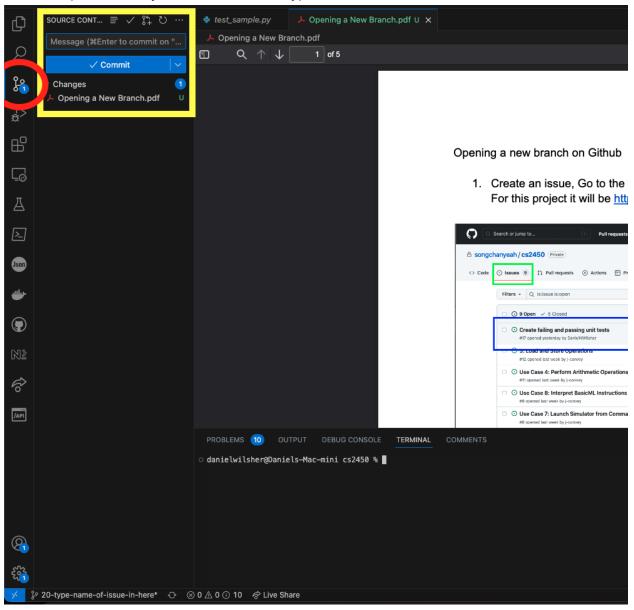
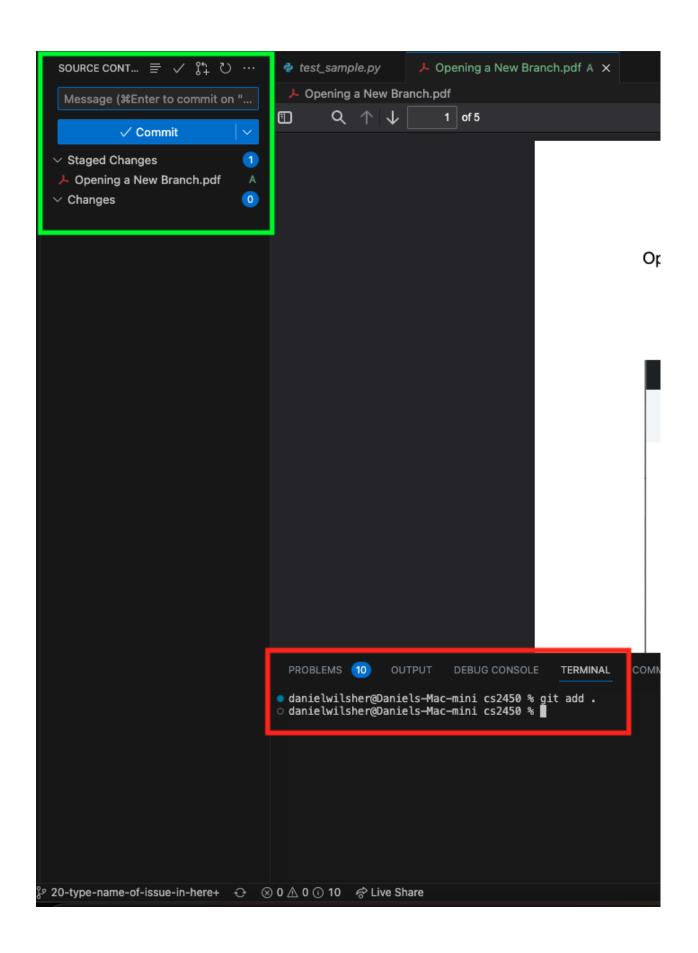
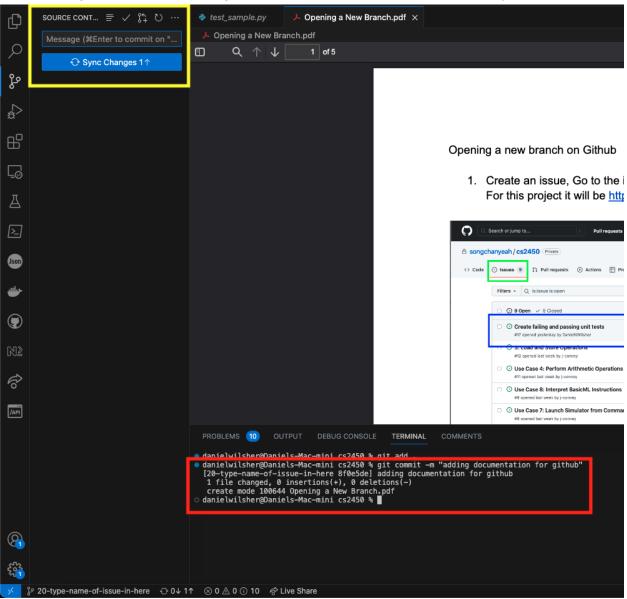
1. In VS code your source control and changes will show up in the tab in the red circle and will show as the menu in the yellow square. Here is a new file that is the change that will be pushed to my current branch "20-type-name-of-issue-here".



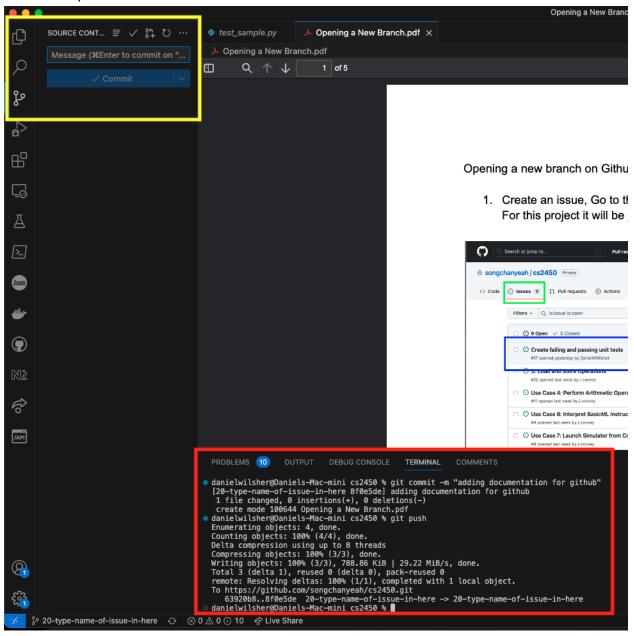
2. If your changes look good run the command "git add." in your terminal (shown in red box) to stage your changes for a commit (it will look like this after running your command as shown by the green box).



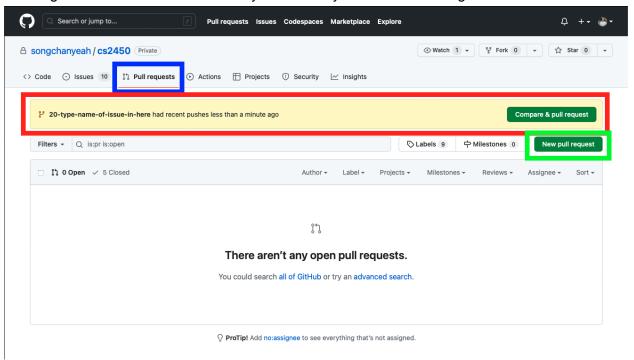
3. After your changes are staged run "git commit -m "enter a message here" in your terminal as shown in the red box below. Replace the enter a message here with a short summary of the changes you made to help other engineers understand what you have changed and are committing. The source control will now look like the yellow box.



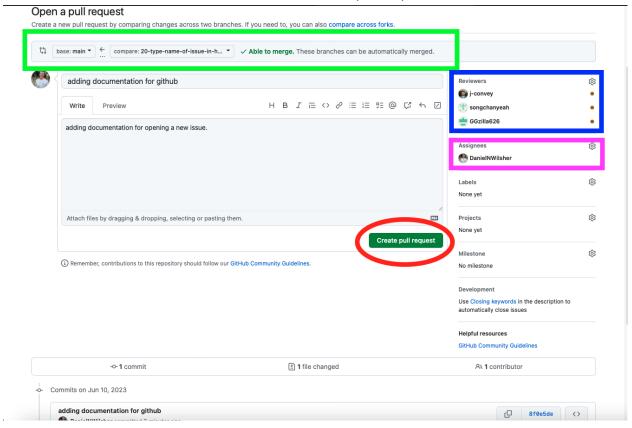
4. After you have created a commit in your terminal run the command "git push" to push your changes to the online version of your branch as shown in the red box outline. The source control outlined in yellow should now be empty with no changes or commits. You can repeat steps 2-4 as many times as you like but try to keep the amount of commits to a smaller amount and only start a pull request when you feel that your work is completed.



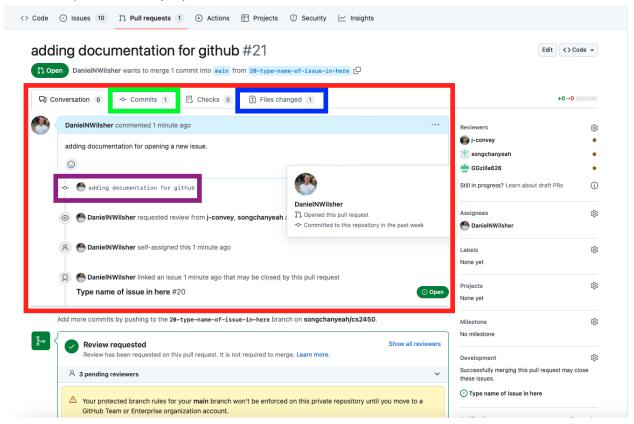
5. Now go to the pull request tab in the github repository outlined in the blue box (for this project the link is <a href="https://github.com/songchanyeah/cs2450/pulls">https://github.com/songchanyeah/cs2450/pulls</a>). Github will recognize any recent pushes and give you the option outlined in red or just click the one outlined in green and make sure to select your branch you've been working on.



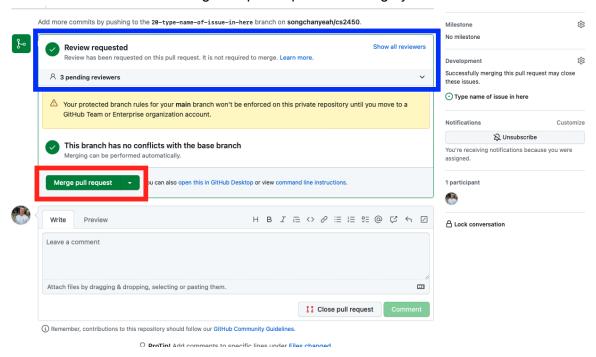
6. Now that you are starting a new pull request, make sure to check as outlined in the green box that your branch in this case "20-type-name-of-issue-here" is being merged into main. Make sure to add peer reviewers as outlined in the blue box so that others can check your work and help provide feedback. To get credit for your work make sure to assign yourself as outlined in the pink box. Lastly when everything looks good, go ahead and click the button in the red circle to create a pull request.



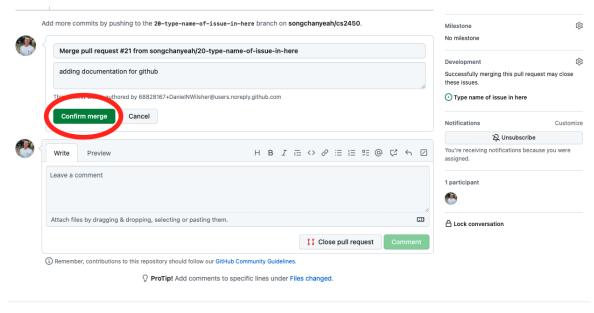
7. The pull request is open and looks like the image below, outlined in red is an overview timeline of any commits, comments or changes to the pull request. The commits tab is a timeline of commits as outlined by the green box. If you are a reviewer you will want to click on the tab outlined in the blue box to check the changes to the file and code and review there (you get credit for reviewing others work on github so it's a good habit to get into). Outlined in purple is a commit.



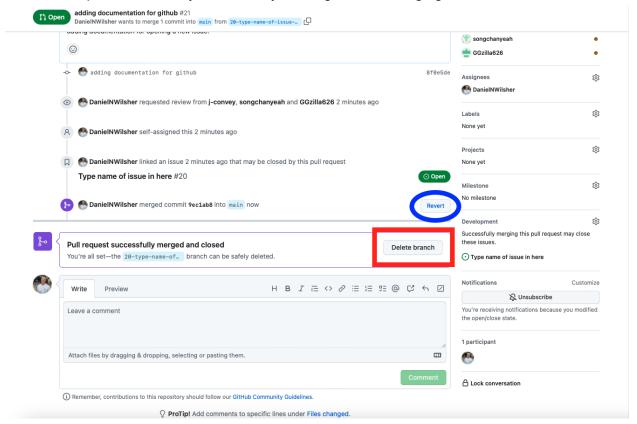
8. Once everything has been reviewed it will tell you if anyone has approved or asked for changes as outlined in the blue box (currently no reviews but some requested). Now you can click the button to merge the pull request and merge your branch into main.



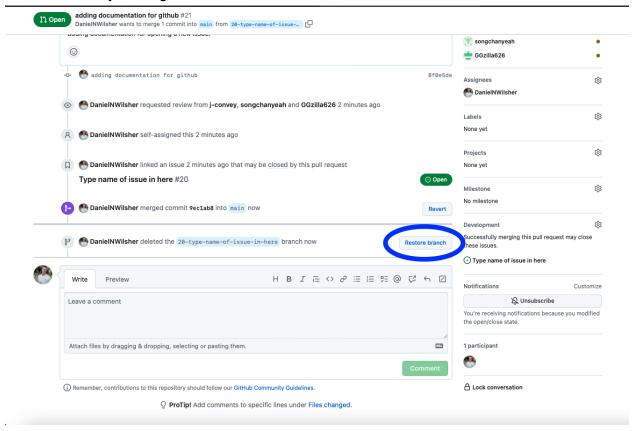
Since merges can sometimes cause issues it will ask a second time to confirm the merge and if you want to merge click the button in the red circle and it will merge the branches.



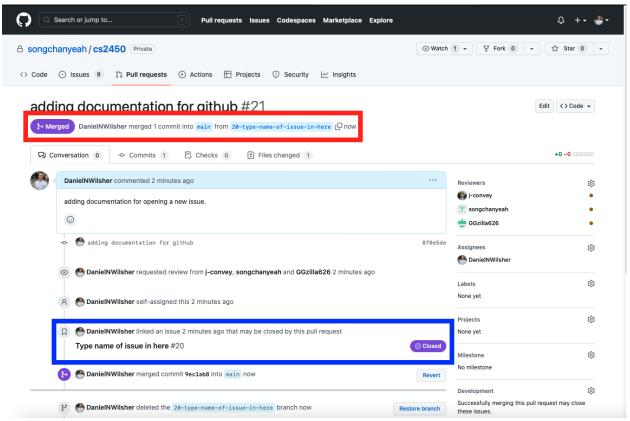
10. Just like how a tree gets overgrown sometimes we don't want to keep old branches around and like a tree we want to clip straying branches so it looks like a nice tree. After you have merged you can click delete branch as outlined in the red box to delete the branch online and keep the tree clean. Likewise if committing caused a huge issue or you didn't want to merge just yet you can click the revert button in the blue circle. For the most part make sure you are ready to merge before merging.



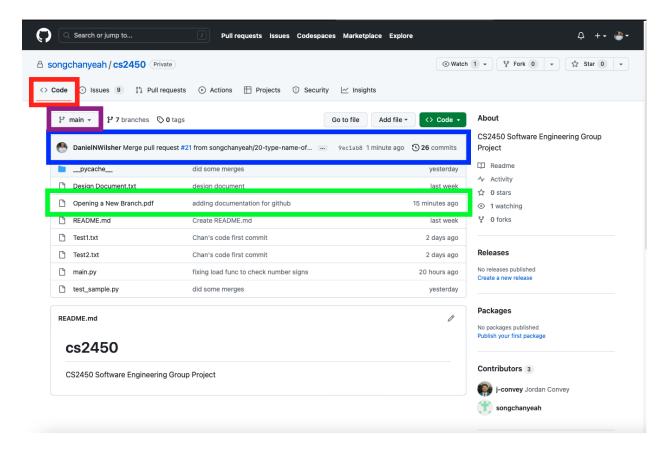
11. Like before if you delete the branch and you did not want to, you can always restore the branch by clicking the button in the blue circle.



12. You have successfully merged your branch into main and as outlined in the red box it will tell you that it is merged and who merged how many commits into main from the other branch. The blue outlined box also shows that the issue you had created earlier is now completed and closed.



13. Now if you go back to the main code tab for the repository as outlined in red (for this project the link is <a href="https://github.com/songchanyeah/cs2450">https://github.com/songchanyeah/cs2450</a>). Make sure the branch as outlined in the purple box is on the main branch and you will see as outlined in the green box that the file has been added to main. The blue box outline will also tell you the last person to merge a pull request into main from the branch they were working on as well as how long ago it was and now how many commits the branch has on it.



14. You are not done, because your local version of main is out of sync with the online repository. To fix this:

Outlined in purple is the command below to switch to the local main branch.

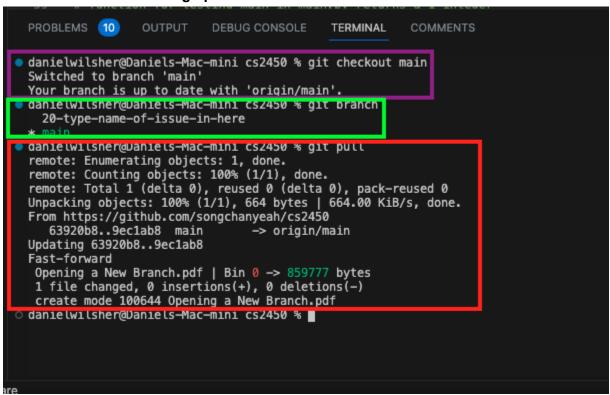
- Run the command "git checkout main"

Outlined in green is the command to check we are on the local main branch and if so the branch will be highlighted in green and have a \* next to it as shown.

- Run the command " git branch "

Outlined in red is the command to pull the latest version of main and it will show you a result of any updates which here shows 1 file was changed.

- Run the command " git pull "



Congratulations you just created a pull request and committed it to the main branch.