Practice Project: Part 1 - GitHub UI

Estimated Time: 30 minutes

Overview

In this lab you will start your journey with the GitHub implemention for your organisation by creating a repository in your GitHub account and then initialising the repository with a README.md file and a License. Following this, you'll update the README file to include a Code of Conduct and Contribution Guidelines markdown files. After making these changes, you'll commit the files to your repository.

Next, you'll create a new branch and add code for Shipping logistics calculation. To wrap up, you'll merge this branch into the main branch using a Pull Request.

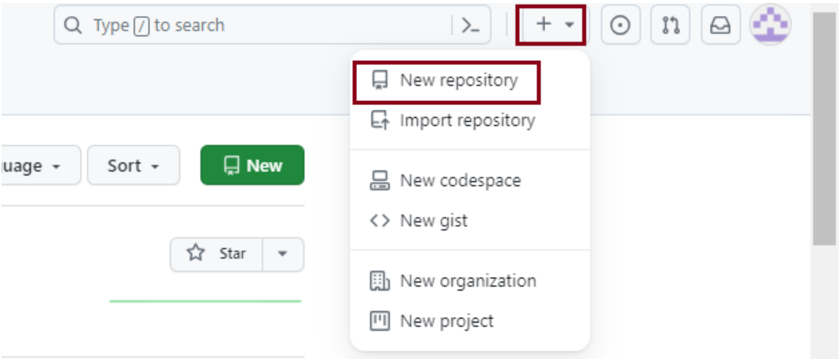
Objectives

After completing this lab, you will have demonstrated that you can:

1. Create a repository with a README.md file and a license.
2. Update the existing files.
3. Commit the files to your repository.
4. Create a new branch and add files to it.
5. Merge this branch to the main branch using a Pull Request.

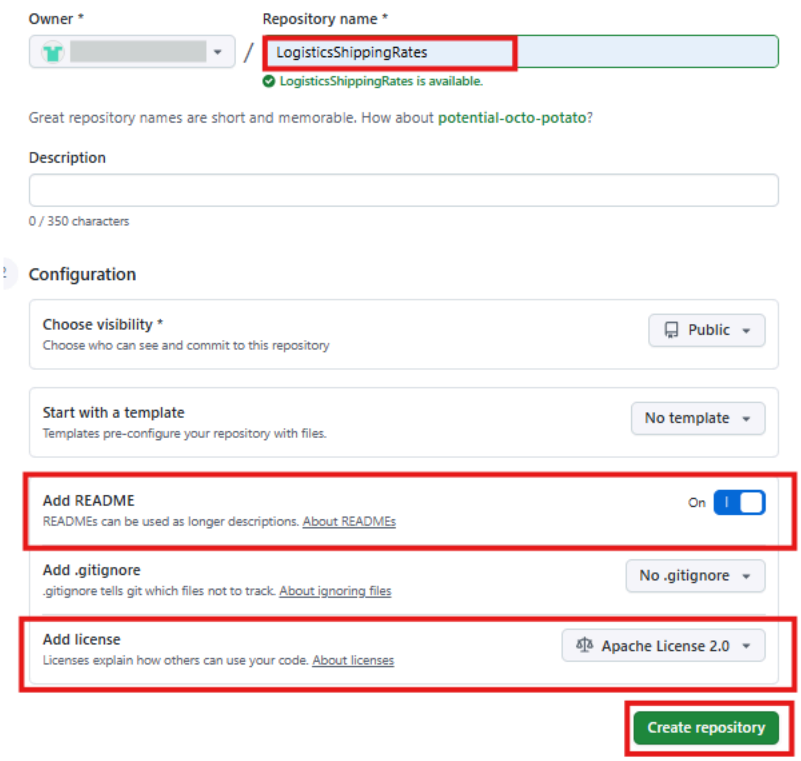
Task 1: Create a repository with a README file and a license.

1. At the top right of the GitHub home page, click on the + icon and select `New repository`.



2. Create a new GitHub repository called `LogisticsShippingRates` and make sure that it is **Public**.

3. Select the **Add a README file** field. Click on the **Choose a license** field and select `Apache License 2.0` from the drop down. Finally, click on **Create repository**.



Owner * [redacted] / Repository name * LogisticsShippingRates

LogisticsShippingRates is available.

Great repository names are short and memorable. How about potential-octo-potato?

Description

0 / 350 characters

Configuration

Choose visibility * — Choose who can see and commit to this repository: Public

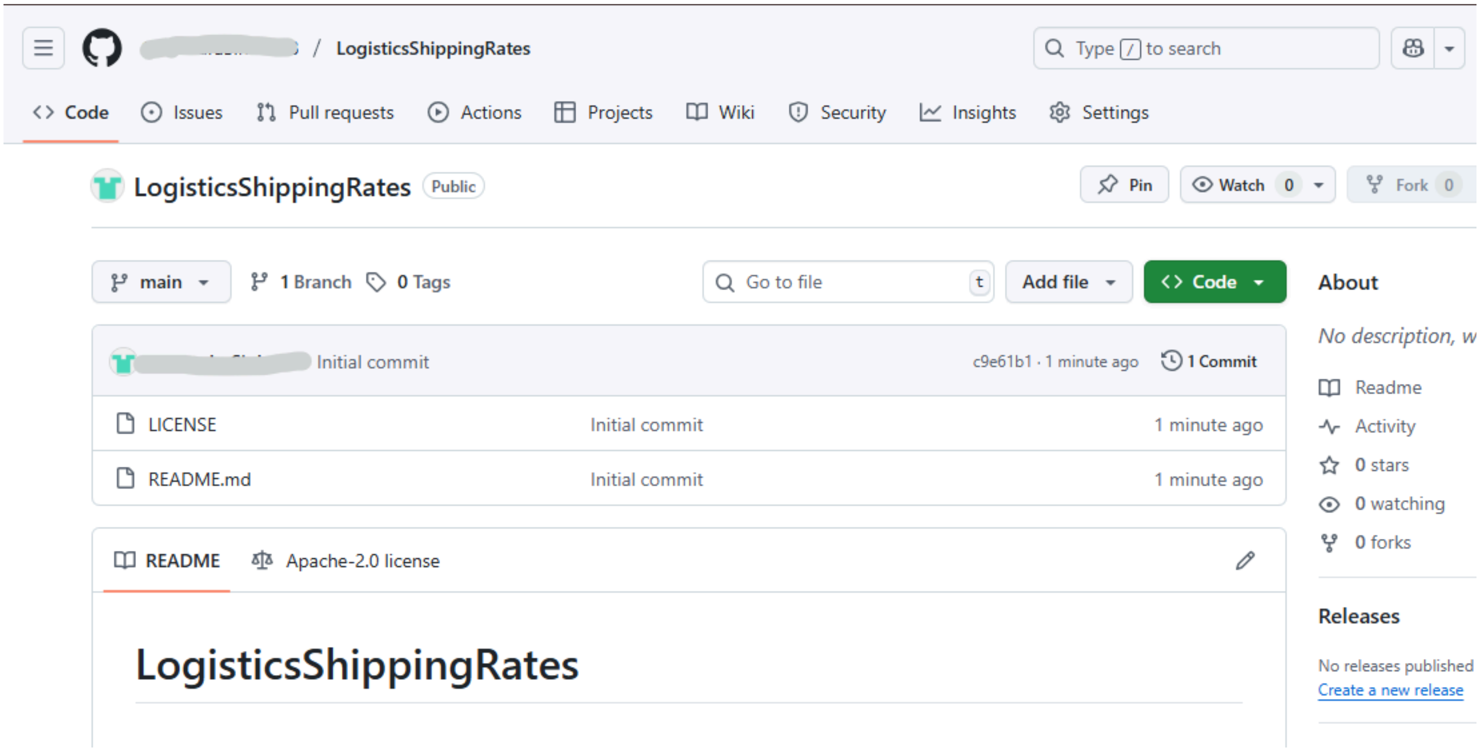
Start with a template — Templates pre-configure your repository with files.: No template

Add README — READMEs can be used as longer descriptions. About READMEs: On

Add .gitignore — .gitignore tells git which files not to track. About ignoring files: No .gitignore

Add license — Licenses explain how others can use your code. About licenses: Apache License 2.0

4. After successfully creating a new repo, you will see the following screenshot.



[redacted] / LogisticsShippingRates

LogisticsShippingRates Public

main · 1 Branch · 0 Tags

[redacted] Initial commit · c9e61b1 · 1 minute ago · 1 Commit

LICENSE	Initial commit	1 minute ago
README.md	Initial commit	1 minute ago

README · Apache-2.0 license

LogisticsShippingRates

About: No description, w

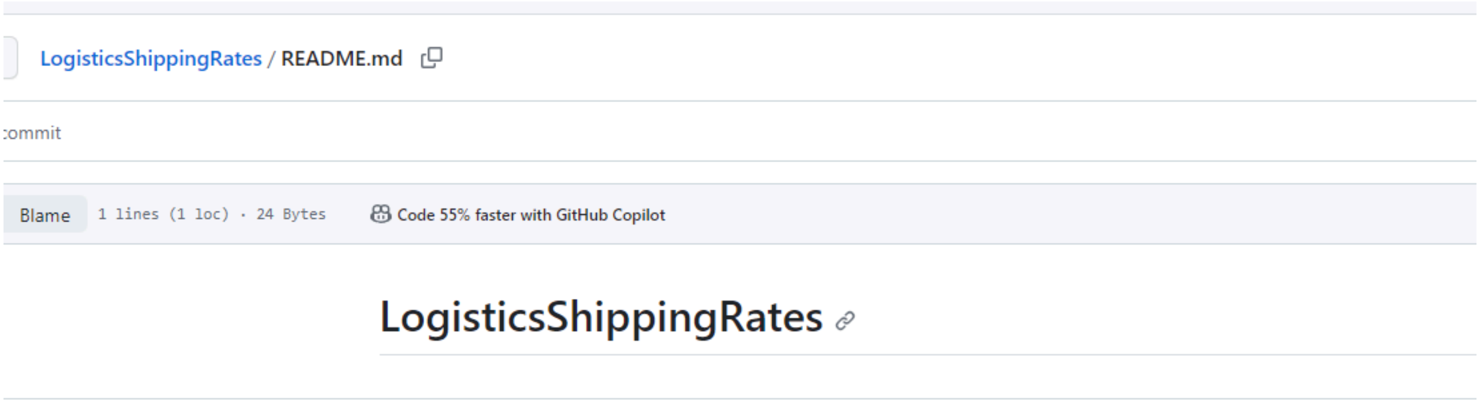
Readme · Activity · 0 stars · 0 watching · 0 forks

Releases: No releases published · Create a new release

Your repository is created and includes the README and LICENSE files. Now, you are ready to update your repository files to include useful information for your community.

Task 2: Update the README file.

1. Click on `README.md` file to open it and click the pencil icon to edit it.

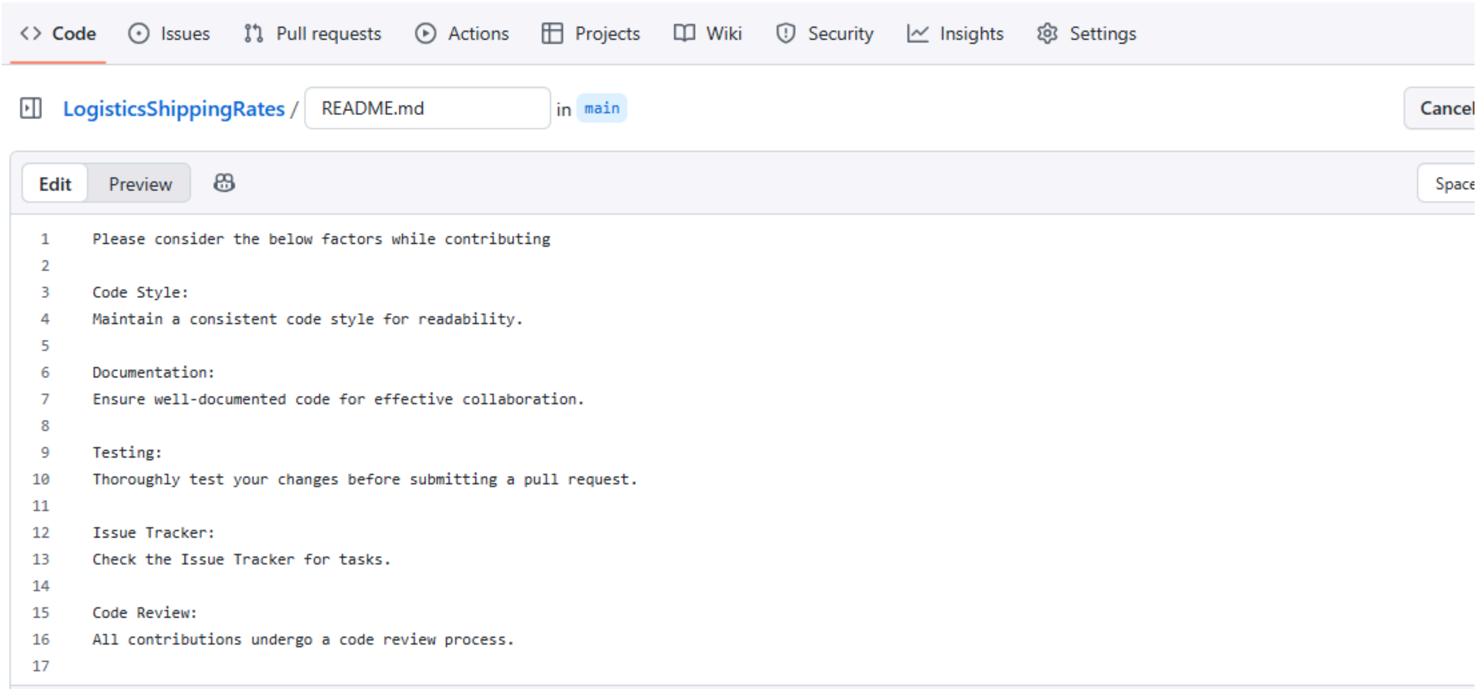

LogisticsShippingRates / README.md
commit
Blame
1 lines (1 loc) · 24 Bytes
Code 55% faster with GitHub Copilot

LogisticsShippingRates

2. Add the following information to the file:

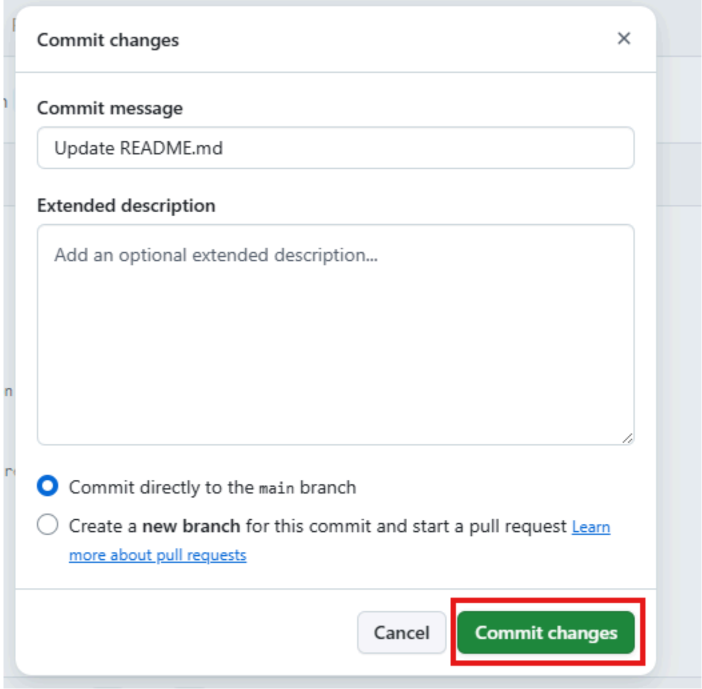
```
Please consider the below factors while contributing
Code Style:
Maintain a consistent code style for readability.
Documentation:
Ensure well-documented code for effective collaboration.
Testing:
Thoroughly test your changes before submitting a pull request.
Issue Tracker:
Check the Issue Tracker for tasks.
Code Review:
All contributions undergo a code review process.
Licensing:
Contributions are licensed.
```

3. Now click on `Commit changes`

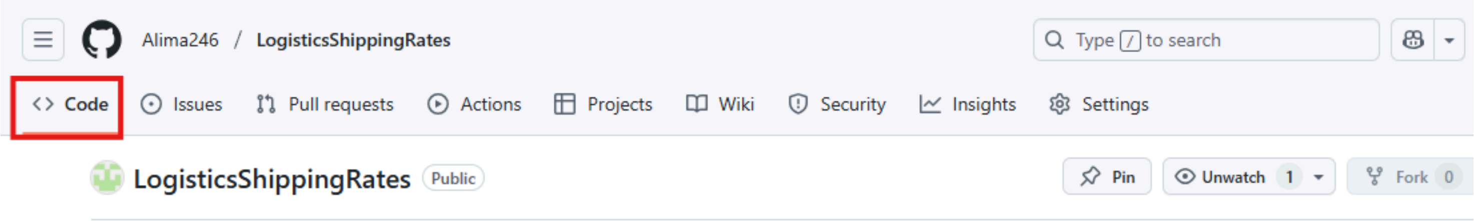


```
Please consider the below factors while contributing

Code Style:
Maintain a consistent code style for readability.

Documentation:
Ensure well-documented code for effective collaboration.

Testing:
Thoroughly test your changes before submitting a pull request.

Issue Tracker:
Check the Issue Tracker for tasks.

Code Review:
All contributions undergo a code review process.

```

4. Ensure that the radio button to **commit directly to the main branch** is selected. Add a commit message and click on `Commit Changes`


Commit changes
×
Commit message
Update README.md
Extended description
Add an optional extended description...
● Commit directly to the main branch
○ Create a new branch for this commit and start a pull request Learn more about pull requests
Cancel
Commit changes

NOTE: After completing the steps in each of the tasks, if you are unable to see the options depicted in the provided screenshots, click on the `Code` option as highlighted in below screenshot:

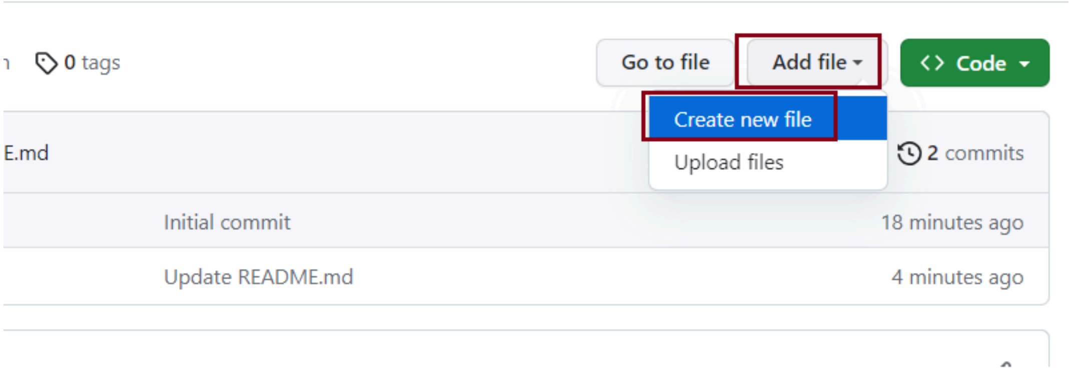


Task 3: Add a code of conduct.

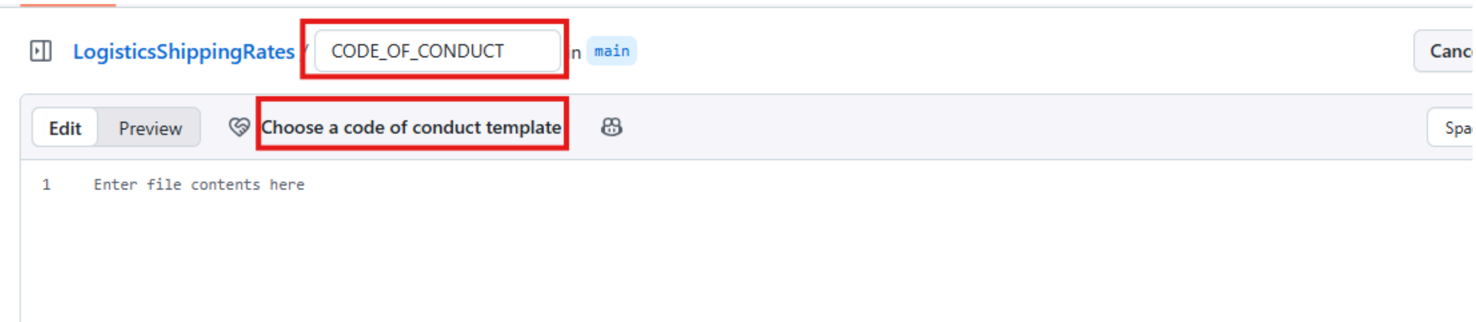
A code of conduct helps set ground rules for the behavior of your project's participants. It defines standards for how to engage in a community.

GitHub provides templates for common codes of conduct to help you quickly add one to your project.

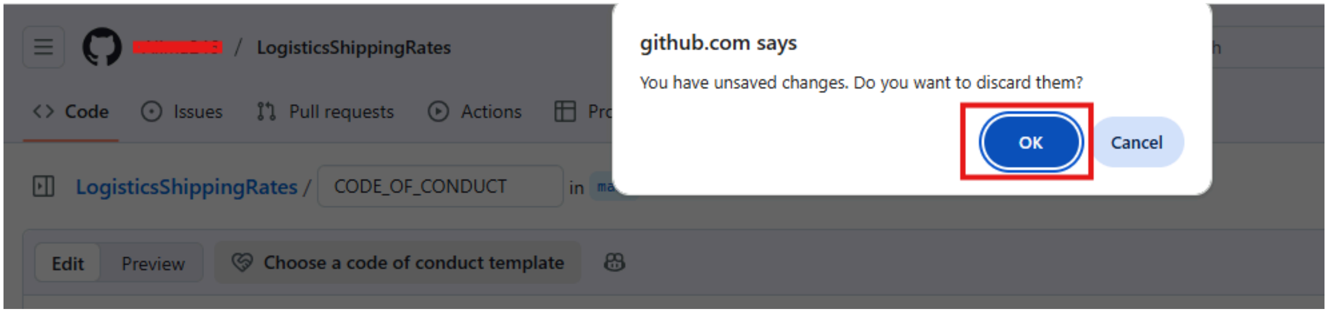
1. To create a new file click on **Add file** and then `Create New File`.



2. Add a new file named `CODE_OF_CONDUCT.md` to the root folder of the repository. The **Choose a code of conduct template** button is displayed.


LogisticsShippingRates / CODE_OF_CONDUCT in main
Canc
Edit
Preview
Choose a code of conduct template
Spa
1 Enter file contents here

3. Click the **Choose a code of conduct template** button. You will see a popup mentioning you may lose unsaved changes. Click on `OK`.


[redacted] / LogisticsShippingRates
Code
Issues
Pull requests
Actions
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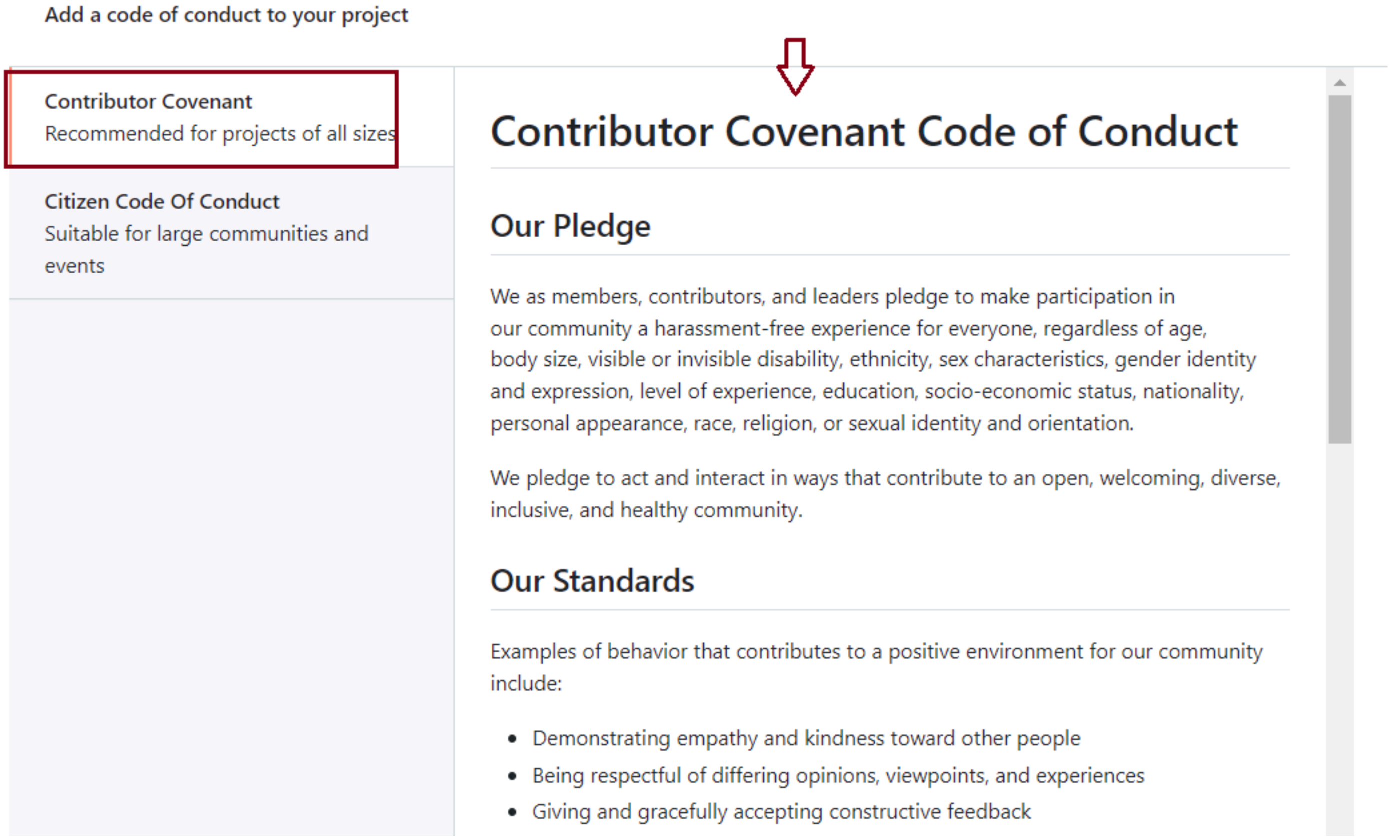
LogisticsShippingRates / CODE_OF_CONDUCT in ma
Edit
Preview
Choose a code of conduct template
OK
Cancel

github.com says

You have unsaved changes. Do you want to discard them?

4. Click on `Contributor Covenant` to load this template. Then click `Review and submit` to add the file to your project.


Add a code of conduct to your project
Contributor Covenant
Recommended for projects of all sizes
Citizen Code Of Conduct
Suitable for large communities and events

Contributor Covenant Code of Conduct

Our Pledge

We as members, contributors, and leaders pledge to make participation in our community a harassment-free experience for everyone, regardless of age, body size, visible or invisible disability, ethnicity, sex characteristics, gender identity and expression, level of experience, education, socio-economic status, nationality, personal appearance, race, religion, or sexual identity and orientation.

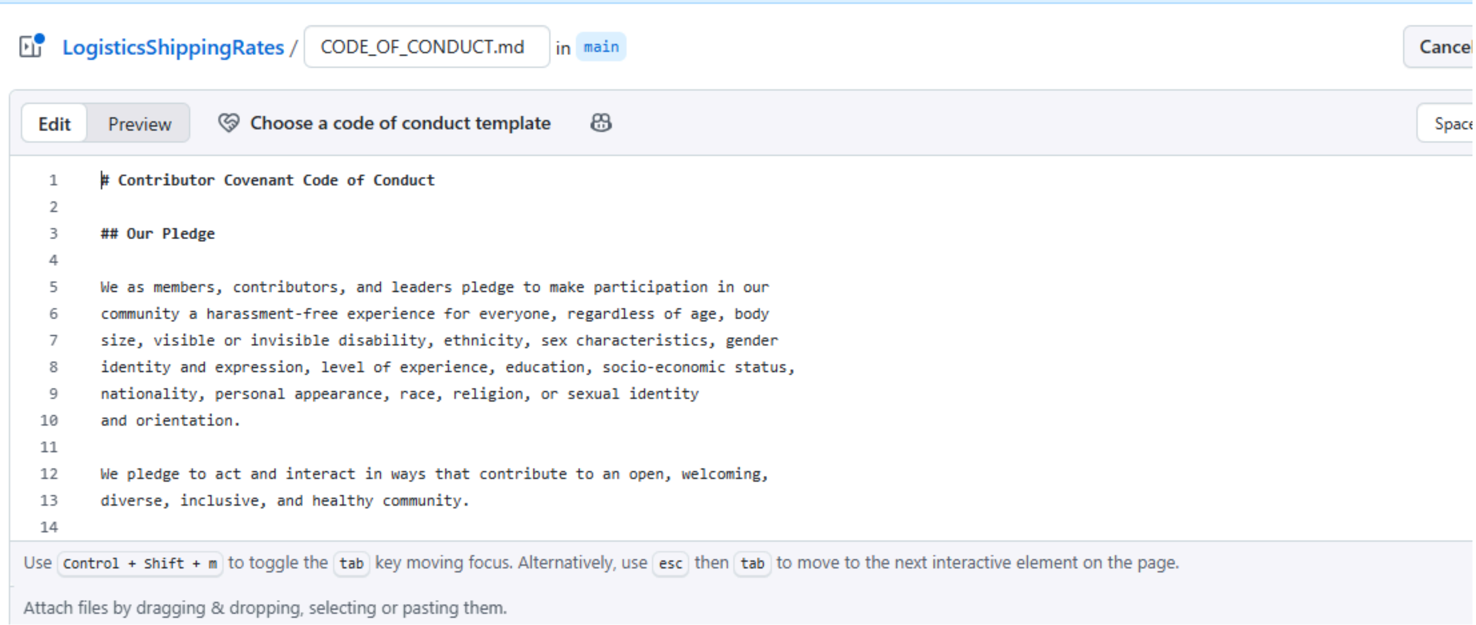
We pledge to act and interact in ways that contribute to an open, welcoming, diverse, inclusive, and healthy community.

Our Standards

Examples of behavior that contributes to a positive environment for our community include:

- Demonstrating empathy and kindness toward other people
- Being respectful of differing opinions, viewpoints, and experiences
- Giving and gracefully accepting constructive feedback

5. Scroll down the page to read the content. Click on `Commit changes`.

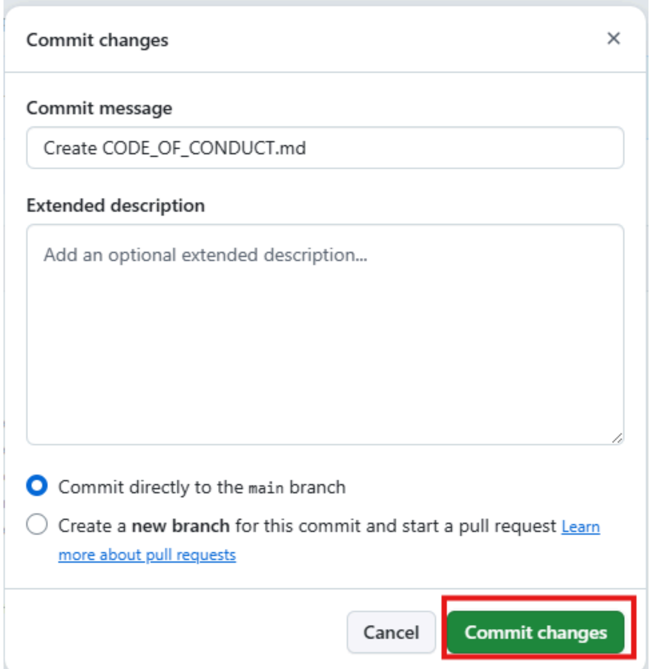

LogisticsShippingRates / CODE_OF_CONDUCT.md in main
Cance
Edit
Preview
Choose a code of conduct template
Space

```
# Contributor Covenant Code of Conduct

## Our Pledge

We as members, contributors, and leaders pledge to make participation in our
community a harassment-free experience for everyone, regardless of age, body
size, visible or invisible disability, ethnicity, sex characteristics, gender
identity and expression, level of experience, education, socio-economic status,
nationality, personal appearance, race, religion, or sexual identity
and orientation.

We pledge to act and interact in ways that contribute to an open, welcoming,
diverse, inclusive, and healthy community.

```

Use `Control + Shift + m` to toggle the `tab` key moving focus. Alternatively, use `esc` then `tab` to move to the next interactive element on the page.

Attach files by dragging & dropping, selecting or pasting them.

6. Ensure that the radio button to **Commit directly to the main branch** is selected and click `Commit changes`.



Commit message

Create CODE_OF_CONDUCT.md

Extended description

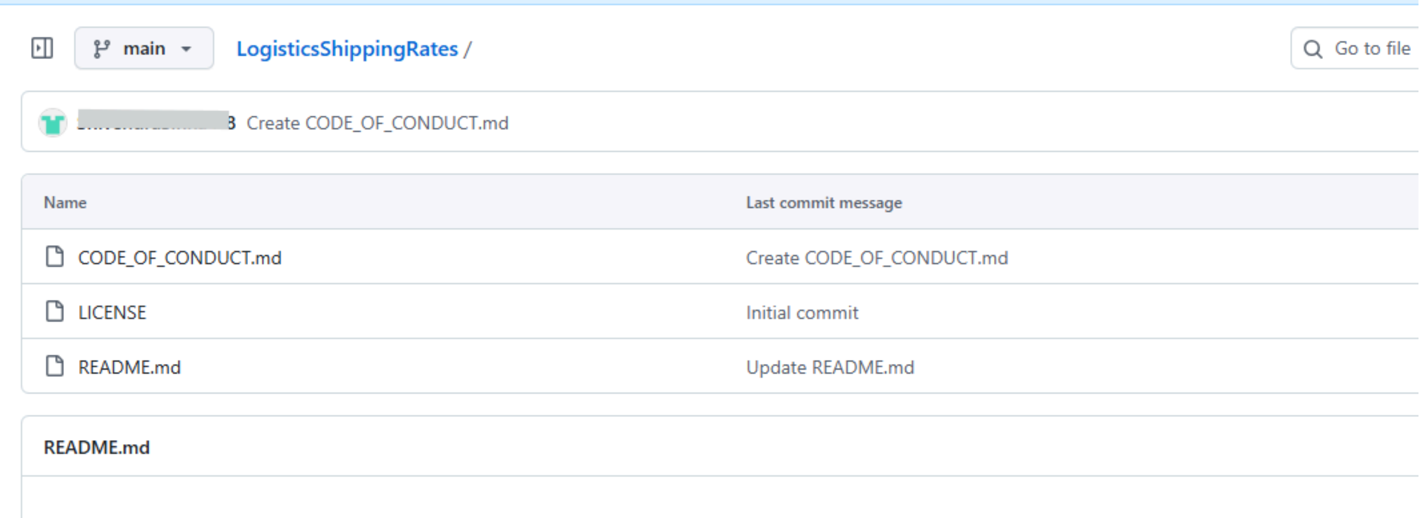
Add an optional extended description...

● Commit directly to the `main` branch

○ Create a **new branch** for this commit and start a pull request Learn more about pull requests

If the page is zoomed in, you may see only the **Commit changes** button and not the radio button. Zoom out or scroll down to see the radio button.

7. Your project now contains a code of conduct.



[redacted] Create CODE_OF_CONDUCT.md

Name	Last commit message
CODE_OF_CONDUCT.md	Create CODE_OF_CONDUCT.md
LICENSE	Initial commit
README.md	Update README.md

README.md

Task 4: Establish contribution guidelines.

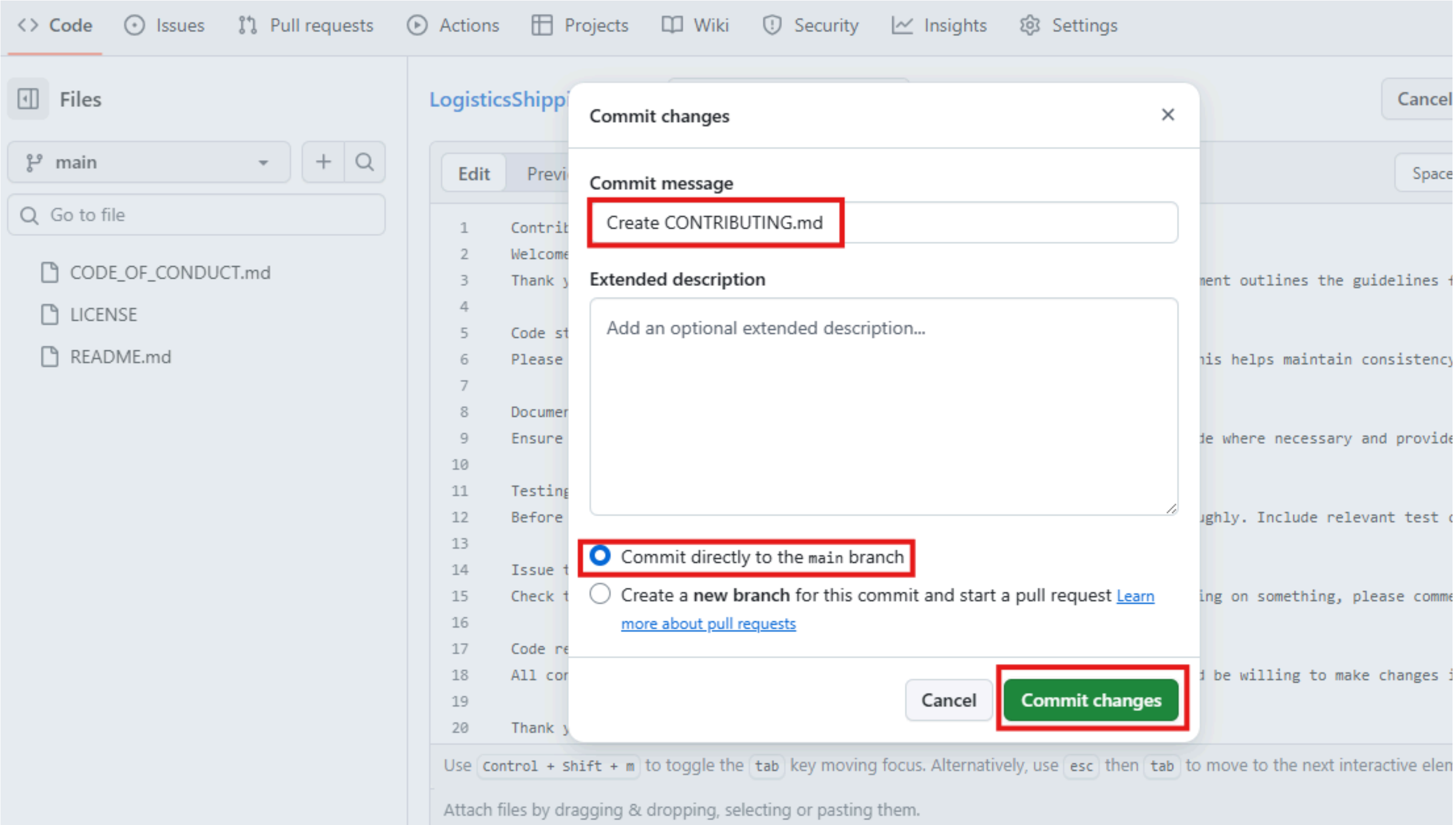
Contribution guidelines provide clear instructions for individuals looking to contribute to the project. To implement these guidelines, please follow these steps:

1. Create a new file in the repository's root directory and name it `CONTRIBUTING.md`.

2. Inside the file, include the following information:

```
Contribution guidelines
Welcome Contributors!
Thank you for considering contributing to the centralized repository. This document outlines the guidelines for contributing to the deve
Code style
Please follow the coding style and conventions used in the existing codebase. This helps maintain consistency across the project.
Documentation
Ensure that your contributions are well-documented. Include comments in your code where necessary and provide a clear and concise descri
Testing
Before submitting a pull request, make sure your changes have been tested thoroughly. Include relevant test cases and ensure that existi
Issue tracker
Check the issue tracker for any open issues or feature requests. If you're working on something, please comment on the issue to let othe
Code review
All contributions will go through a code review process. Be open to feedback and be willing to make changes if necessary. Code reviews h
Thank you for your contribution!
```

3. Commit this file to your repository.



Commit changes

Commit message

Create CONTRIBUTING.md

Extended description

Add an optional extended description...

● Commit directly to the `main` branch

○ Create a **new branch** for this commit and start a pull request Learn more about pull requests

Cancel | Commit changes

```
Contrib
Welcome
Thank y                                          ment outlines the guidelines f

Code st
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Testing
Before                                           ughly. Include relevant test c

Issue t
Check t                                          ing on something, please comme

Code re
All cor                                          d be willing to make changes i

Thank y
```
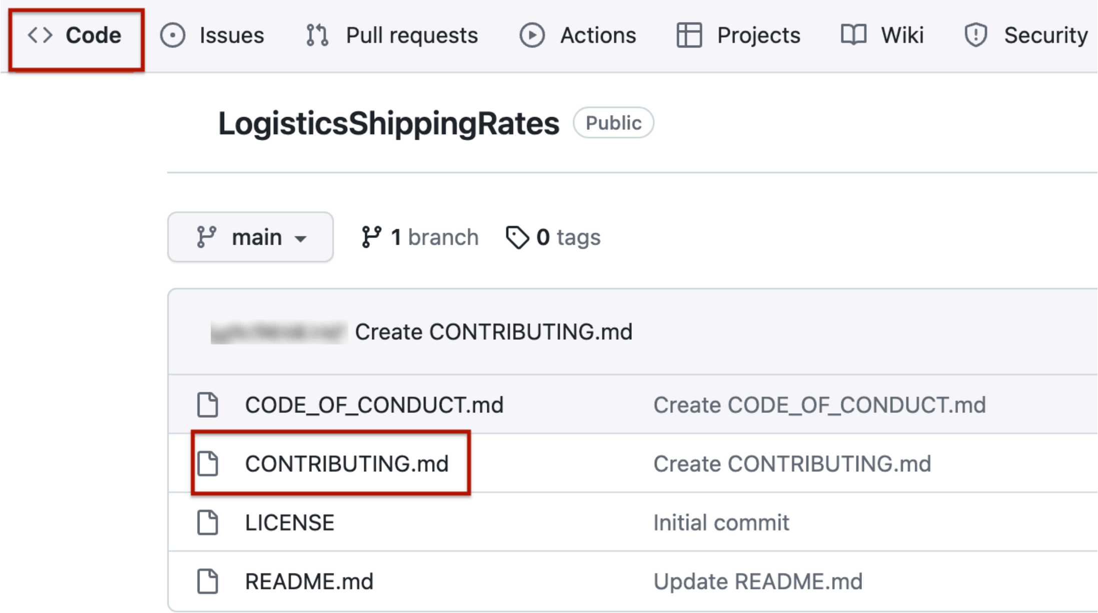

Use `Control + Shift + m` to toggle the `tab` key moving focus. Alternatively, use `esc` then `tab` to move to the next interactive elem

Attach files by dragging & dropping, selecting or pasting them.

4. Click on `Code` to go to the repository home page.



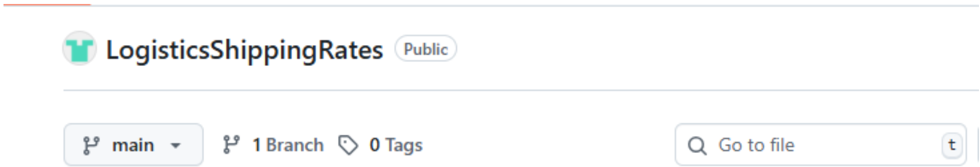
[redacted] Create CONTRIBUTING.md

CODE_OF_CONDUCT.md	Create CODE_OF_CONDUCT.md
CONTRIBUTING.md	Create CONTRIBUTING.md
LICENSE	Initial commit
README.md	Update README.md

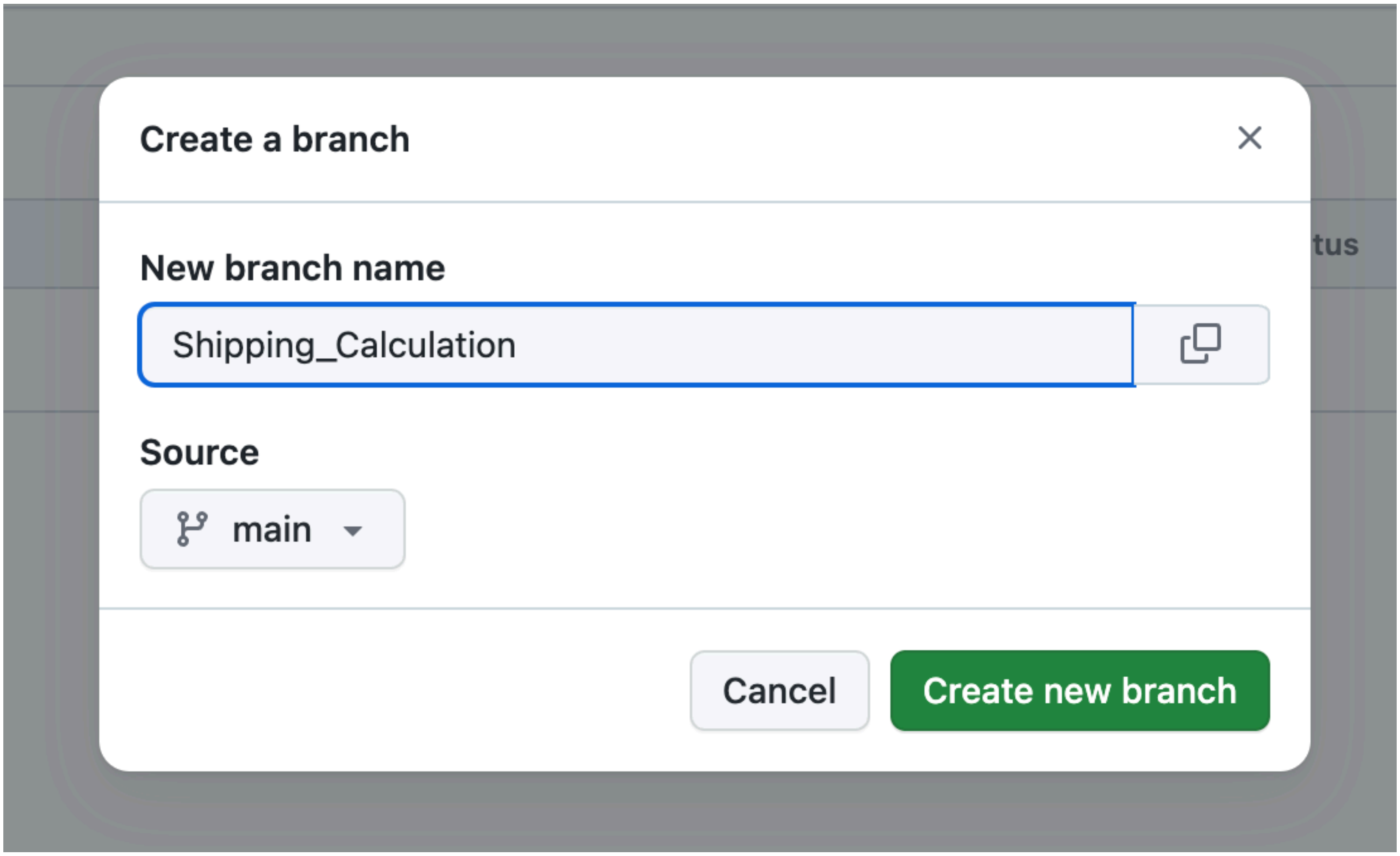
Your project now contains Contribution Guidelines as well.

Task 5: Create a new branch.

1. Click on `branch` in your repository.



2. Now, click on `New Branch` and enter the branch name as `Shipping_Calculation`, then click `Create New Branch`



Create a branch

New branch name

Shipping_Calculation

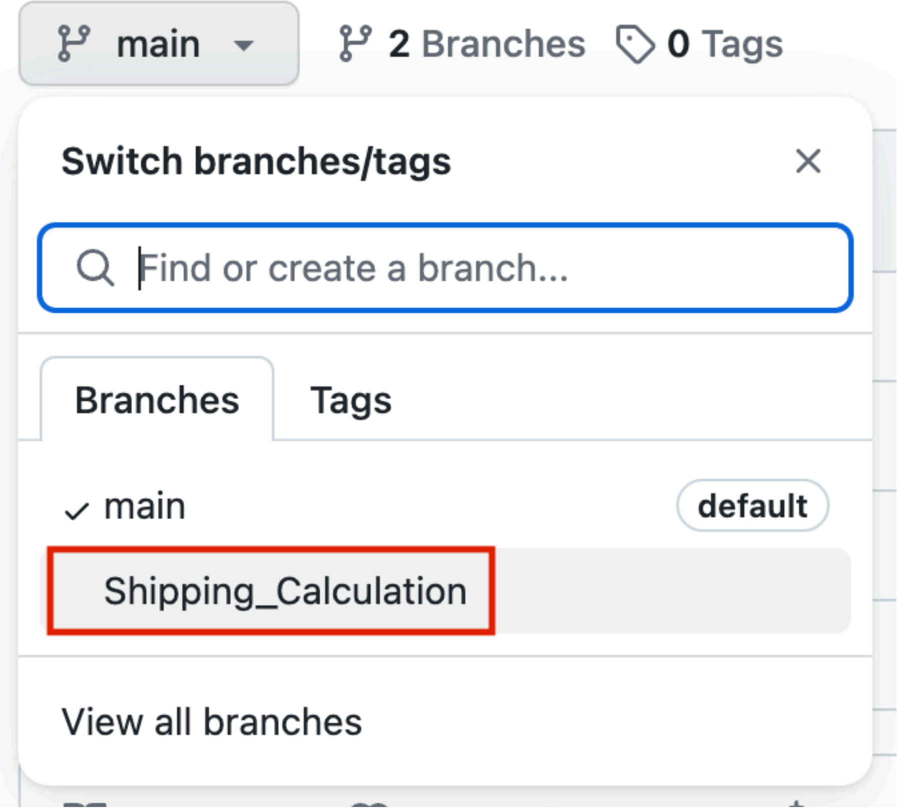
Source

main

This will be used for adding your Shipping Calculation code.

Task 6: Add the Shipping Calculation code in this branch.

1. Change to the `Shipping_Calculation` branch by selecting it from the dropdown.

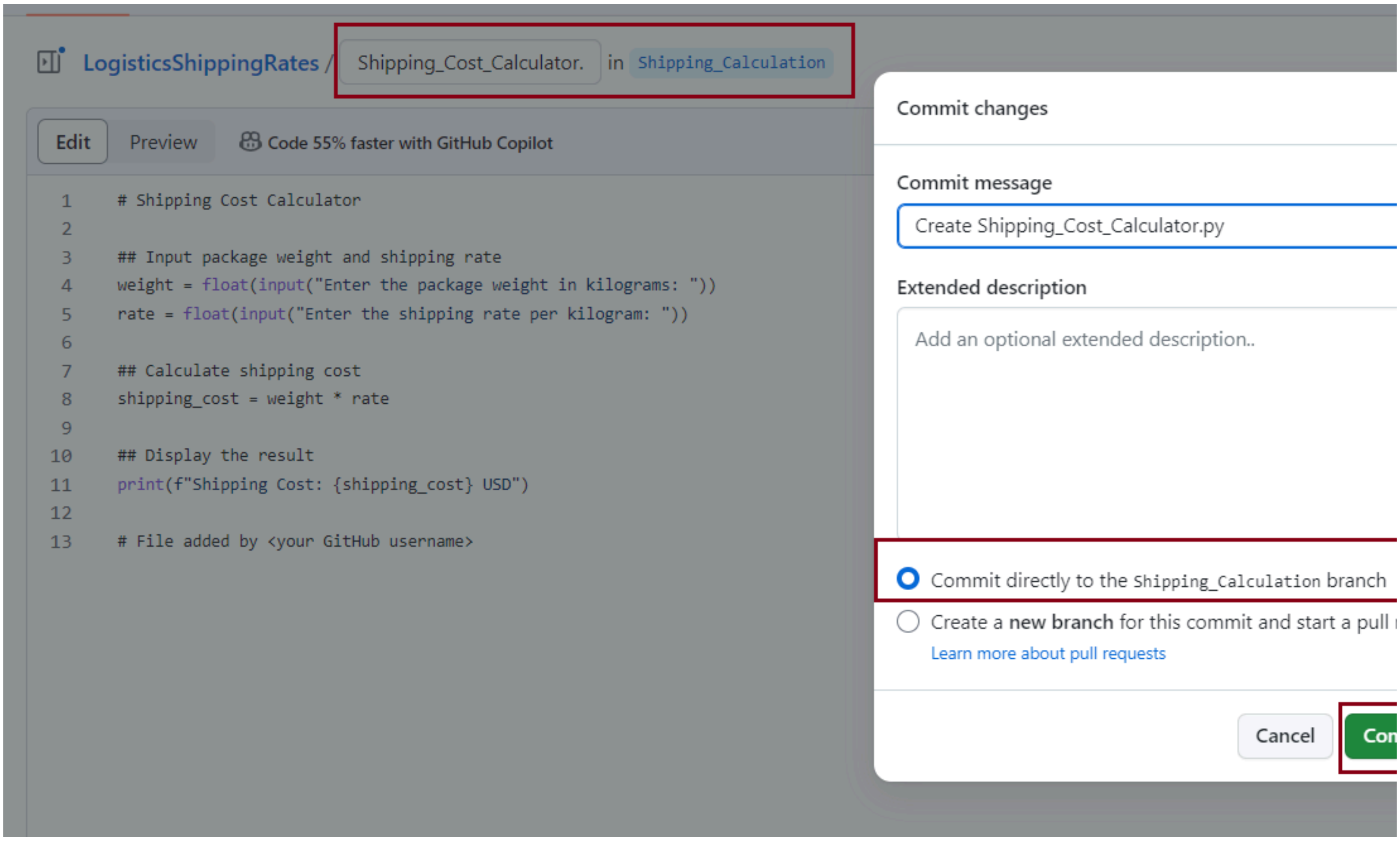


2. Create a new file named `Shipping_Cost_Calculator.py`.

3. Add the following code in the new file:

```
# Shipping Cost Calculator
## Input package weight and shipping rate
weight = float(input("Enter the package weight in kilograms: "))
rate = float(input("Enter the shipping rate per kilogram: "))
## Calculate shipping cost
shipping_cost = weight * rate
## Display the result
print(f"Shipping Cost: {shipping_cost} USD")
```

4. Ensure that the radio button to **Commit directly to the Shipping_Calculation branch** is selected and click `Commit changes`.



LogisticsShippingRates / Shipping_Cost_Calculator. in Shipping_Calculation
Edit
Preview
Code 55% faster with GitHub Copilot

```
# Shipping Cost Calculator

## Input package weight and shipping rate
weight = float(input("Enter the package weight in kilograms: "))
rate = float(input("Enter the shipping rate per kilogram: "))

## Calculate shipping cost
shipping_cost = weight * rate

## Display the result
print(f"Shipping Cost: {shipping_cost} USD")

# File added by <your GitHub username>
```

Commit changes

Commit message: Create Shipping_Cost_Calculator.py

Extended description: Add an optional extended description..

● Commit directly to the `Shipping_Calculation` branch

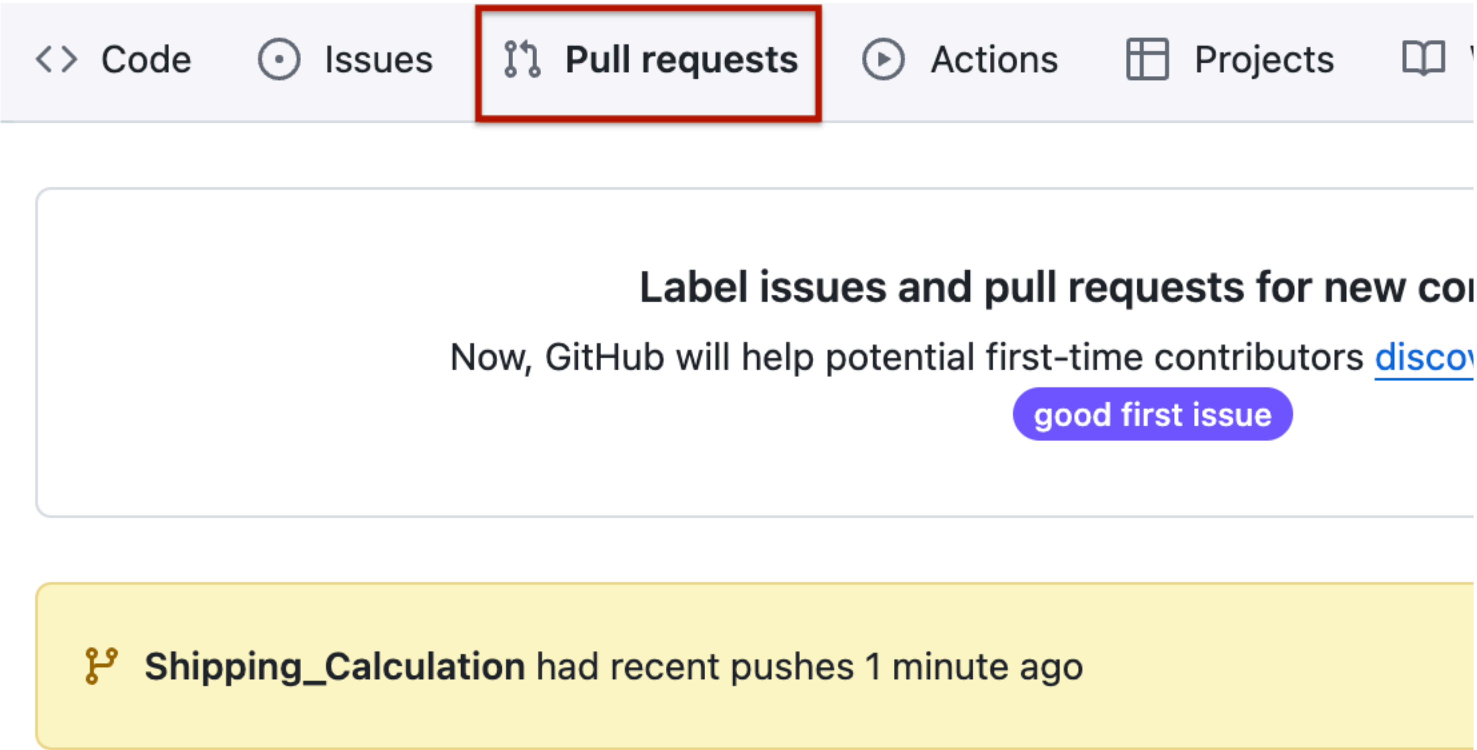
○ Create a **new branch** for this commit and start a pull

Learn more about pull requests

The `Shipping_Calculation` branch now contains the `Shipping_Cost_Calculator.py` file.

Task 7: Create a pull request to the main branch.

1. Go to the `Pull request` tab and click on `Compare & pull request`.

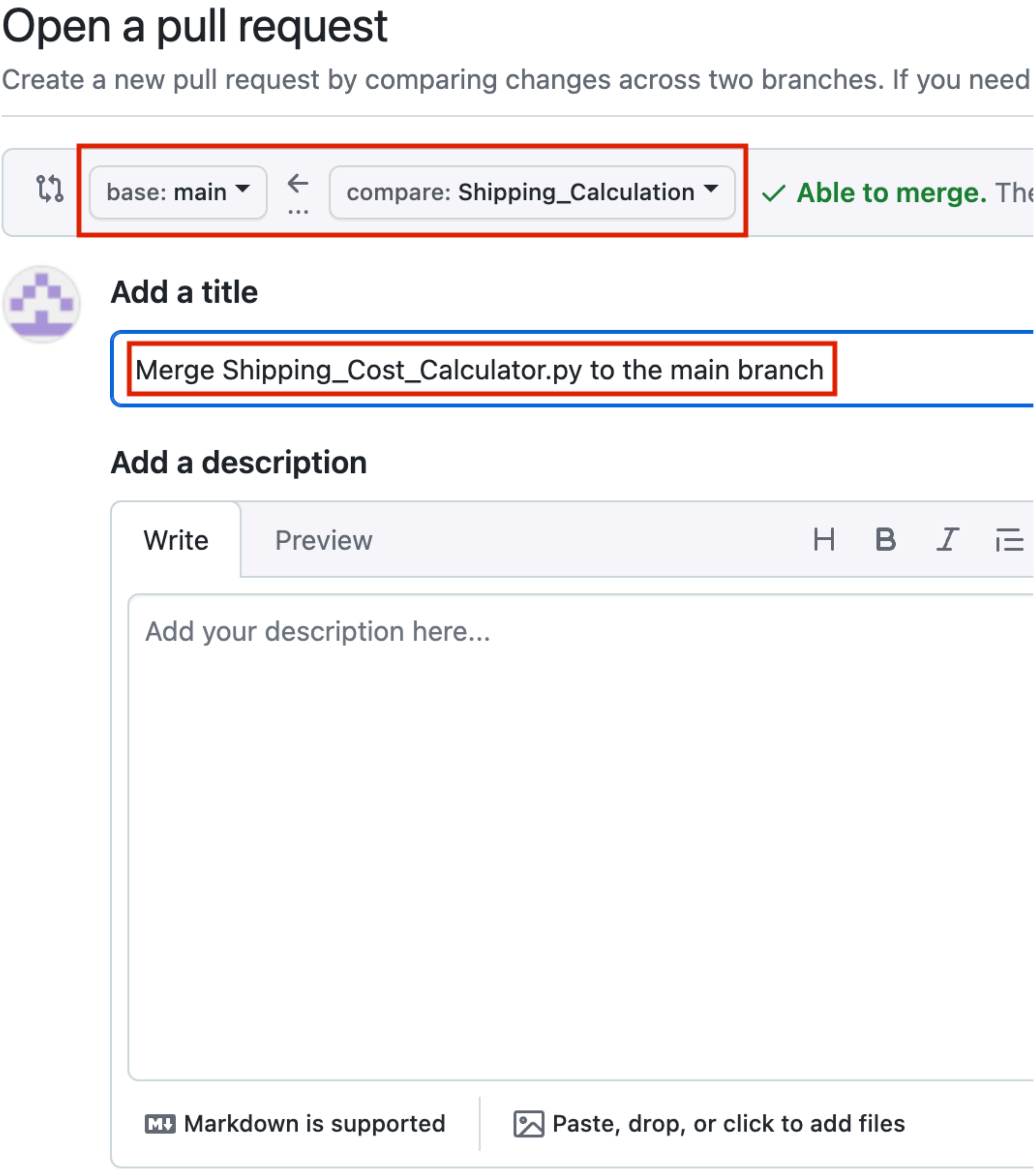


Label issues and pull requests for new co

Now, GitHub will help potential first-time contributors disco

Shipping_Calculation had recent pushes 1 minute ago

2. Add an appropriate commit message and click on `Create pull request`.



Open a pull request

Create a new pull request by comparing changes across two branches. If you need

base: main ← compare: Shipping_Calculation ✓ Able to merge. The

Add a title

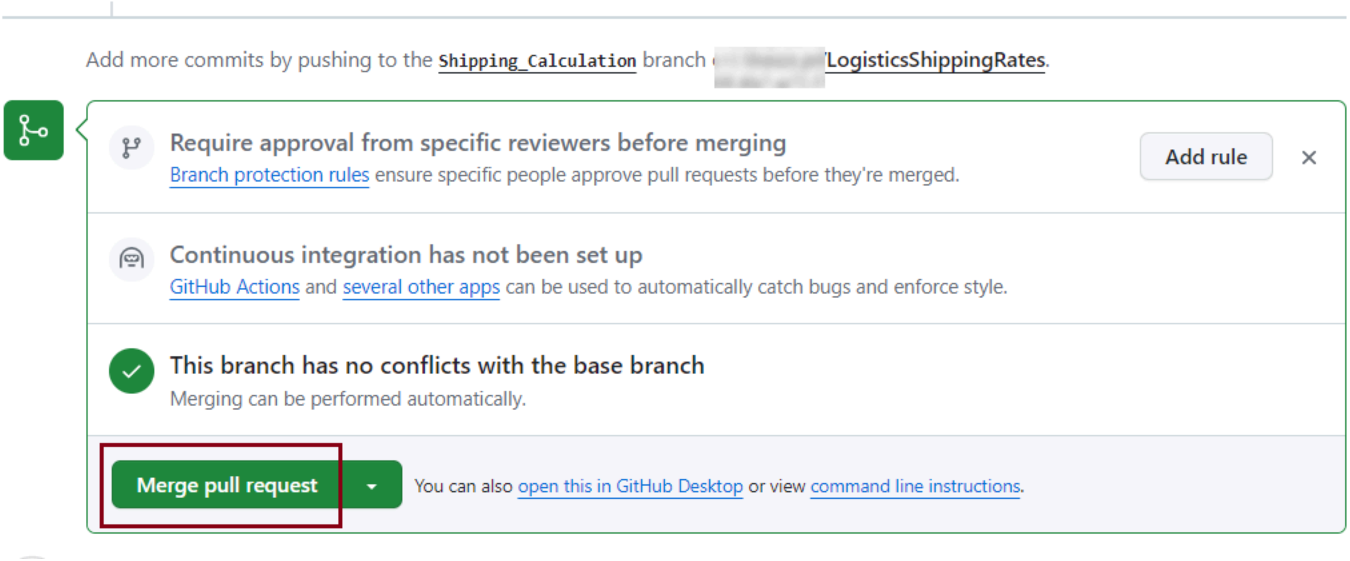
Merge Shipping_Cost_Calculator.py to the main branch

Add a description

Write
Preview
H
B
I
Add your description here...
Markdown is supported
Paste, drop, or click to add files

Task 8: Merge the branch to the main branch.

1. Click on `Merge pull request`.



Add more commits by pushing to the `Shipping_Calculation` branch [redacted]LogisticsShippingRates.

Require approval from specific reviewers before merging

Branch protection rules ensure specific people approve pull requests before they're merged.

Continuous integration has not been set up

GitHub Actions and several other apps can be used to automatically catch bugs and enforce style.

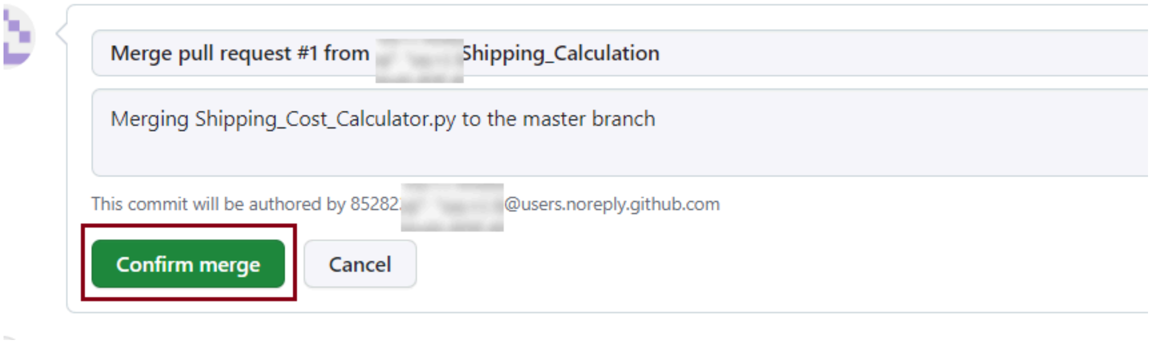
This branch has no conflicts with the base branch

Merging can be performed automatically.

You can also open this in GitHub Desktop or view command line instructions.

2. Click on `Confirm merge`.

3. The successfully merged changes will be shown in the Github UI as below:

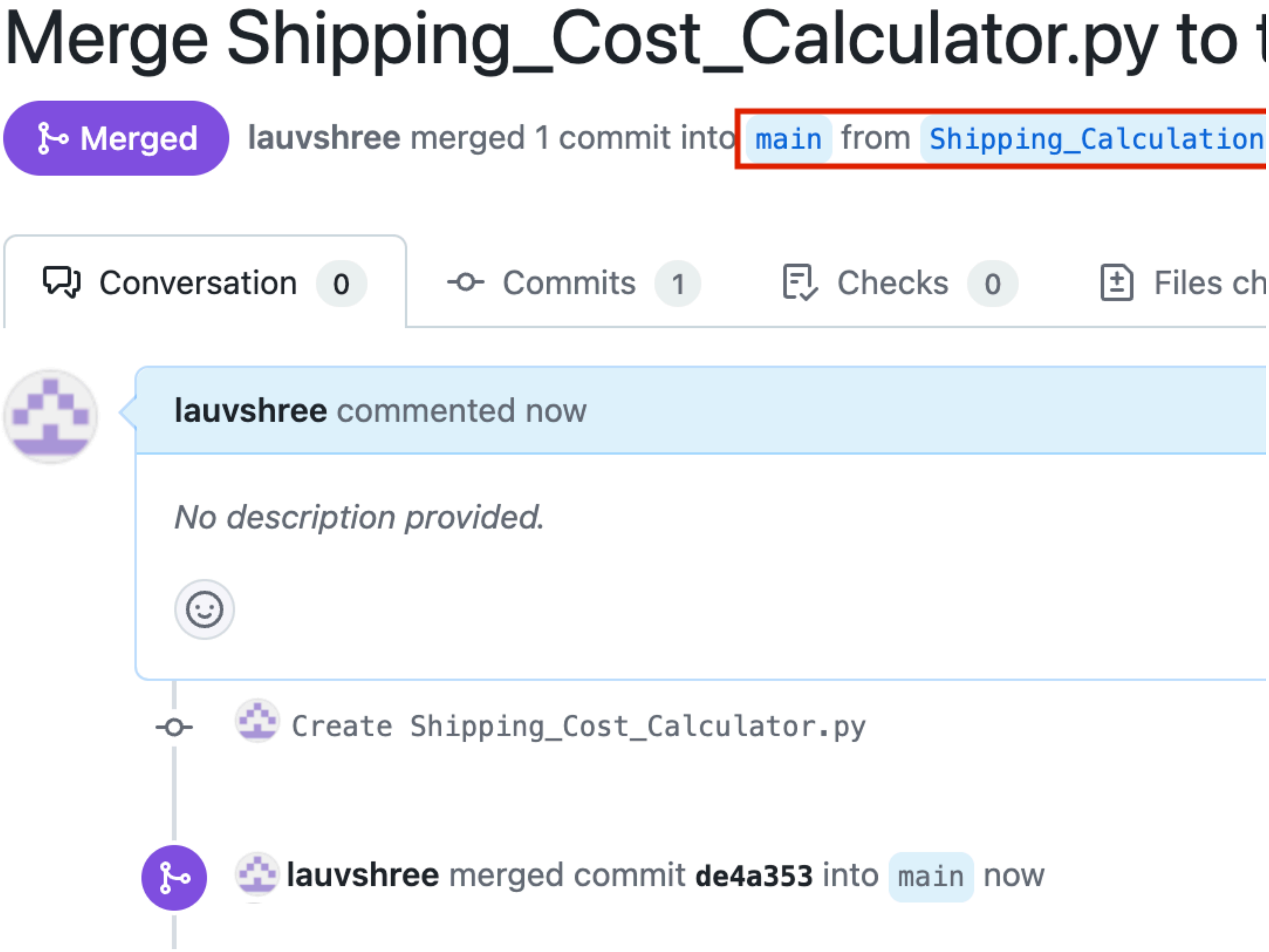


Merge pull request #1 from [redacted]Shipping_Calculation

Merging Shipping_Cost_Calculator.py to the master branch

This commit will be authored by 85282[redacted]@users.noreply.github.com

4. You will see the below message once the branch is merged.



Merge Shipping_Cost_Calculator.py to t

Merged lauvshree merged 1 commit into main from Shipping_Calculation

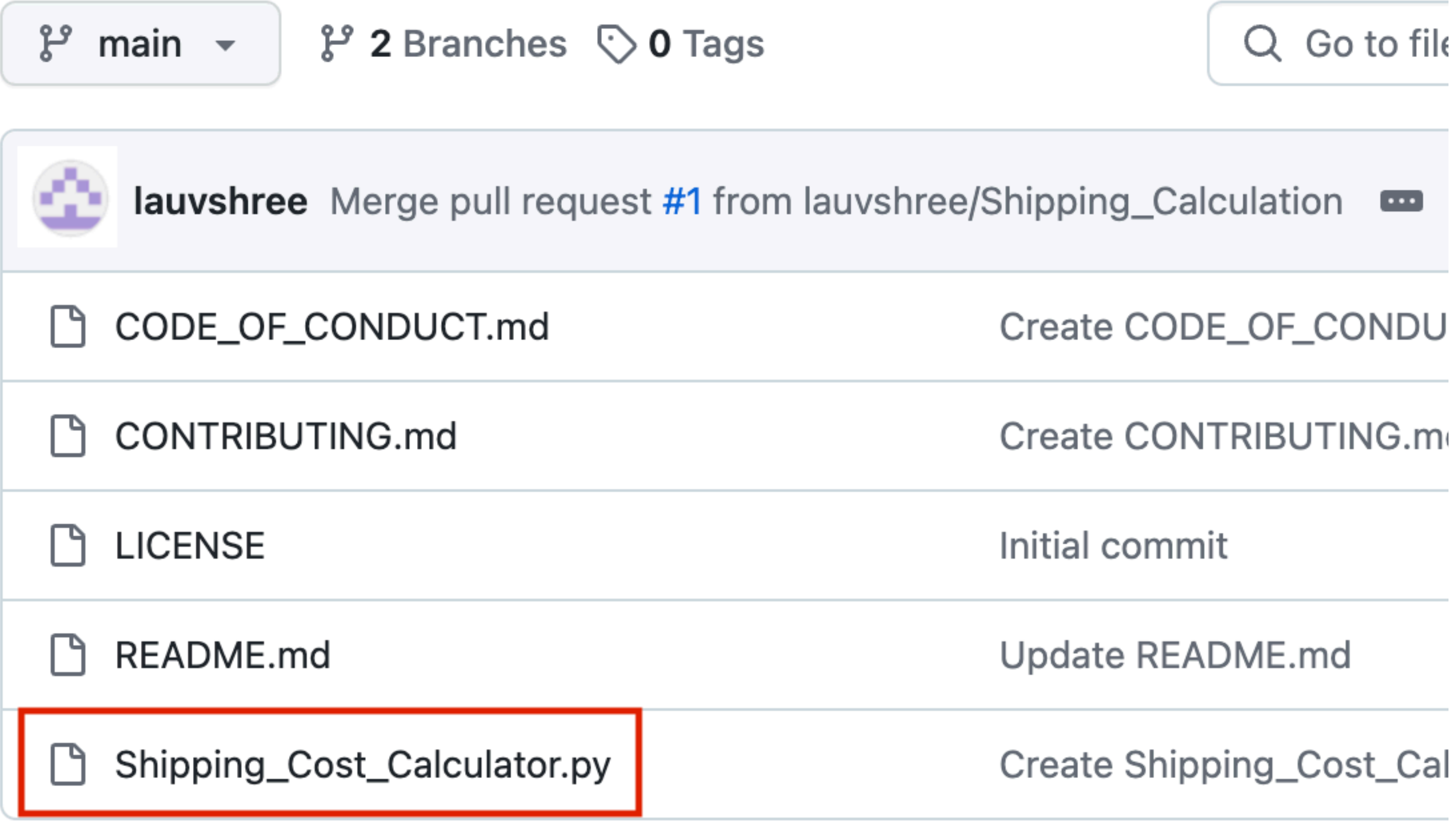
lauvshree commented now

No description provided.

Create Shipping_Cost_Calculator.py

lauvshree merged commit **de4a353** into main now

5. Check to see that your project now contains the `Shipping_Cost_Calculator.py` file as well.



main 2 Branches 0 Tags Go to file

lauvshree Merge pull request #1 from lauvshree/Shipping_Calculation

CODE_OF_CONDUCT.md	Create CODE_OF_CONDU
CONTRIBUTING.md	Create CONTRIBUTING.m
LICENSE	Initial commit
README.md	Update README.md
Shipping_Cost_Calculator.py	Create Shipping_Cost_Cal

Congratulations

In this lab you have created a repository in your GitHub account with a README.md file and a License. You have then edited the README file and added Code of Conduct, and Contribution Guidelines. Further, you have commited these files to your repository. Finally, you have added the Shipping logistics calculator file to a new branch, and merged it to the main branch using a Pull Request.

Author(s)

Nikesh Kumar

K Sundararajan