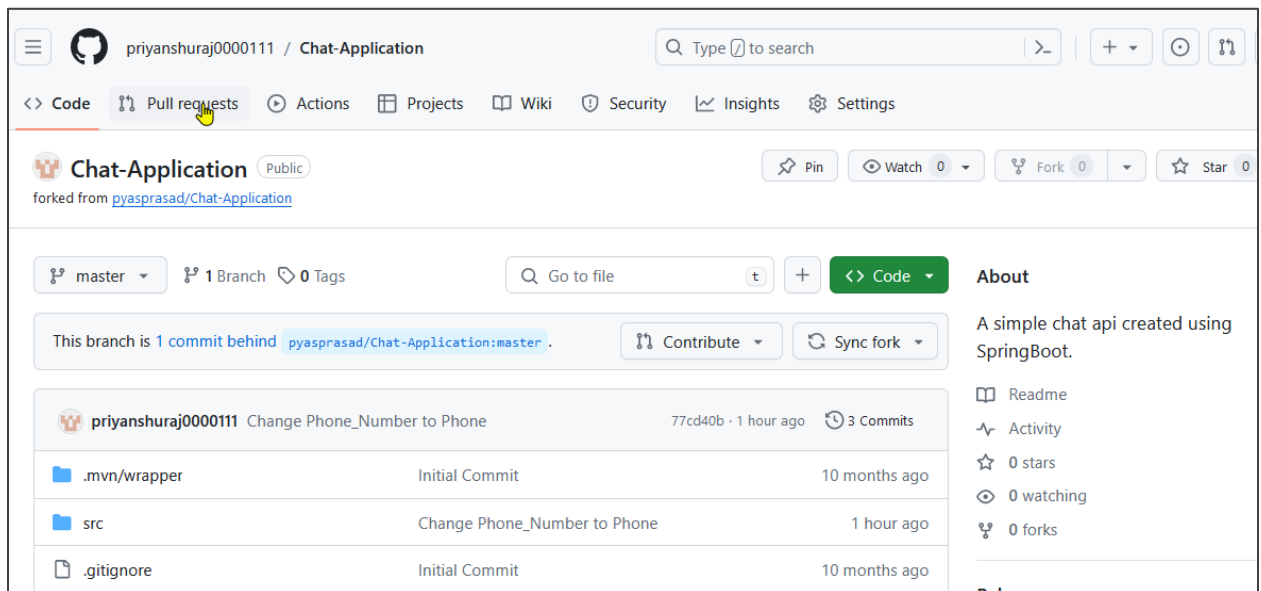**git push**

```
priyanshurajsim@ip-172-31-28-201:~/Pyas/Chat-Application$ git push
Username for 'https://github.com': priyanshuraj0000111
Password for 'https://priyanshuraj0000111@github.com':
Everything up-to-date
priyanshurajsim@ip-172-31-28-201:~/Pyas/Chat-Application$
```
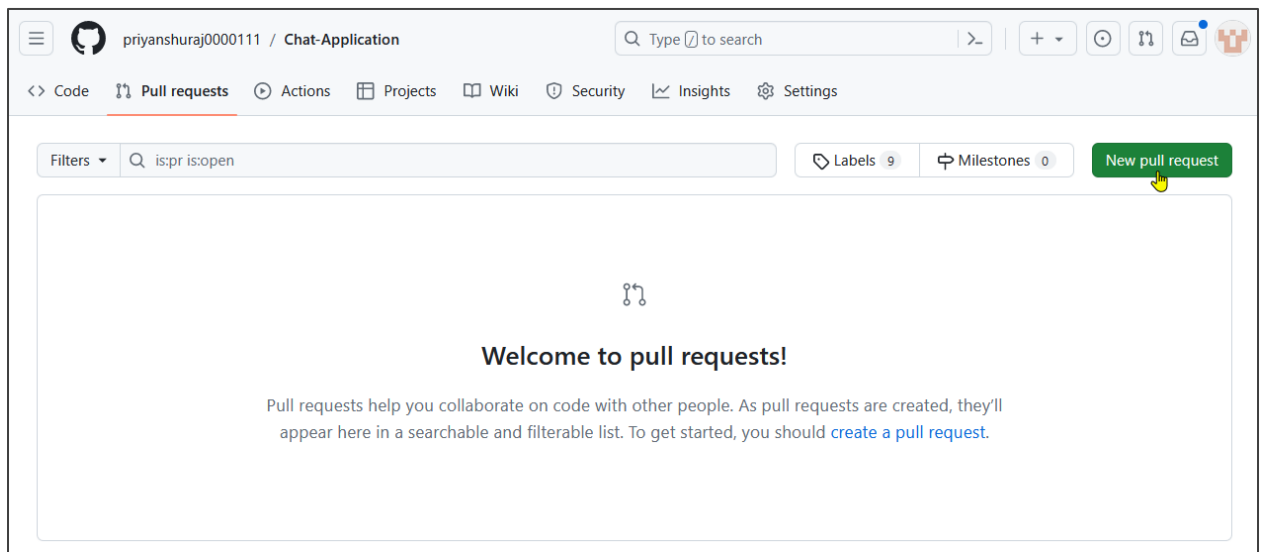
Note: After executing the Git push command, you will be asked to enter the username and password for your GitHub account.
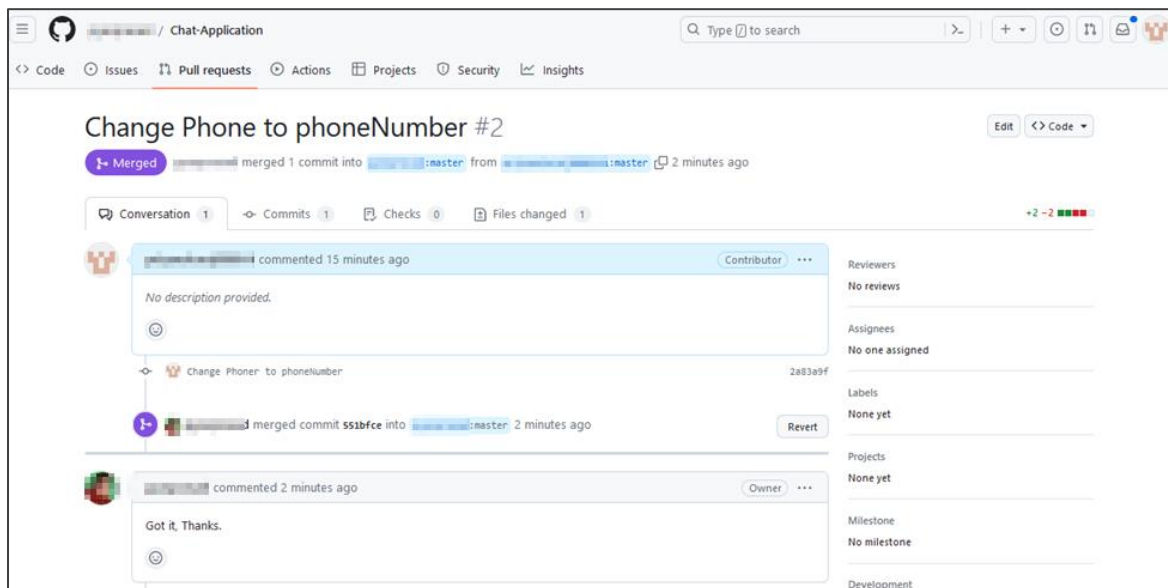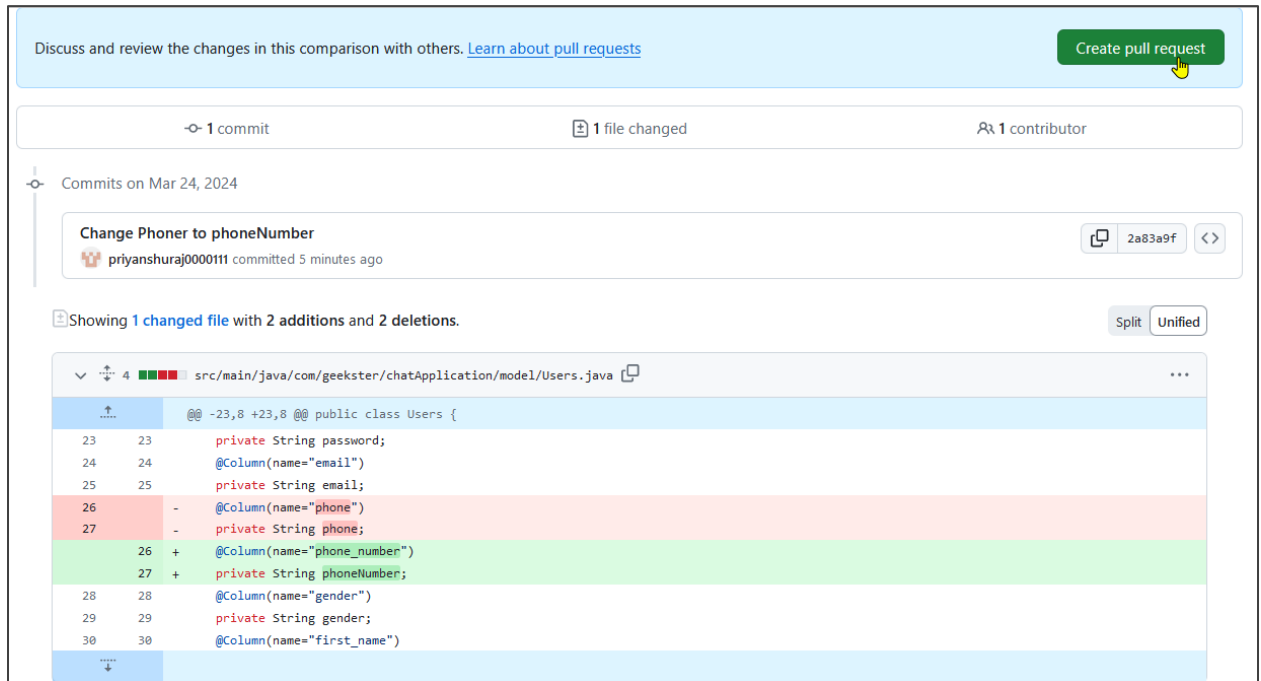
Step 5: Create a pull request

5.1 Click the **Pull requests** button on your GitHub fork's page

5.2 Click the **New pull request** button

5.3 Select the **Create pull request** button and resolve the merge comments

By following these steps, you have successfully created a pull request for merging the local changes into a remote Git repository.