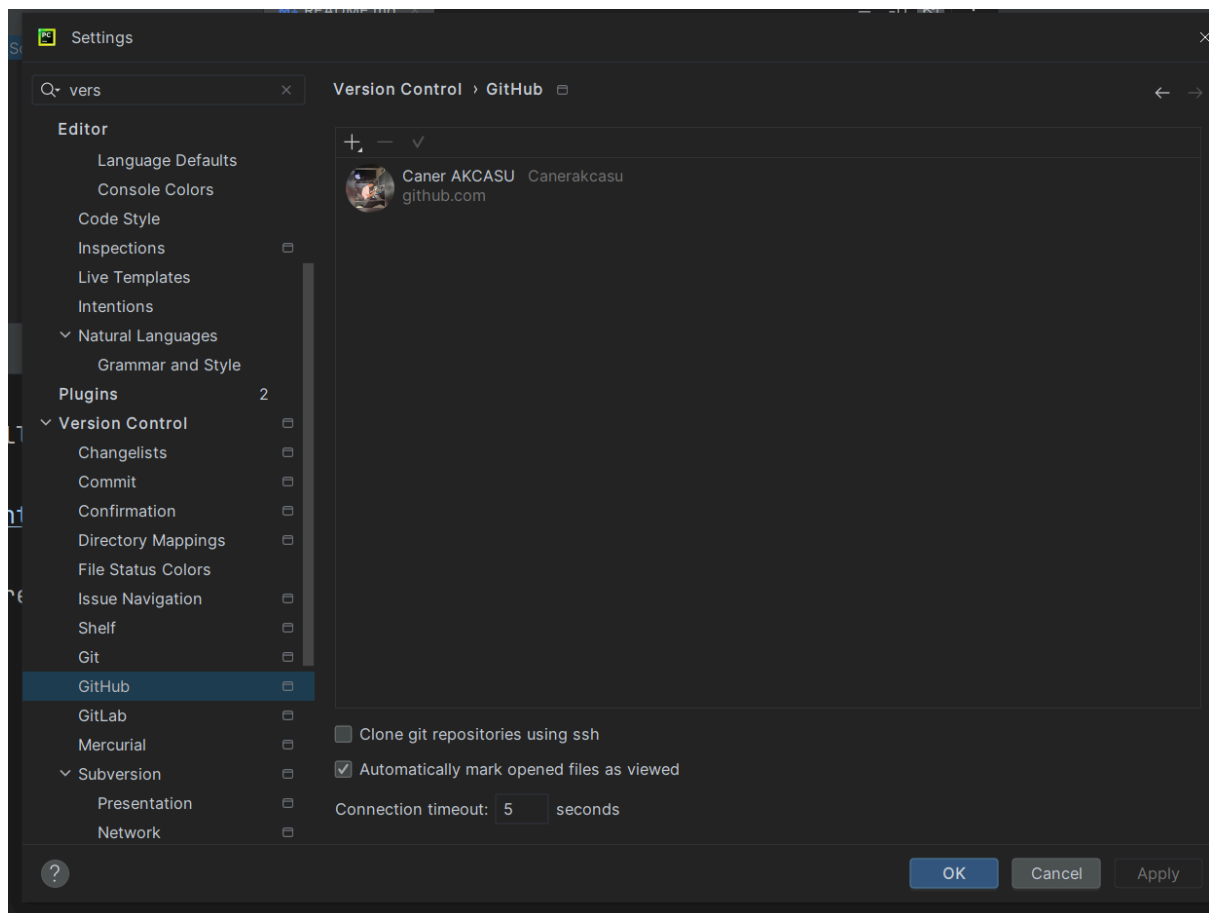


Software Build Automation Tools - GIT Automation Lab Report

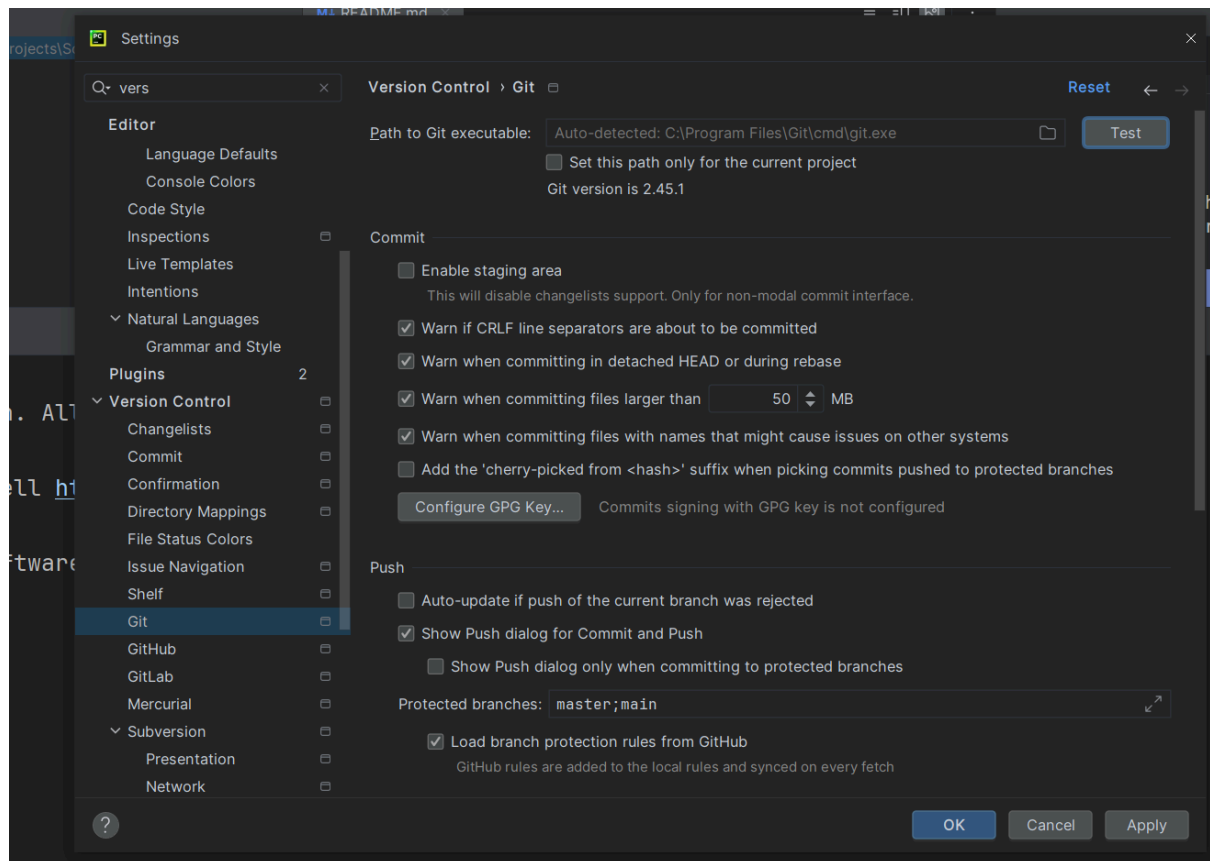
TASK4

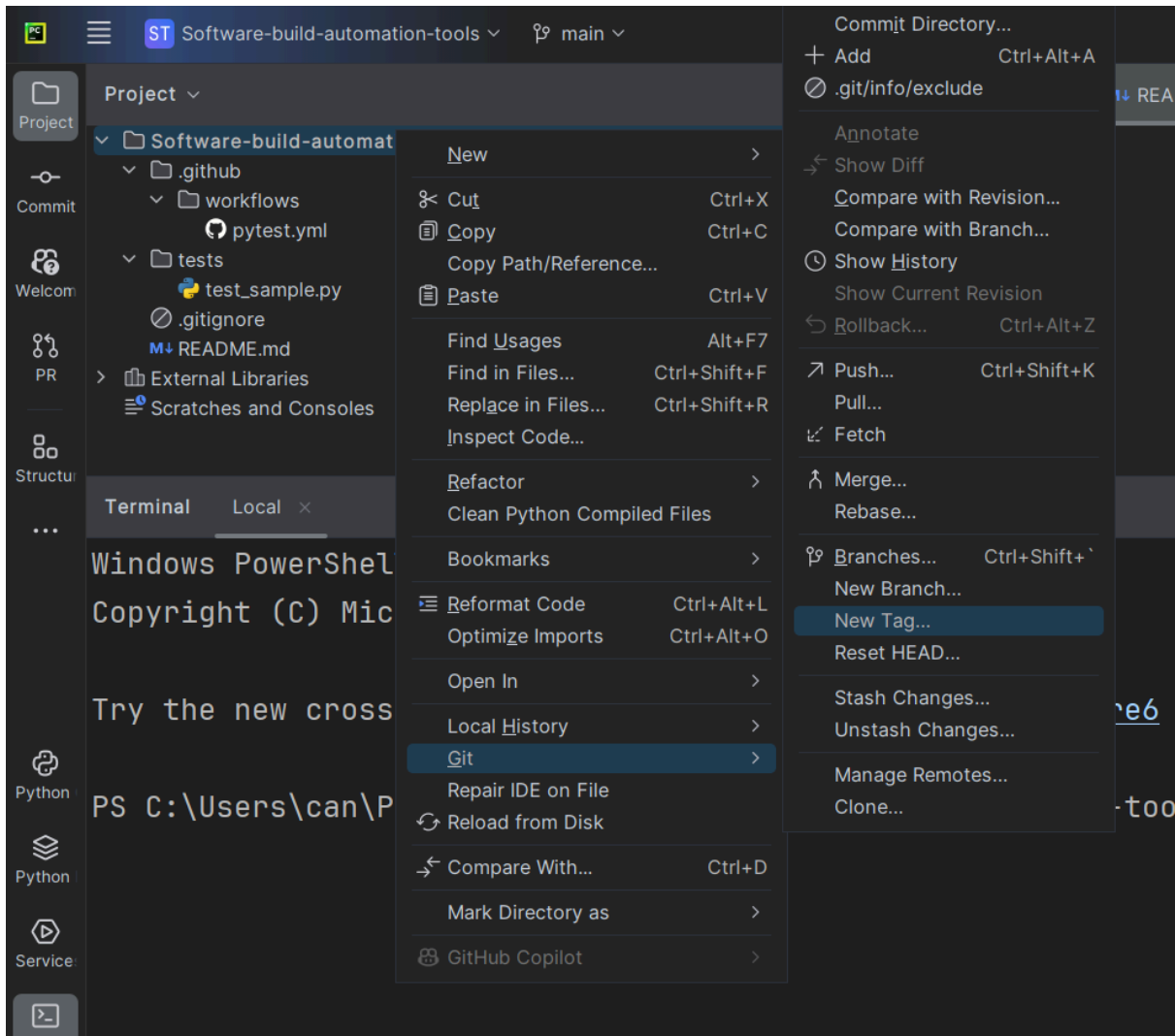
Caner akcasu

github: <https://github.com/Canerakcasu/Software-build-automation-tools>

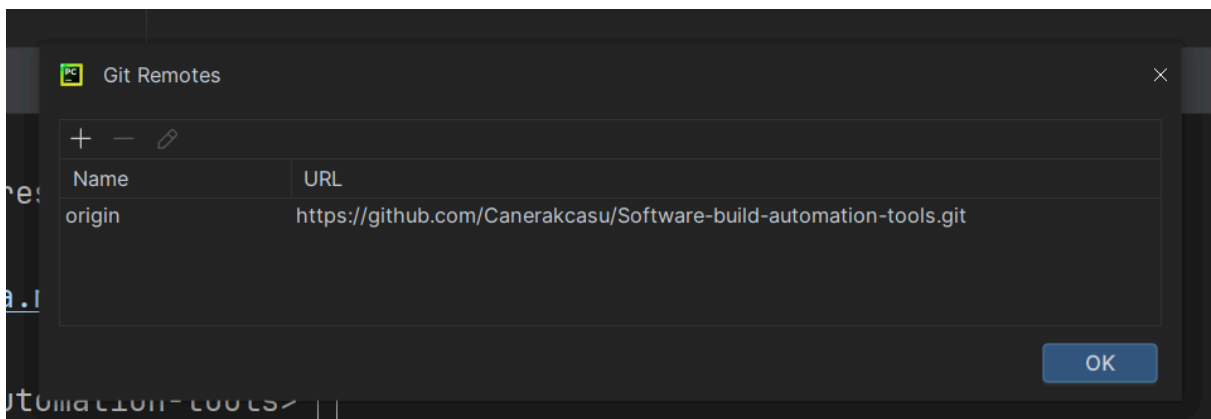


Configured Git in PyCharm by providing the path to the Git executable and testing the connection.

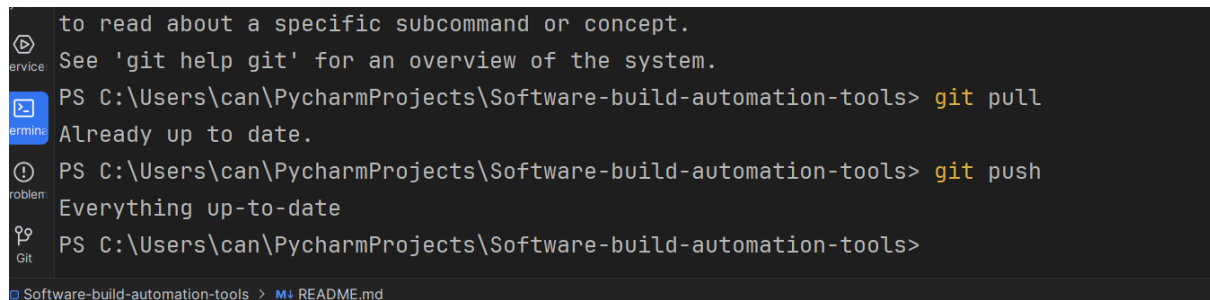




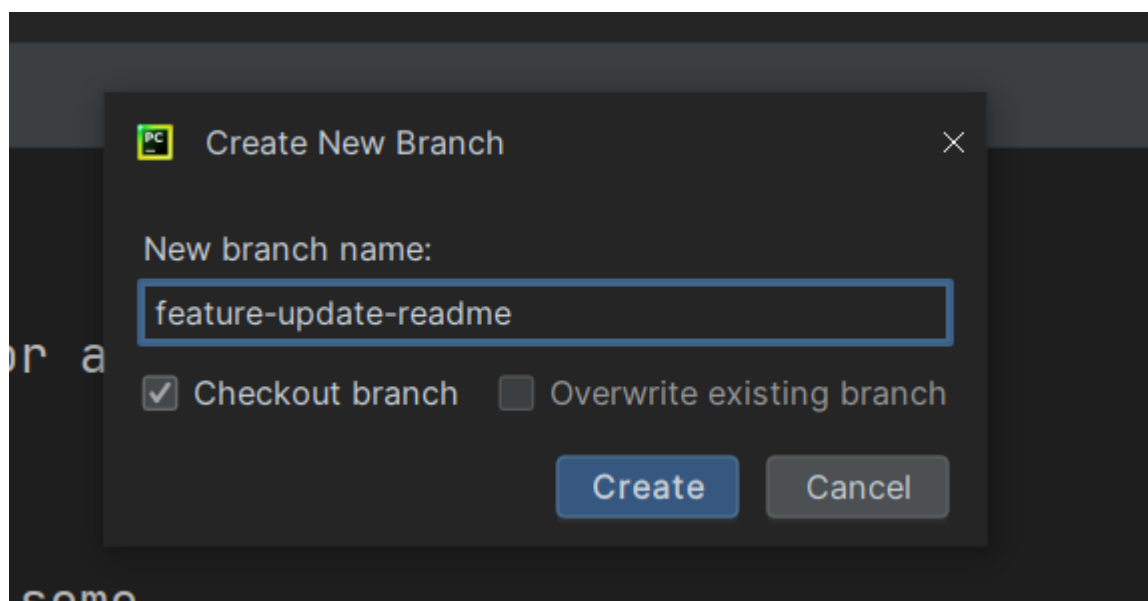
Initialized Git version control in the project. PyCharm now tracks all file changes and enables version control operations like commit, push, branch management, and more.



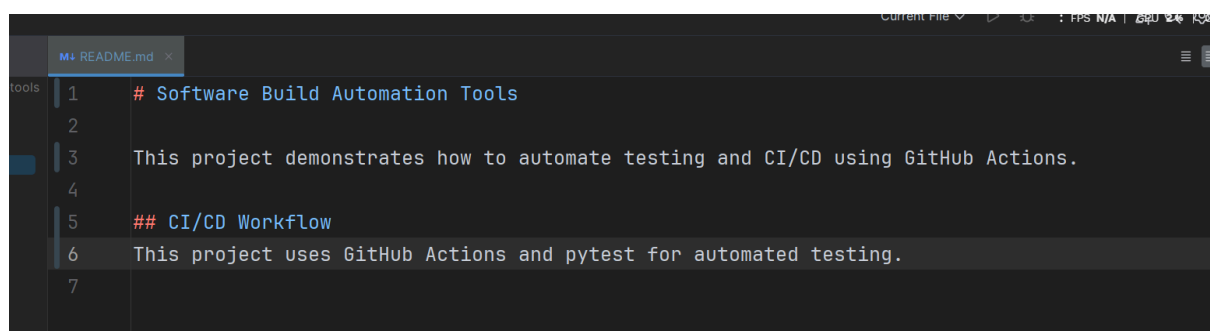
Defined the remote GitHub repository URL under the name **origin**. This allows local changes to be pushed to GitHub.



```
to read about a specific subcommand or concept.  
See 'git help git' for an overview of the system.  
PS C:\Users\can\PycharmProjects\Software-build-automation-tools> git pull  
Already up to date.  
PS C:\Users\can\PycharmProjects\Software-build-automation-tools> git push  
Everything up-to-date  
PS C:\Users\can\PycharmProjects\Software-build-automation-tools>
```

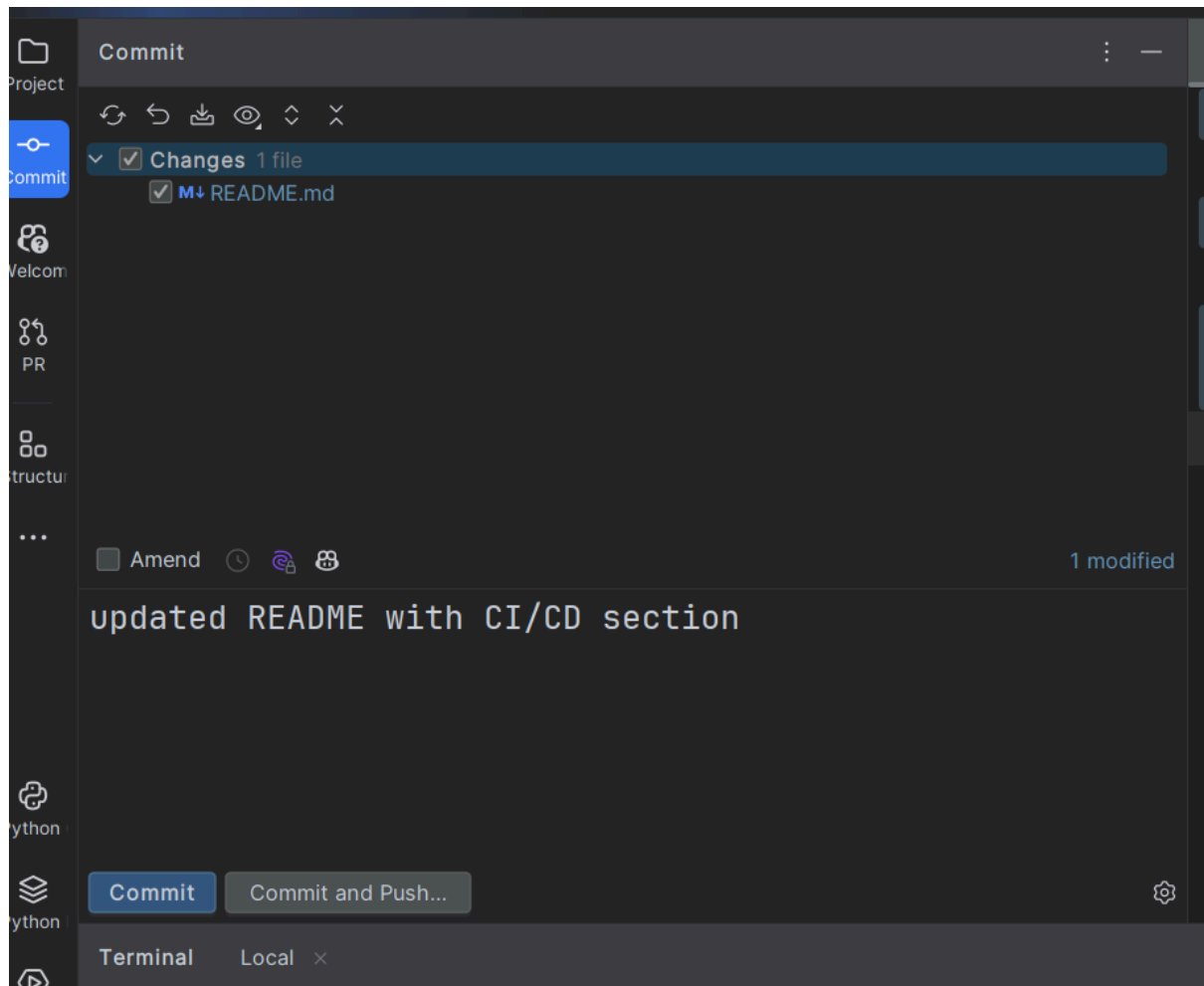


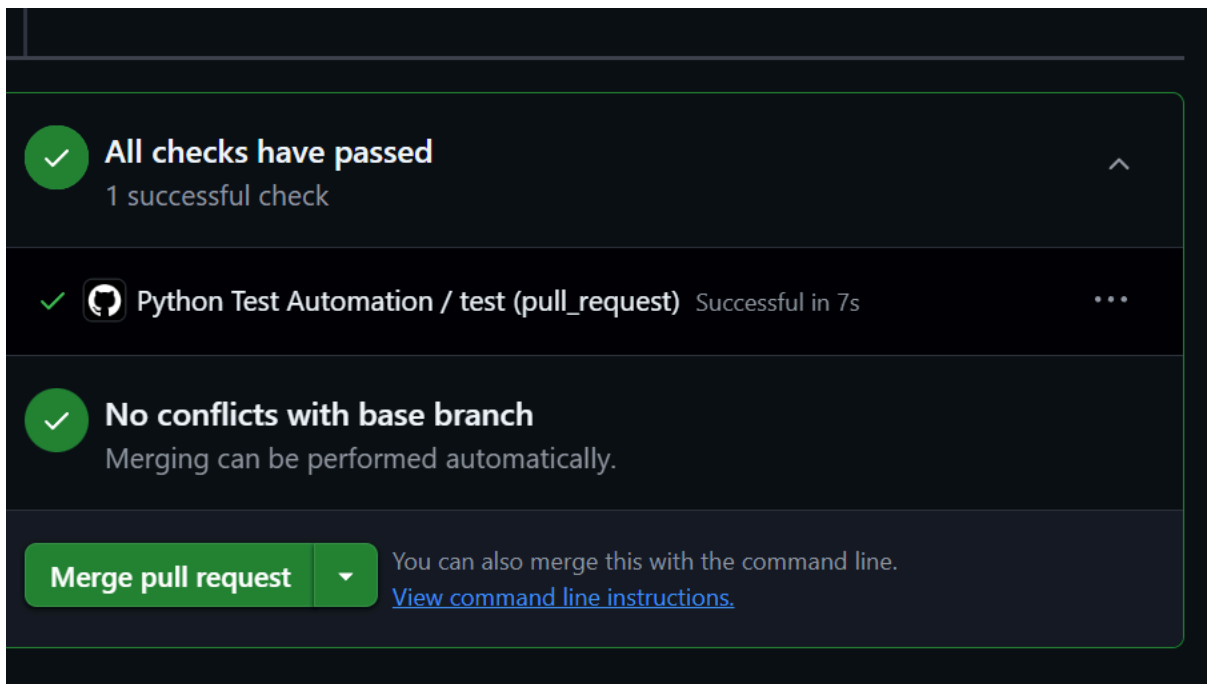
Created a new feature branch **feature-update-readme** for making isolated changes



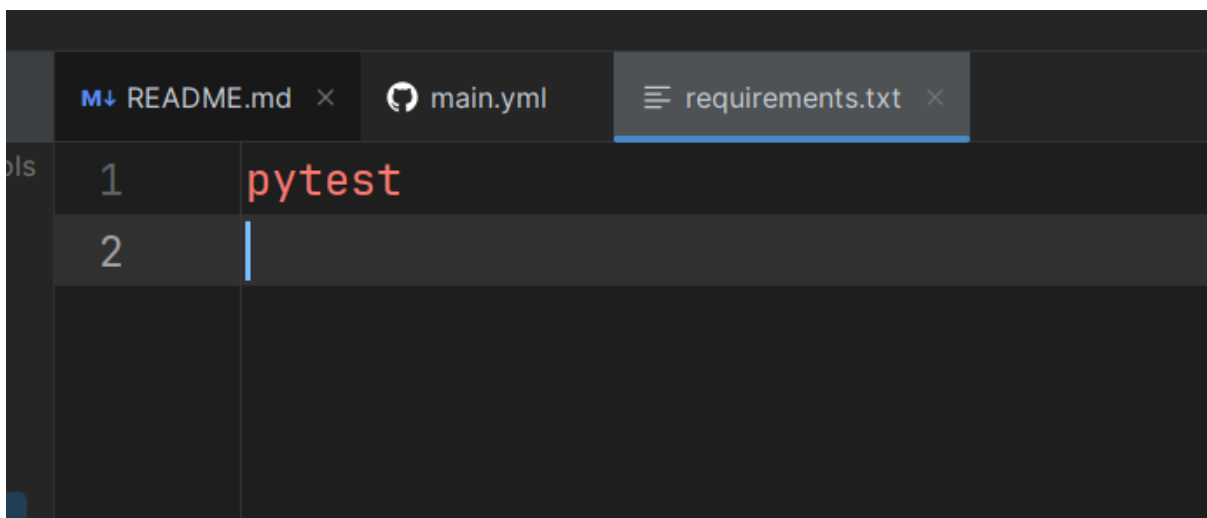
```
# Software Build Automation Tools  
  
This project demonstrates how to automate testing and CI/CD using GitHub Actions.  
  
## CI/CD Workflow  
This project uses GitHub Actions and pytest for automated testing.
```

I opened the **README.md** file in PyCharm and added a description of the CI/CD workflow used in the project. This helps explain the purpose of the automation setup to anyone viewing the repository.





Created a pull request to merge the **feature-update-readme** branch into **main**. This includes documentation about the CI/CD process in the README.



I created the **requirements.txt** file in the root directory of the project. This file lists the necessary dependencies, in this case, **pytest**, which will be used by GitHub Actions during the CI pipeline to install the required packages.

```
+ FullyQualifiedErrorId : CommandNotFoundException

PS C:\Users\can\PycharmProjects\Software-build-automation-tools> git push
Enumerating objects: 9, done.
Counting objects: 100% (9/9), done.
Delta compression using up to 4 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (6/6), 694 bytes | 694.00 KiB/s, done.
Total 6 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/Canerakcasu/Software-build-automation-tools.git
   2b134dd..bf4b81a  feature-update-readme -> feature-update-readme
PS C:\Users\can\PycharmProjects\Software-build-automation-tools> 
```

After creating the **requirements.txt** file, I committed the changes and pushed them to GitHub. This allows GitHub Actions to access the file and install the necessary dependencies during the CI process.

All workflows ▾

New workflow

Showing runs from all workflows

Filter workflow runs

12 workflow runs

Event ▾

Status ▾

Branch ▾

Actor ▾

✓ Added CI/CD section to README

Python CI #6: Pull request #2 synchronize by Canerakcasu

2 minutes ago 15s feature-update-readme

...

✓ Added CI/CD section to README

Python Test Automation #6: Pull request #2 synchronize by Canerakcasu

2 minutes ago 16s feature-update-readme

...

✗ Create main.yml

Python CI #5: Commit 40e0611 pushed by Canerakcasu

4 minutes ago 16s main

...

✓ Create main.yml

Python Test Automation #5: Commit 40e0611 pushed by Canerakcasu

...

I checked the GitHub Actions tab to confirm that the CI pipeline was triggered correctly after pushing the changes. The pipeline ran successfully and the tests passed.

← Python CI


✓

Added CI/CD section to README #6

...

Summary ▾

Triggered via pull request 2 minutes ago

 Canerakcasu

 synchronize #2 [feature-update-readme](#)

Status	Total duration	Artifacts
Success	15s	—

main.yml

on: pull_request

✓ build

6s

⌵

—

+

I reviewed the details of the job in the GitHub Actions tab. The tests ran successfully, and I confirmed that all checks passed, indicating that the CI process is working as expected.