How to Submit Assignments to GitHub

CSCI 3326 OBJECT ORIENTED PROGRAMMING IN JAVA
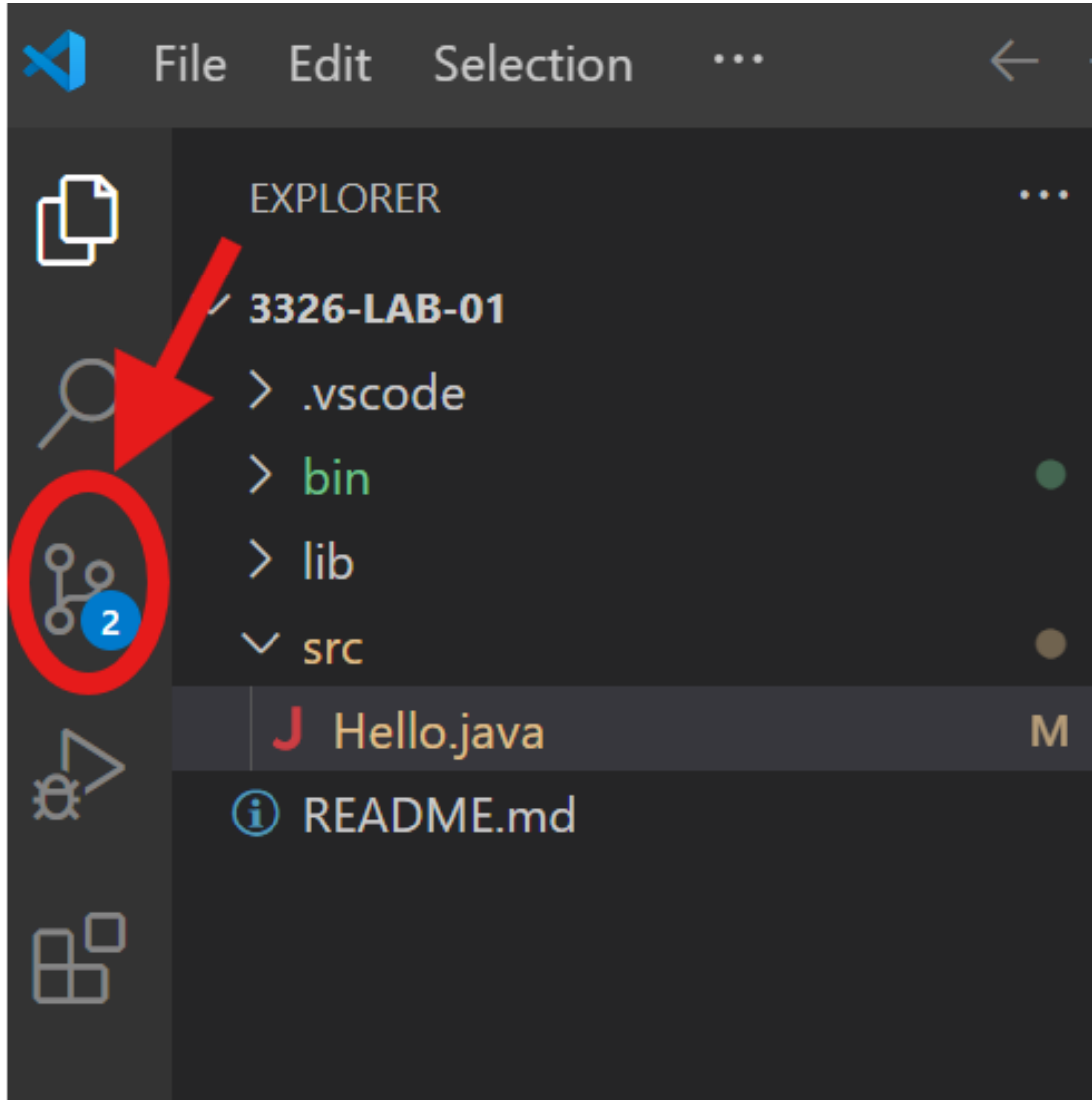
CSCI 3341 SOFTWARE ENGINEERING II

Before You Start

Before following these steps make sure all your work is saved.

To save your work, click anywhere inside the file where you made changes and hit the **Cntrl + S** keys for Windows or **Command + S** keys for Mac.

You can submit your code to GitHub more than once, so do not worry if you submit your code and later realize you forgot something. Simply redo the following steps (1 – 4) to submit your new code changes.

1. Go to the source control tab

Open your Visual Studio Code editor in Codespaces or in your local computer.

Navigate to the **Source Control** tab. It will have a blue circle with the number of files you have changed.
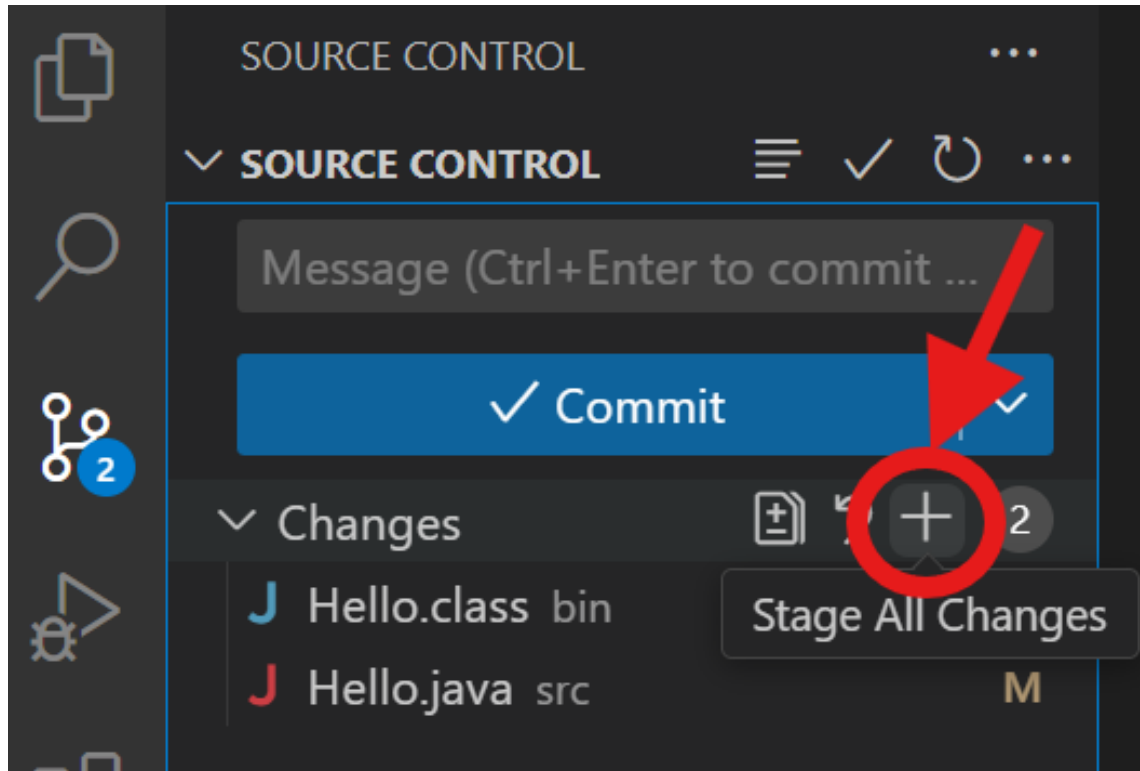
This is VS Code's designated tab for working with Git (a software that works alongside GitHub).

2. Stage all your changes

In the Source Control tab, you will see all the files you have made changes to.

If you do not see a file that you changed, it means you did not save those changes. Simply go to the file, save your changes, and the file will appear.

Click on the + button next to Changes to stage or ready your code for submission.
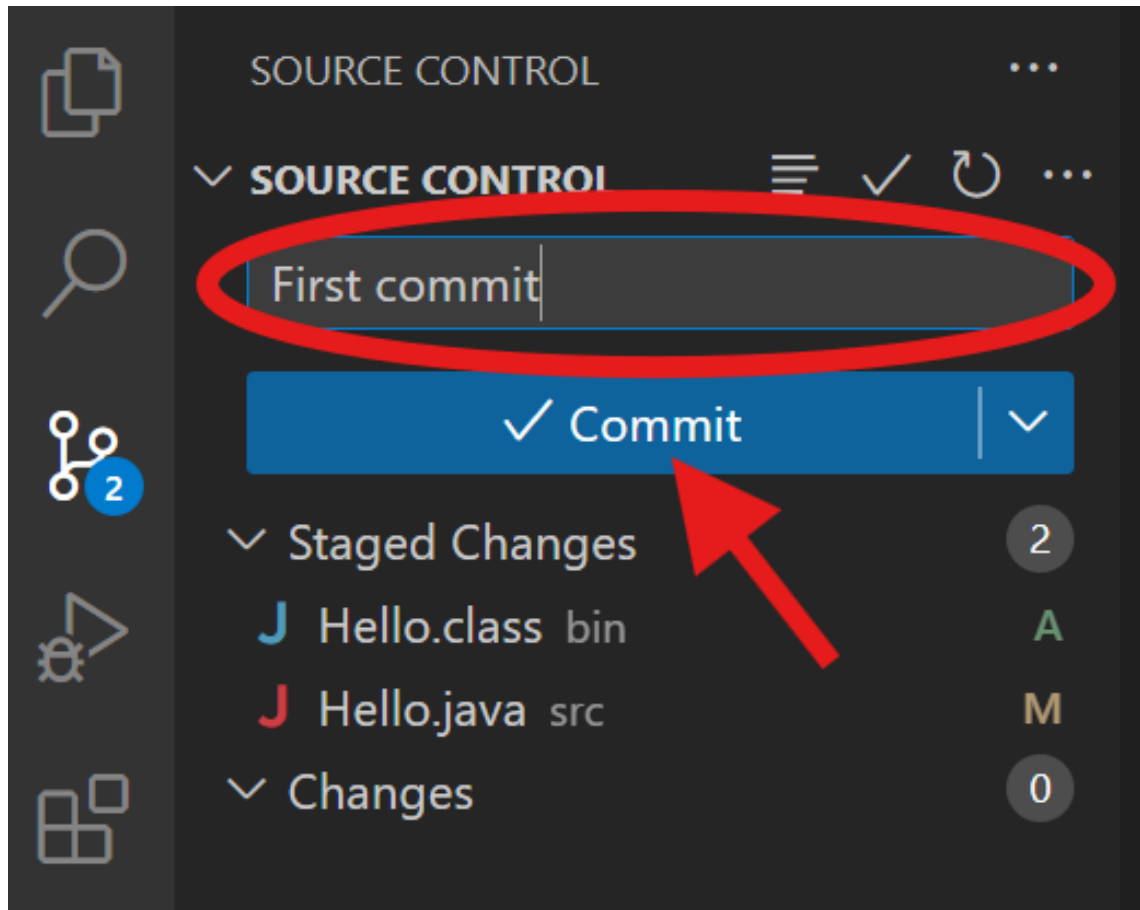
3. Add a message and commit your changes

Your changed files should now appear in the Staged Changes section.

Add a message in the text box. Try to summarize your changes into a short phrase.

Next, **click on the Commit button**. A commit saves the new state of your code, this state is what will be submitted.

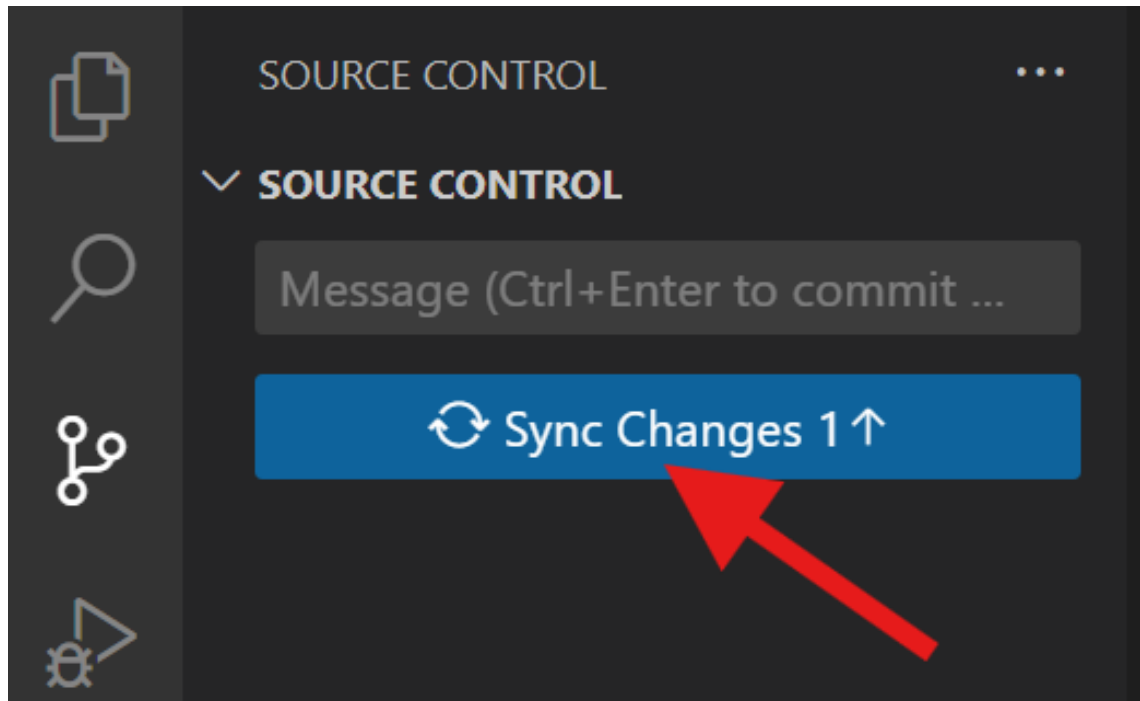VS Code **will not** let you commit without a message.

4. Sync your changes

The last step is to submit the new state of your code to GitHub.

Remember, Git is a version control system, so a new state is like a new version. So, let's update GitHub's version.

Click on the Sync Changes button to submit your code (update GitHub).

If you get a sync conflict, go to the next section.
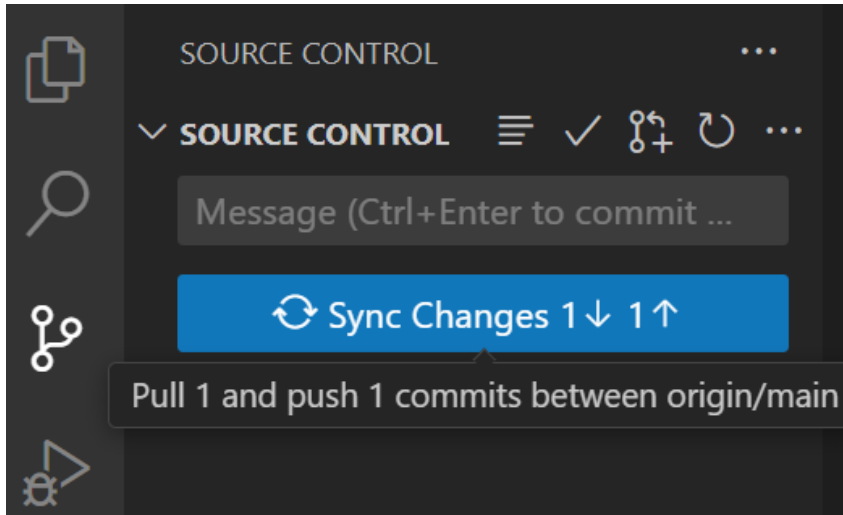
Resolve Sync Conflicts

Sync Conflict

What is a sync conflict?

Remember how Git is a version control system and when you submit your code you are updating GitHub's version. Well, a sync conflict is caused when your version is out of date.

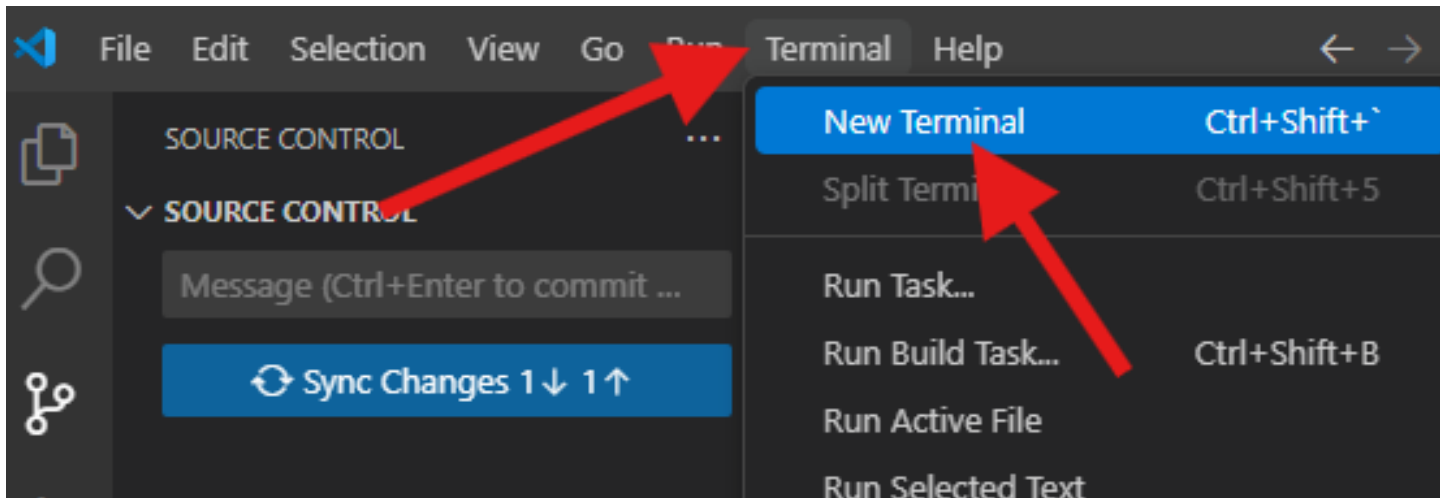To fix a sync conflict you need to update your version to match GitHub's and then add your changes on top.

Follow the next steps to 4 steps to resolve the conflict.

1. Open a new terminal

First, **open a new terminal**. A terminal is an interface where you can execute commands.

The terminal will appear at the bottom of your VS Code editor.

2. Merge your changes with GitHub's changes

Inside the terminal execute the following two commands, make sure to hit enter after typing each command to execute.
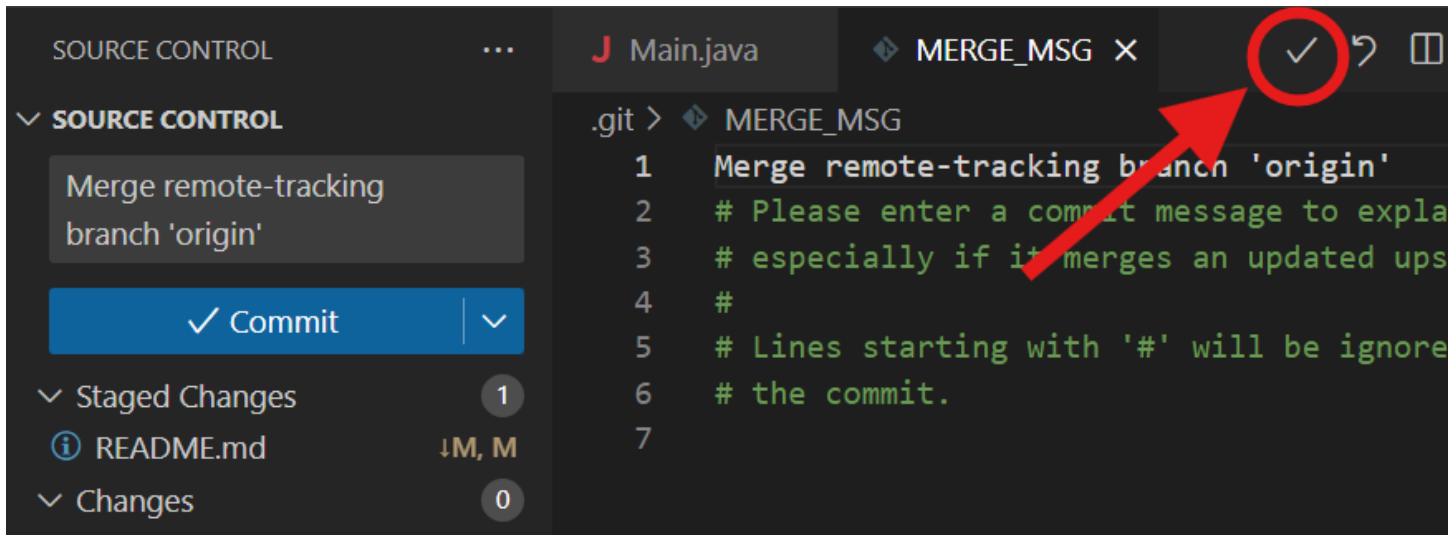
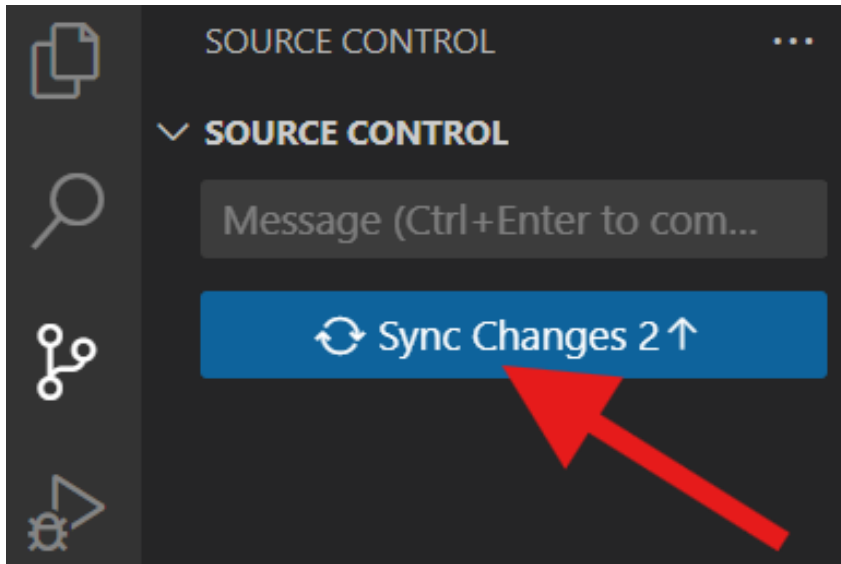- **git fetch origin**
- **git merge origin**

3. Accept the merger

After executing the two commands a new tab will appear to confirm the merger.

It's optional if you want to add a message.

Click on the ✔ button.

4. Sync your changes

By accepting the merger 2 things have happened, you have updated your code's version to match GitHub's version, and you have added your recent changes.

This is why the Sync Changes button will now show that there are 2 commits.

Click on the Sync Changes button to submit your code.