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.
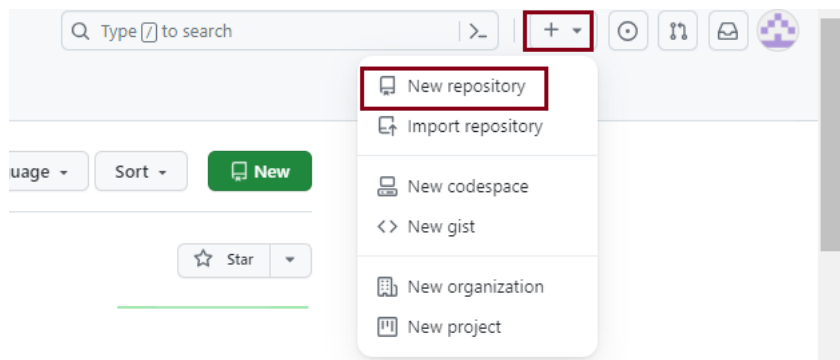
Objectives

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**.

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

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 ⧉

:ommit

Blame   1 lines (1 loc) · 24 Bytes   Code 55% faster with GitHub Copilot

LogisticsShippingRates ⧉

2. Add the following information to the file:

```
 1.  1
 2.  2
 3.  3
 4.  4
 5.  5
 6.  6
 7.  7
 8.  8
 9.  9
10.  10
11.  11
12.  12
13.  13
14.  14
15.  15
16.  16
17.  17
18.  18
19.  19
```

```
 1. Please consider the below factors while contributing
 2.
 3. Code Style:
 4. Maintain a consistent code style for readability.
 5.
 6. Documentation:
 7. Ensure well-documented code for effective collaboration.
 8.
 9. Testing:
10. Thoroughly test your changes before submitting a pull request.
11.
12. Issue Tracker:
13. Check the Issue Tracker for tasks.
14.
15. Code Review:
16. All contributions undergo a code review process.
17.
18. Licensing:
19. Contributions are licensed.
```

Copied!

3. Now click on `Commit changes`

LogisticsShippingRates /   README.md   in `master`

| Edit | Preview | 🐱 Code 55% faster with GitHub Copilot |

```
 1    Please consider the below factors while contributing
 2
 3    Code Style:
 4    Maintain a consistent code style for readability.
 5
 6    Documentation:
 7    Ensure well-documented code for effective collaboration.
 8
 9    Testing:
10    Thoroughly test your changes before submitting a pull request.
11
12    Issue Tracker:
13    Check the Issue Tracker for tasks.
14
15    Code Review:|
16    All contributions undergo a code review process.
17
18    Licensing:
19    Contributions are licensed.
```

4. Ensure that the radio button to **commit directly to the main/master 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.. |

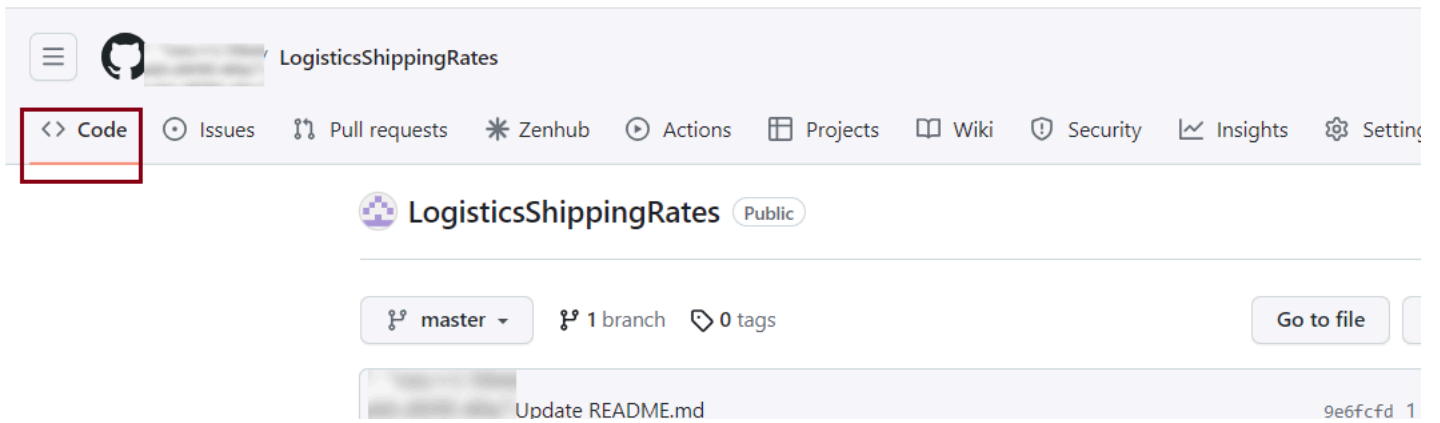🔘 Commit directly to the `master` branch

⭕ 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:
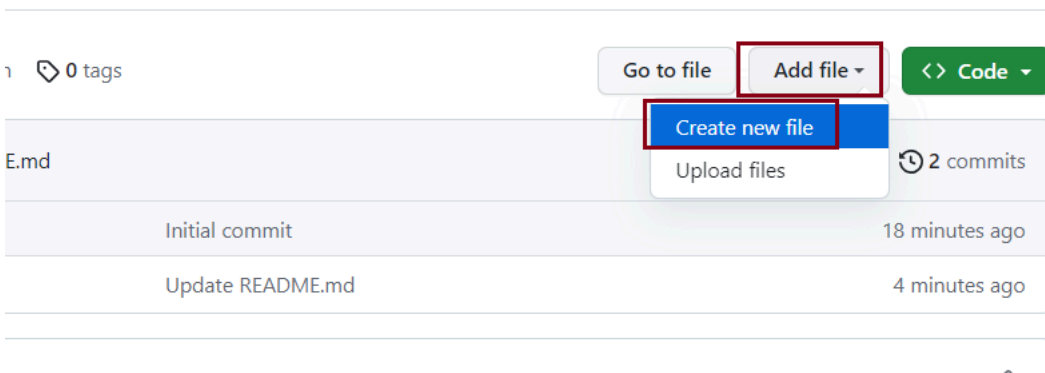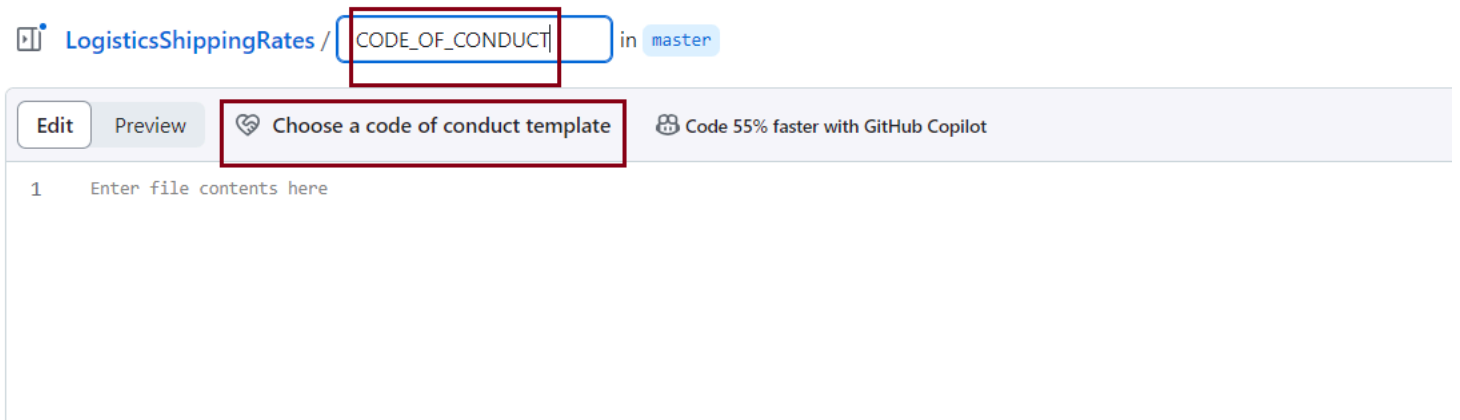
Task 3: Add a code of conduct.

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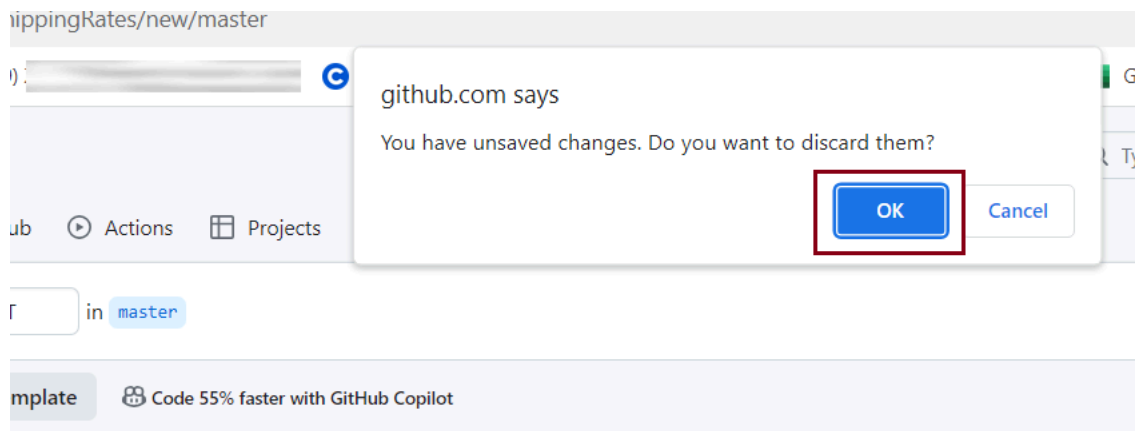
1. To create a new file click on **Add file** and then `Create New File`.
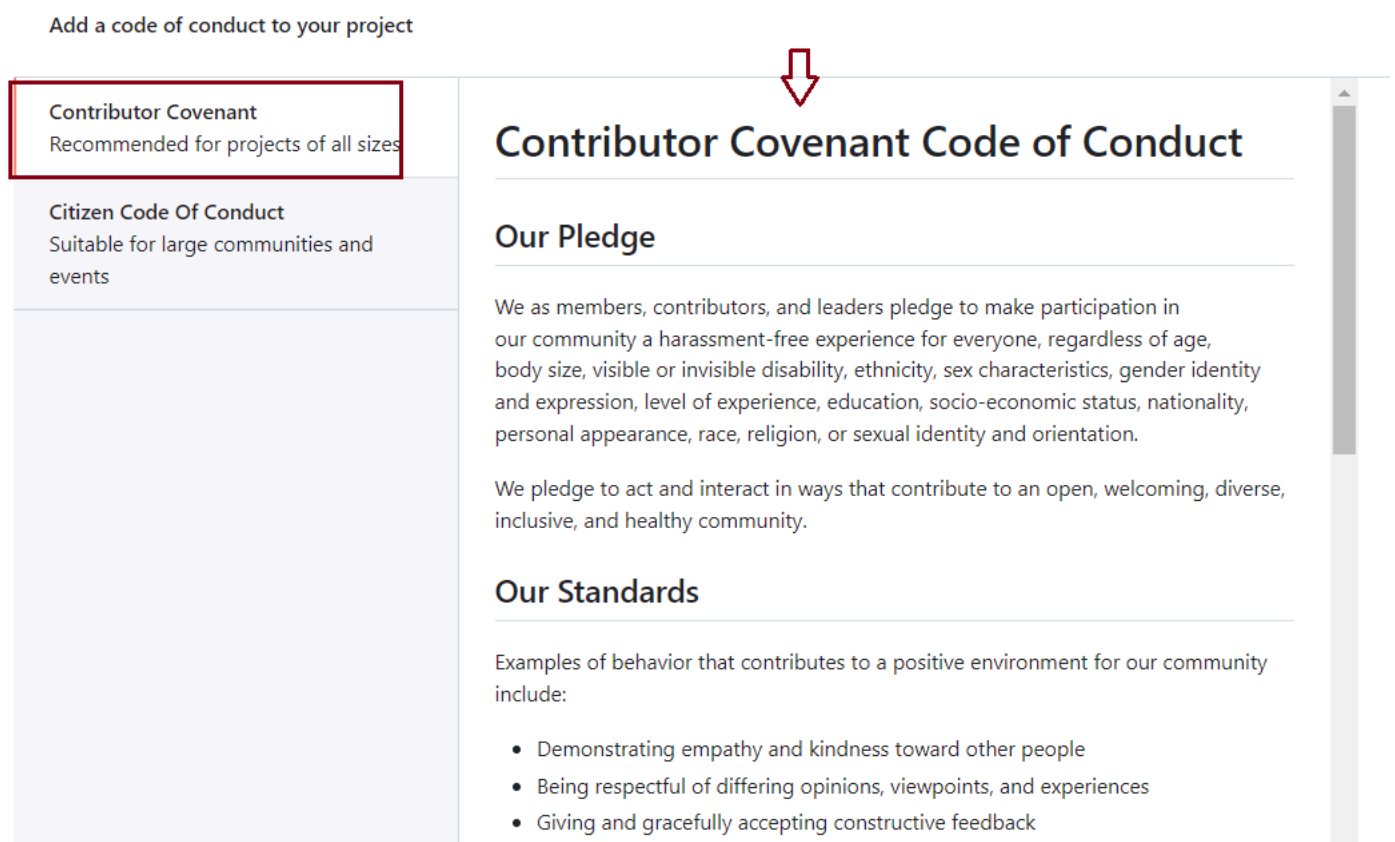

2. Add a new file named `CODE_OF_CONDUCT.md` to the root folder of the repository. The **Choose a code of conduct template** button is displayed.

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

github.com says

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

OK   Cancel

in `master`

mplate   Code 55% faster with GitHub Copilot

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`.

Your code of conduct template is ready. Please review it below and either commit it to the master branch or to a new branch.

LogisticsShippingRates / CODE_OF_CONDUCT.md   in `master`

Edit	Preview	💚 Choose a code of conduct template	🐙 Code 55% faster with GitHub Copilot

```
 1    # Contributor Covenant Code of Conduct
 2
 3    ## Our Pledge
 4
 5    We as members, contributors, and leaders pledge to make participation in our
 6    community a harassment-free experience for everyone, regardless of age, body
 7    size, visible or invisible disability, ethnicity, sex characteristics, gender
 8    identity and expression, level of experience, education, socio-economic status,
 9    nationality, personal appearance, race, religion, or sexual identity
10    and orientation.
11
12    We pledge to act and interact in ways that contribute to an open, welcoming,
13    diverse, inclusive, and healthy community.
14
15    ## Our Standards
16
```

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

> **NOTE:** In the past the default branch in your GitHub repo used the name `master`. Effective Oct 1. 2020, all new GitHub repositories use the more inclusive term `main` as the name of the default branch instead of `master`.

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.

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:

```
1.  1
2.  2
3.  3
4.  4
5.  5
6.  6
7.  7
8.  8
9.  9
10. 10
11. 11
12. 12
13. 13
14. 14
15. 15
16. 16
17. 17
18. 18
19. 19
20. 20
```

```
1.  Contribution guidelines
2.  Welcome Contributors!
3.  Thank you for considering contributing to the centralized repository. This document outlines the guidelines for contributing to the development of Sh
4.
5.  Code style
6.  Please follow the coding style and conventions used in the existing codebase. This helps maintain consistency across the project.
7.
8.  Documentation
9.  Ensure that your contributions are well-documented. Include comments in your code where necessary and provide a clear and concise description of your
10.
11. Testing
12. Before submitting a pull request, make sure your changes have been tested thoroughly. Include relevant test cases and ensure that existing tests pass
13.
14. Issue tracker
15. Check the issue tracker for any open issues or feature requests. If you're working on something, please comment on the issue to let others know.
16.
17. Code review
18. All contributions will go through a code review process. Be open to feedback and be willing to make changes if necessary. Code reviews help maintain
19.
20. Thank you for your contribution!
```

Copied!

3. Commit this file to your repository.

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

Your project now contains Contribution Guidelines as well.

Task 5: Create a new branch.

1. Click on branch in your repository.

⬡ **LogisticsShippingRates** (Public)

⑂ master ▾   ⑂ 1 branch   ⬦ 0 tags

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   ⬚
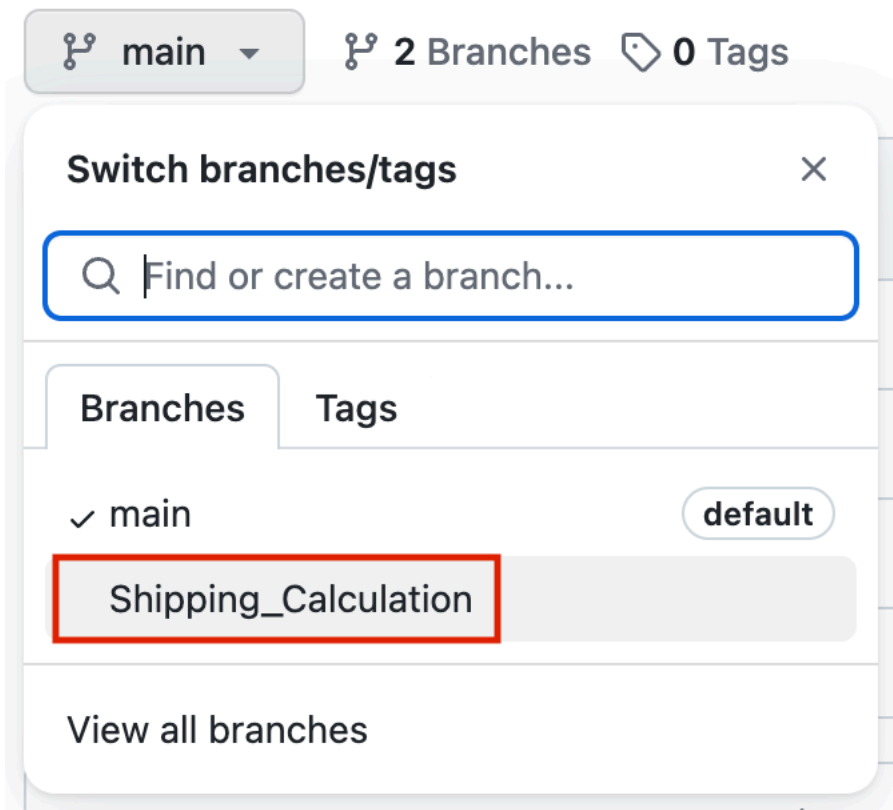
Source

⑂ main ▾

Cancel   **Create new branch**

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:

```
1.  1
2.  2
3.  3
4.  4
5.  5
6.  6
7.  7
8.  8
9.  9
10. 10
11. 11
```

```
1.  # Shipping Cost Calculator
2.
3.  ## Input package weight and shipping rate
4.  weight = float(input("Enter the package weight in kilograms: "))
5.  rate = float(input("Enter the shipping rate per kilogram: "))
6.
7.  ## Calculate shipping cost
8.  shipping_cost = weight * rate
9.
10. ## Display the result
11. print(f"Shipping Cost: {shipping_cost} USD")
```

Copied!

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

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`.

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 ⬚⬚⬚ `LogisticsShippingRates`.

Require approval from specific reviewers before merging
[Branch protection rules](#) ensure specific people approve pull requests before they're merged.

Add rule ✕

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.

Merge pull request ▾ 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 ⬚⬚⬚ Shipping_Calculation

Merging Shipping_Cost_Calculator.py to the master branch

This commit will be authored by 85282⬚⬚⬚@users.noreply.github.com

Confirm merge Cancel

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`

💬 Conversation **0**   ⊸ Commits **1**   ☑ Checks **0**   ⊡ Files ch

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.

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)

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