

CS Program GitHub Portfolio Tutorial

Setting Up Your Account


If you have not done so already, go to [GitHub](https://github.com) and set up an account. You will be asked to create a Username, add your email address, and create a password. When finished, click **Verify**.

The screenshot shows the GitHub 'Join GitHub' page. At the top is a dark navigation bar with the GitHub logo, links for 'Why GitHub?', 'Enterprise', 'Explore', 'Marketplace', and 'Pricing', a search bar, and 'Sign in' and 'Sign up' buttons. The main heading is 'Join GitHub' with the tagline 'The best way to design, build, and ship software.' Below this is a three-step progress bar: 'Step 1: Set up your account' (active), 'Step 2: Choose your subscription', and 'Step 3: Tailor your experience'. The 'Create your personal account' section contains three input fields: 'Username' (with a note that it will be the public username), 'Email address' (with a note about occasional updates), and 'Password' (with a note about password requirements and a 'Learn more' link). To the right, a box titled 'You'll love GitHub' lists benefits: 'Unlimited public repositories', 'Unlimited private repositories', 'Limitless collaboration', 'Frictionless development', and 'Open source community'. The 'Verify account' section at the bottom shows a placeholder for a CAPTCHA puzzle and a 'Verify' button highlighted with a red rectangle.

When you click **Verify**, a puzzle will appear and you will be asked to solve it. It will likely be different from the puzzle in this example. After you answer the question correctly, you will be able to click on the **Create an account** button.

Verify account

Click the image that is the correct way up.



Please click one

By clicking "Create an account" below, you agree to our [Terms of Service](#) and [Privacy Statement](#). We'll occasionally send you account-related emails.

Create an account

You will be taken to a welcome page where you can select your account type. For the purposes of this class, you only need the free option. After you make your selection, click **Continue**.

Search or jump to... Pull requests Issues Marketplace Explore

Welcome to GitHub

You're a few steps away from building better software. @

✓ Completed
Set up your account

Step 2: Choose your subscription

Step 3: Personalize your experience

Choose your subscription

With tools developers love and the world's largest open source community, there's no wrong choice.

Free

The basics of GitHub for every developer

\$0
per month

Includes:
✓ Unlimited public and private repositories
✓ 3 collaborators for private repositories
✓ Issues and bug tracking
✓ Project management

Pro

Pro tools for developers with advanced requirements

\$7
per month

Includes:
✓ Unlimited public and private repositories
✓ Unlimited collaborators
✓ Issues and bug tracking
✓ Project management
✓ Advanced tools and insights

Are you a student? Get access to the **best developer tools for free with the GitHub Student Developer Pack.**

👤 Help me set up an organization inbox
Organizations are separate from personal accounts and are best suited for businesses who need to manage permissions for many employees.
[Learn more about organizations](#)

📧 Send me updates on GitHub news, offers, and events
Unsubscribe anytime in your email preferences. [Learn more](#)

Continue

GitHub will send an email verification. Make sure to verify your account. On the next screen, you will be asked questions about how you intend to use GitHub. You may choose to fill out the form and click **Submit**, or you may choose **Skip this step**.

Welcome to GitHub

You'll find endless opportunities to learn, code, and create. @

✓ Completed Set up a personal account	🔧 Step 2: Choose your subscription	⚙️ Step 3: Tailor your experience
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What is your level of programming experience?

- ☐ None—I don't program at all
- ☐ New to programming
- ☐ Somewhat experienced
- ☐ Very experienced

What do you plan to use GitHub for? (Select up to 3)

- ☐ Learning to code
- ☐ Learning Git and GitHub
- ☐ Host a project (repository)
- ☐ Creating a website with GitHub Pages
- ☐ Collaborating with my team
- ☐ Finding a project to contribute to
- ☐ School work / School-related project
- ☐ The GitHub API
- ☐ I don't know yet
- ☐ Other (please specify)

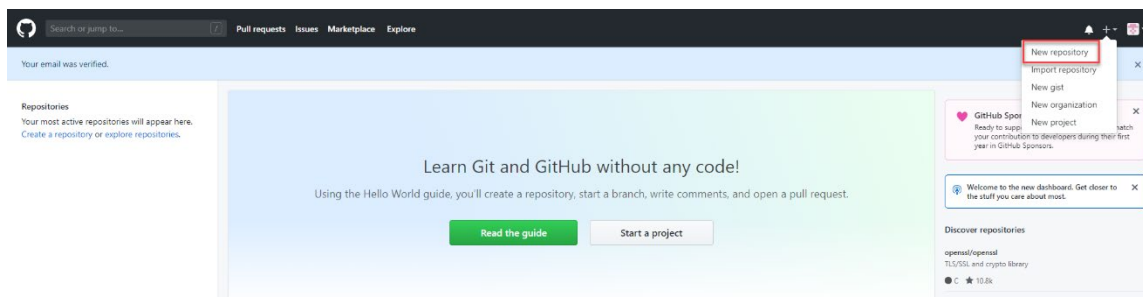
What are you interested in?

What languages, frameworks, industries, or disciplines are you interested in?
e.g. arduino, bioinformatics, ocean

Submit	skip this step
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Setting Up Your Repository

To create a new repository, sign into GitHub. On the home page, look for the small + button in the top right corner of the screen and click on it. Select **New repository** from the drop-down list.



The **Create a new repository** screen will display. You will be prompted to enter a repository name. Since you will be using this portfolio tool throughout the program, it is recommended that you create a new repository for each course. In this example, the repository name is "Cplusplus Program." Be sure to select the **Private** and **Initialize this repository with a README** options. This will ensure that you have the proper set up and privacy settings for your portfolio submission. When you are finished, click the button labeled **Create repository**.

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere?
[Import a repository.](#)

Owner

agentile1

Repository name *

Cplusplus Program ✓

Great repository names

Your new repository will be created as Cplusplus-Program bilant-engine?

Description (optional)

☐ Public

Anyone can see this repository. You choose who can commit.

☒ Private

You choose who can see and commit to this repository.

Skip this step if you're importing an existing repository.

☒ Initialize this repository with a README
This will let you immediately clone the repository to your computer.

Add .gitignore: None

Add a license: None

Create repository

Next, you will see the screen for your newly created repository. From here you can add a collaborator, upload project files, and update your README. Each of these options is laid out in its own section.

agentile1 / Cplusplus-Program Private

Watch 0 Star 0 Fork 0

<> Code

Issues 0

Pull requests 0

Projects 0

Security

Insights

Settings

No description, website, or topics provided.

Edit

Manage topics

2 commits

1 branch

0 releases

Branch: master

New pull request

Create new file

Upload files

Find File

Clone or download

agentile1 Update README.md

Latest commit b0cd76e 40 seconds ago

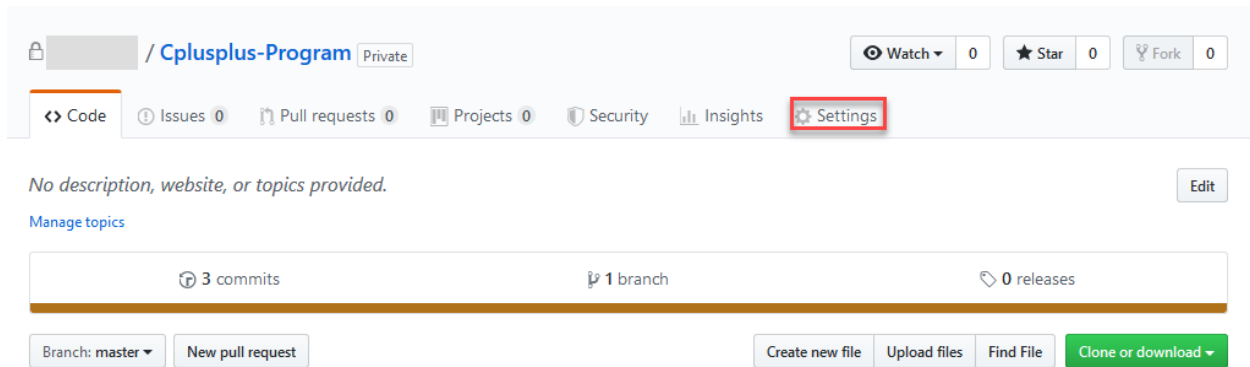
README.md

Update README.md

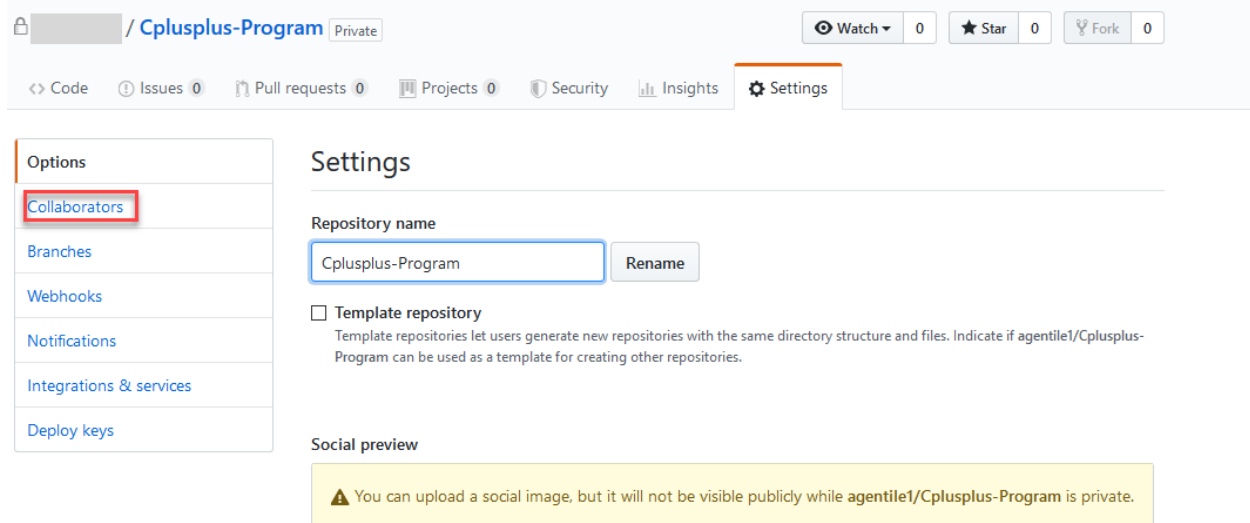
40 seconds ago

Adding a Collaborator

In order for your instructor to view and grade your portfolio, you will need to add them as a collaborator to your repository. From the home page for your repository, navigate to the **Settings** tab.

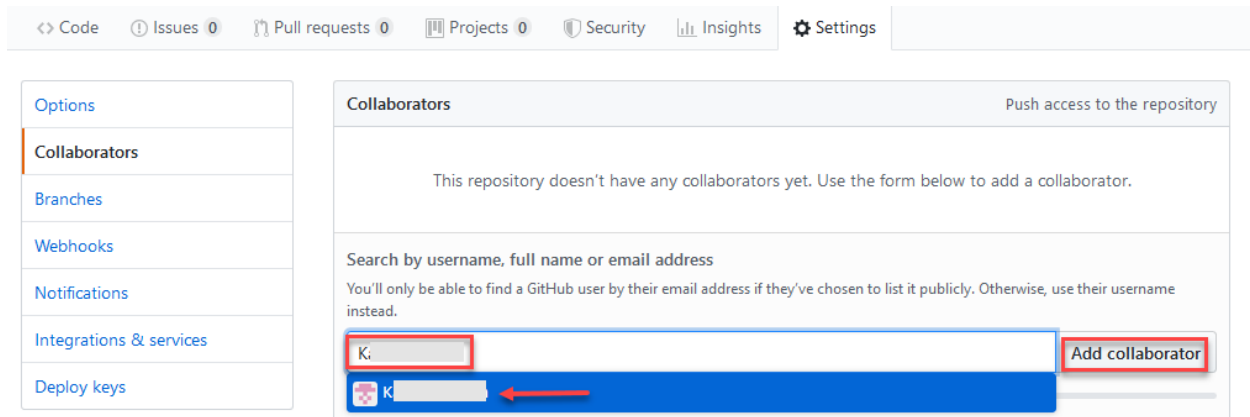


From the sidebar menu, click the **Collaborators** link to open the Collaborators page.



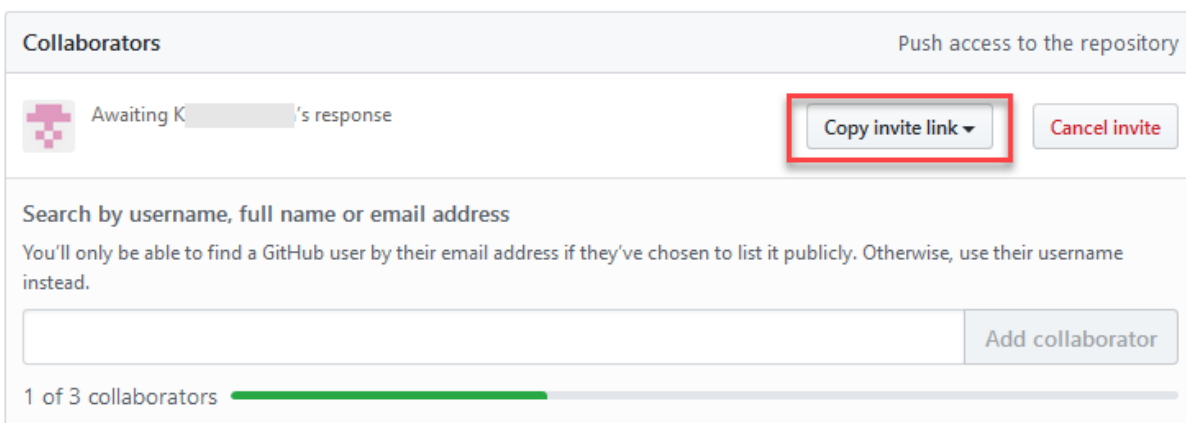
For security, you will be prompted to confirm your password. Once you have confirmed your password, you will be taken to the **Collaborators** page. Look for where it says **Search by username, full name or email address** and enter your instructor's GitHub username in the box. Once you have typed their name in the box, you should see their username pop up below the search. Click on the username, then click **Add collaborator**.

Note: Your instructor should have provided their username in an announcement or discussion post. If you are unsure of their username, please email your instructor.



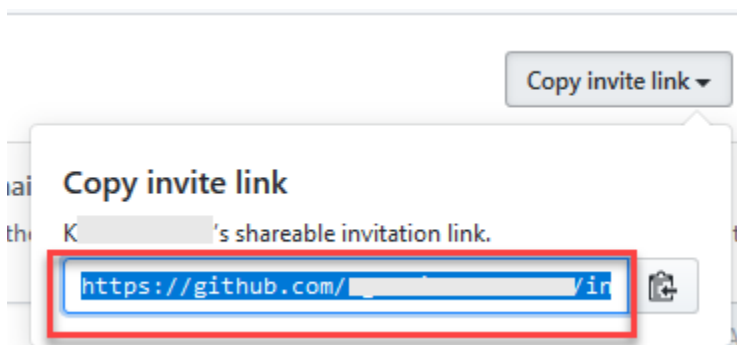
The screenshot shows the GitHub interface with the 'Collaborators' tab selected. The left sidebar contains links for Options, Collaborators, Branches, Webhooks, Notifications, Integrations & services, and Deploy keys. The main content area is titled 'Collaborators' and includes a 'Push access to the repository' link. A message states: 'This repository doesn't have any collaborators yet. Use the form below to add a collaborator.' Below this is a search bar with the placeholder text 'Search by username, full name or email address' and a note: 'You'll only be able to find a GitHub user by their email address if they've chosen to list it publicly. Otherwise, use their username instead.' A search input field contains the text 'K.' and is highlighted with a red box. To the right of the input field is a red 'Add collaborator' button, also highlighted with a red box. Below the input field, a blue dropdown menu is open, showing a search result with a GitHub logo and the text 'K.', with a red arrow pointing to it.

Once you have completed this step, you should see your instructor's username listed under **Collaborators**. It will say, "Awaiting [username]'s response." You will also see a button labeled **Copy invite link**. Click this button.



The screenshot shows the GitHub 'Collaborators' page after a user has been added. The main content area shows a list of collaborators with one entry: 'Awaiting K.'s response', accompanied by a GitHub logo icon. To the right of this entry is a 'Copy invite link' button, which is highlighted with a red box, and a 'Cancel invite' button. Below the list is a search bar with the placeholder text 'Search by username, full name or email address' and a note: 'You'll only be able to find a GitHub user by their email address if they've chosen to list it publicly. Otherwise, use their username instead.' Below the search bar is an 'Add collaborator' button. At the bottom, a progress bar indicates '1 of 3 collaborators'.

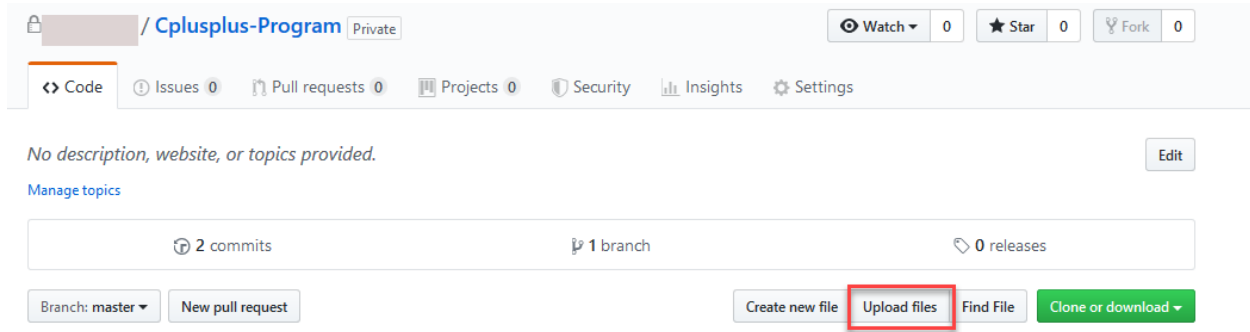
This button will pop up a URL with the invitation link. Click on the text to highlight it, as shown in the image. Press **Ctrl + C** to copy the link to your clipboard. Then paste your link into the indicated box and submit it to your instructor.



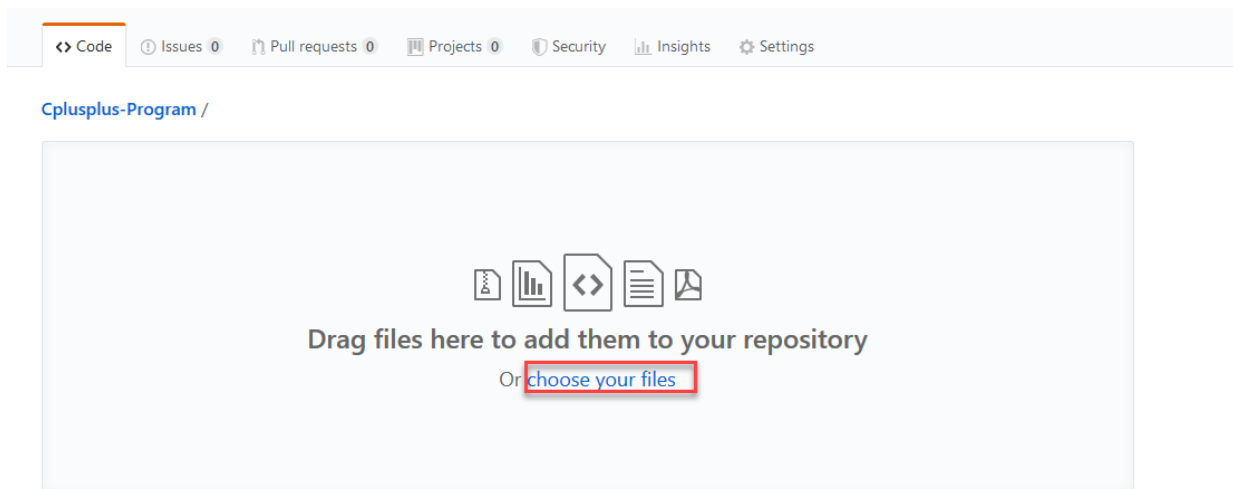
The screenshot shows a 'Copy invite link' dialog box. The dialog box has a title 'Copy invite link' and a subtitle 'K.'s shareable invitation link.' Below the subtitle is a text input field containing the URL 'https://github.com/[username]/[repository]/invitations/new', which is highlighted with a red box. To the right of the input field is a copy icon. Above the dialog box is a 'Copy invite link' button with a dropdown arrow.

Uploading Project Files

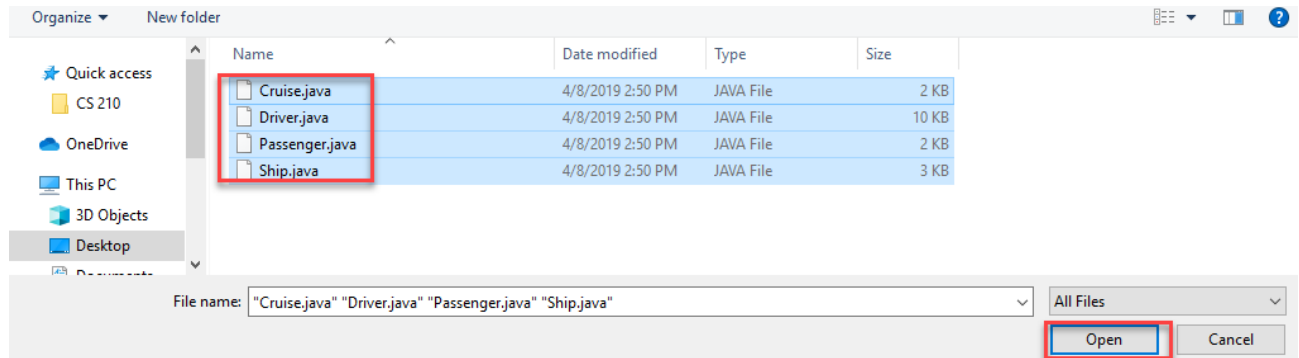
Once you are in your new repository, you will see an option to **Upload files**. When you have decided on the project you want to include in your portfolio, click this button to upload your files.



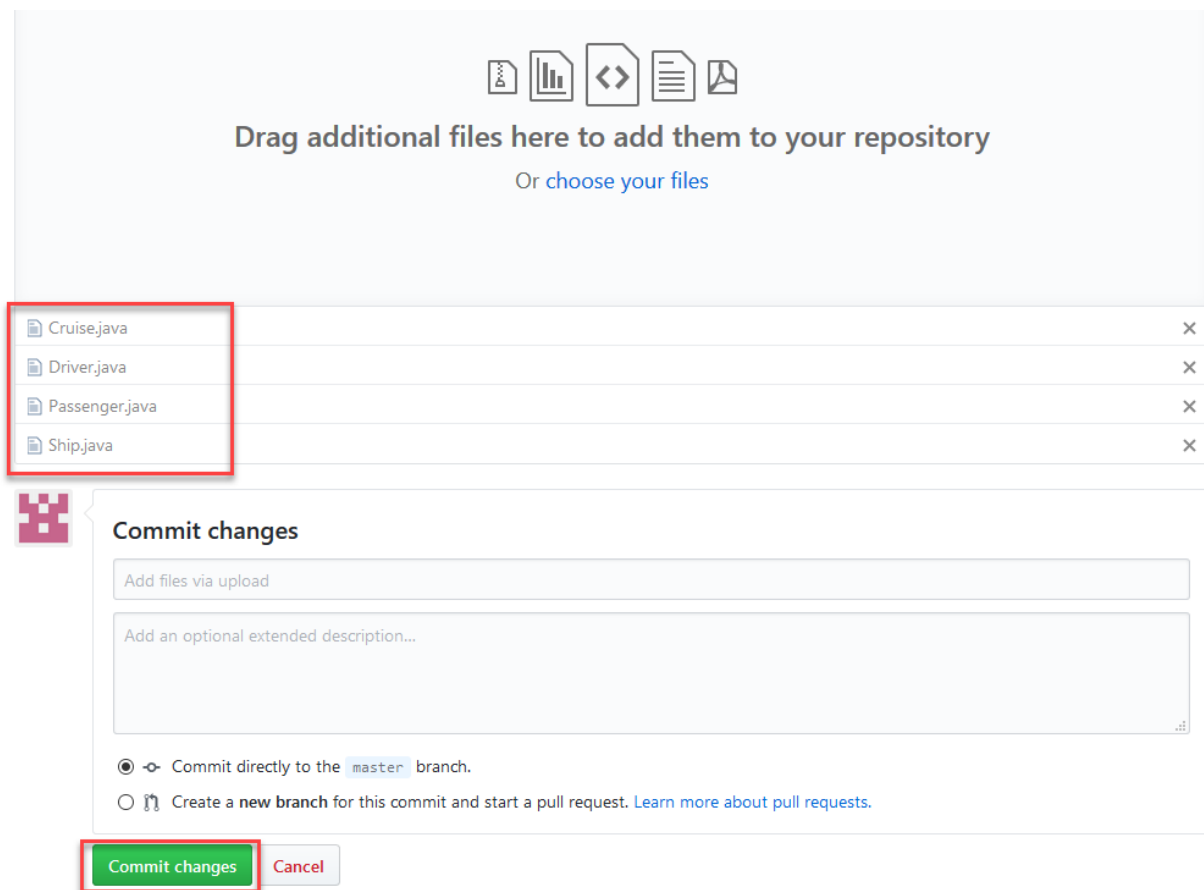
You have the option to either drag your files into the window or click the **choose your files** link. Either option will upload your files to the repository. This tutorial will walk you through using the **choose your files** link.



If you upload your files using the **choose your files** link, a dialog box will pop up allowing you to browse through your computer. Navigate to the folder where your project files are stored. Use **Ctrl + click** and select each file. This will allow you to upload multiple files at once. In this example, there are four JAVA files selected. Click **Open** to upload your files into the repository.



Once you have successfully uploaded your files, you should see them underneath the upload window. In this example, sample files named Cruise.java, Driver.java, Passenger.java, and Ship.java have been uploaded. Once all your files have been uploaded, select the **Commit changes** button. The default option is to **Commit directly to the master branch**. Make sure this option stays selected.



You will see a screen that indicates your files are being uploaded. When the files are finished, you will be taken back to your repository page and should see all your files listed. Also included is the README.md file that was created with your repository.

The screenshot shows a GitHub repository page for 'Cplusplus-Program'. The repository is private and has 0 watches, 0 stars, and 0 forks. The 'Code' tab is selected, showing 3 commits, 1 branch, and 0 releases. A table lists the commit history:

Commit	Message	Time
Cruise.java	Add files via upload	29 minutes ago
Driver.java	Add files via upload	29 minutes ago
Passenger.java	Add files via upload	29 minutes ago
README.md	Update README.md	1 hour ago
Ship.java	Add files via upload	29 minutes ago

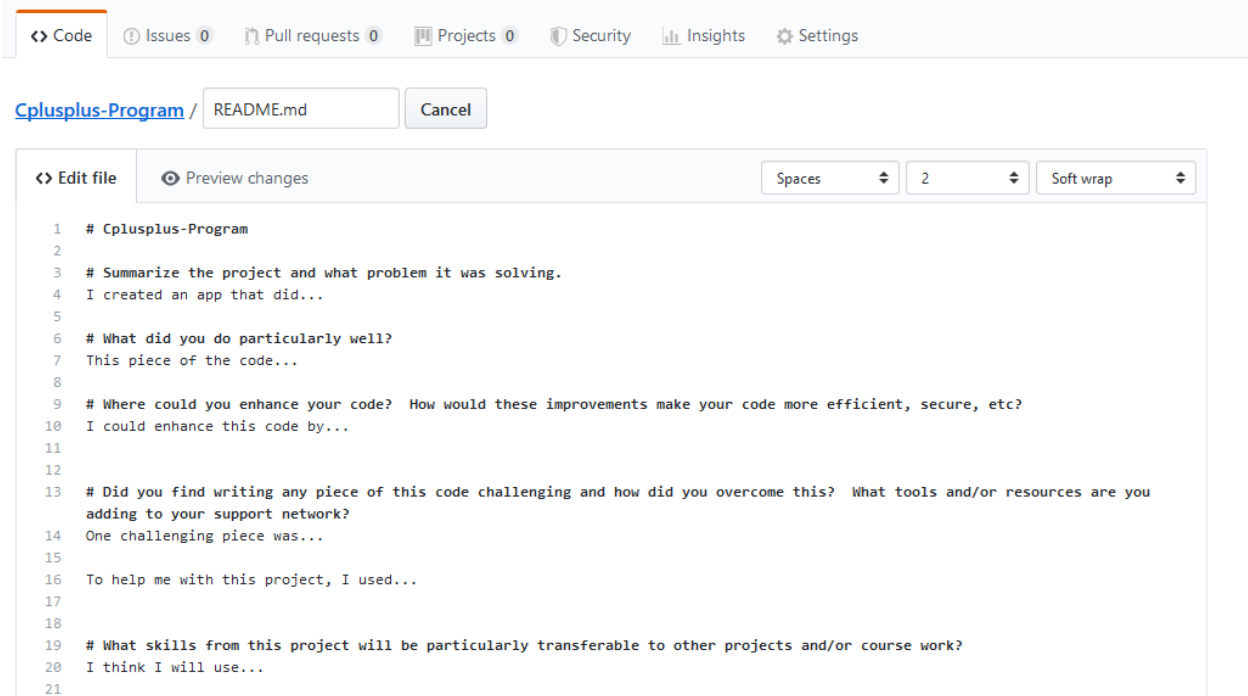
Updating the README

Once you have submitted your project files, you will need to update the README file for your repository. This is where you will describe your project in more detail and reflect on what you have learned. Click on the file named **README.md** to open your README file.

The screenshot shows a GitHub repository page for 'Project Three: Integrates Java and C++ to create an app for the Wildlife Zoo'. The repository has 2 commits, 1 branch, and 0 releases. A table lists the commit history:

Commit	Message	Time
Update README.md	Update README.md	34 seconds ago

This will bring you to the editor, where you can write your portfolio reflection. The example below includes a sample of some questions and responses. You should copy in the reflection questions or prompt from the portfolio activity in your course. Then write your reflection. You can use # to create headers for your responses.

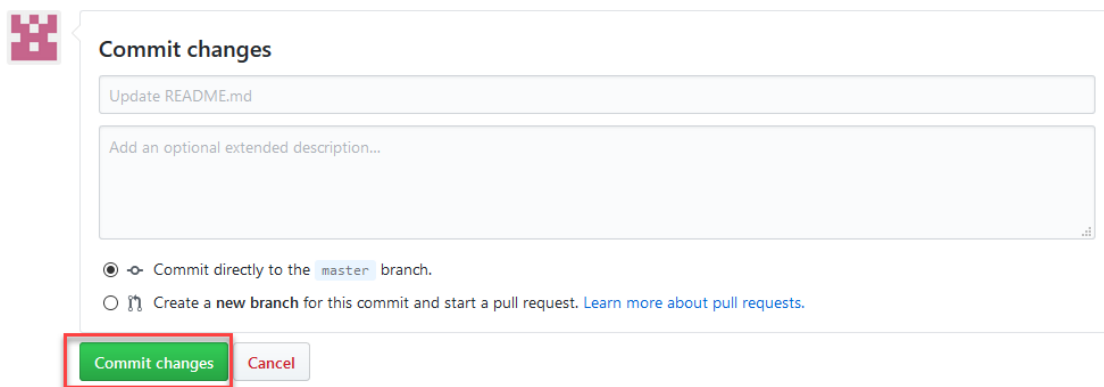


The screenshot shows the GitHub web editor interface. At the top, there's a navigation bar with links for Code, Issues (0), Pull requests (0), Projects (0), Security, Insights, and Settings. Below this, the file path is shown as 'Cplusplus-Program / README.md' with a 'Cancel' button. The main editor area has tabs for 'Edit file' and 'Preview changes'. The 'Edit file' tab is active, showing a code editor with line numbers 1 through 21. The code is a README file with the following content:

```
1 # Cplusplus-Program
2
3 # Summarize the project and what problem it was solving.
4 I created an app that did...
5
6 # What did you do particularly well?
7 This piece of the code...
8
9 # Where could you enhance your code? How would these improvements make your code more efficient, secure, etc?
10 I could enhance this code by...
11
12
13 # Did you find writing any piece of this code challenging and how did you overcome this? What tools and/or resources are you
    adding to your support network?
14 One challenging piece was...
15
16 To help me with this project, I used...
17
18
19 # What skills from this project will be particularly transferable to other projects and/or course work?
20 I think I will use...
21
```



On the right side of the editor, there are settings for 'Spaces' (set to 2) and 'Soft wrap'.




When you have finished your reflection, be sure to press the **Commit changes** button as shown below to save your updated README file. This is located under the editor. Be sure to keep the default setting **Commit directly to the master branch** selected.



The screenshot shows the 'Commit changes' dialog box. It has a title bar with a commit icon and the text 'Commit changes'. Below the title bar, there's a text input field with the placeholder 'Update README.md'. Below that is a larger text area with the placeholder 'Add an optional extended description...'. At the bottom, there are two radio button options: 'Commit directly to the master branch.' (which is selected) and 'Create a new branch for this commit and start a pull request. Learn more about pull requests.' Below the options are two buttons: 'Commit changes' (highlighted with a red box) and 'Cancel'.

Committing your changes will bring you back to the repository page. This page should include a list of your files and a preview of the README file. Copy the URL and paste it into your portfolio submission.

  / **Cplusplus-Program** Private

 Watch 0  Star 0  Fork 0

[Code](#) [Issues 0](#) [Pull requests 0](#) [Projects 0](#) [Security](#) [Insights](#) [Settings](#)

No description, website, or topics provided. [Edit](#)

[Manage topics](#)



3 commits






1 branch



0 releases

Branch: master [New pull request](#)

[Create new file](#) [Upload files](#) [Find File](#) [Clone or download](#)

  Add files via upload Latest commit 49ad853 27 minutes ago

 Cruise.java	Add files via upload	27 minutes ago
 Driver.java	Add files via upload	27 minutes ago
 Passenger.java	Add files via upload	27 minutes ago
 README.md	Update README.md	1 hour ago
 Ship.java	Add files via upload	27 minutes ago

 README.md 

Cplusplus-Program

Summarize the project and what problem it was solving.