

*“Continuous Integration Report(CIR)”*

**Project Name:** *Easy To Buy Easy To Sell*

**Framework:** *Django*

**Role:** *Project Manager/Developer*

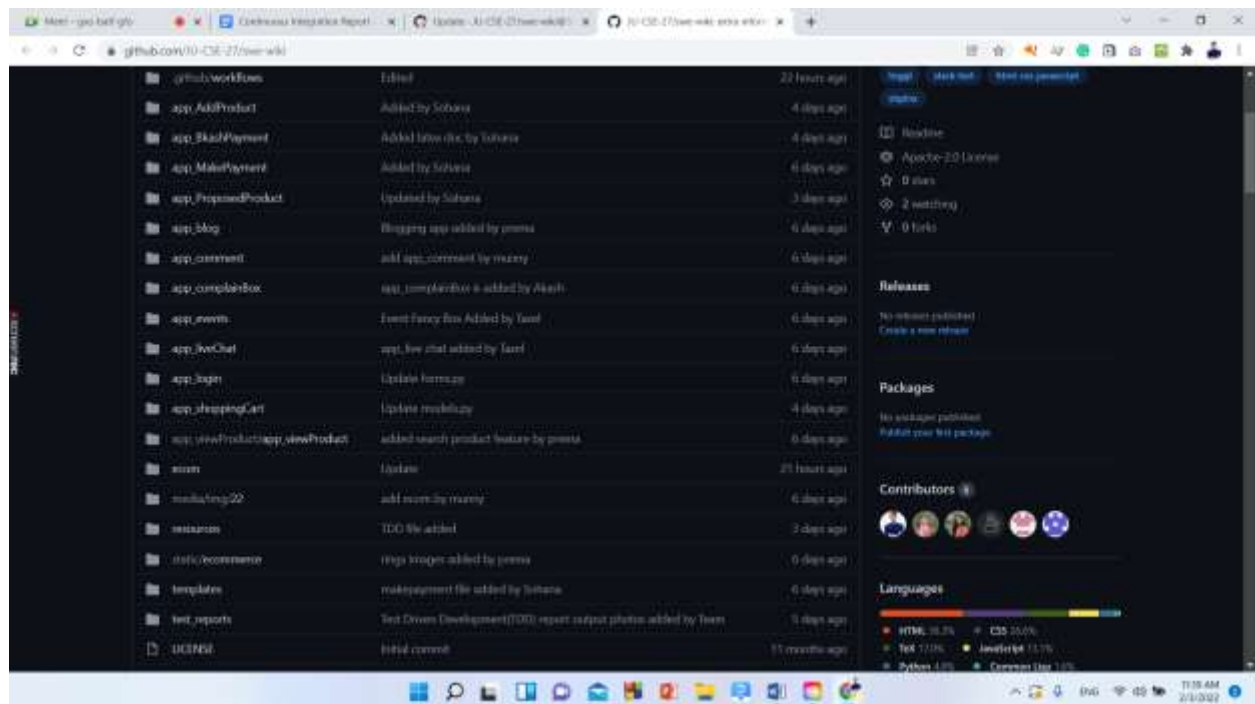
## CI Tool: *GitHub Actions as an integration tool*

**Introduction:** In our project, there were several subdivisions as we distributed works among all team members. After completing the respected tasks, the codes were pushed into personal branches in GitHub. But obviously the project will run if all the codes are merged. Here comes the Continuous Integration.

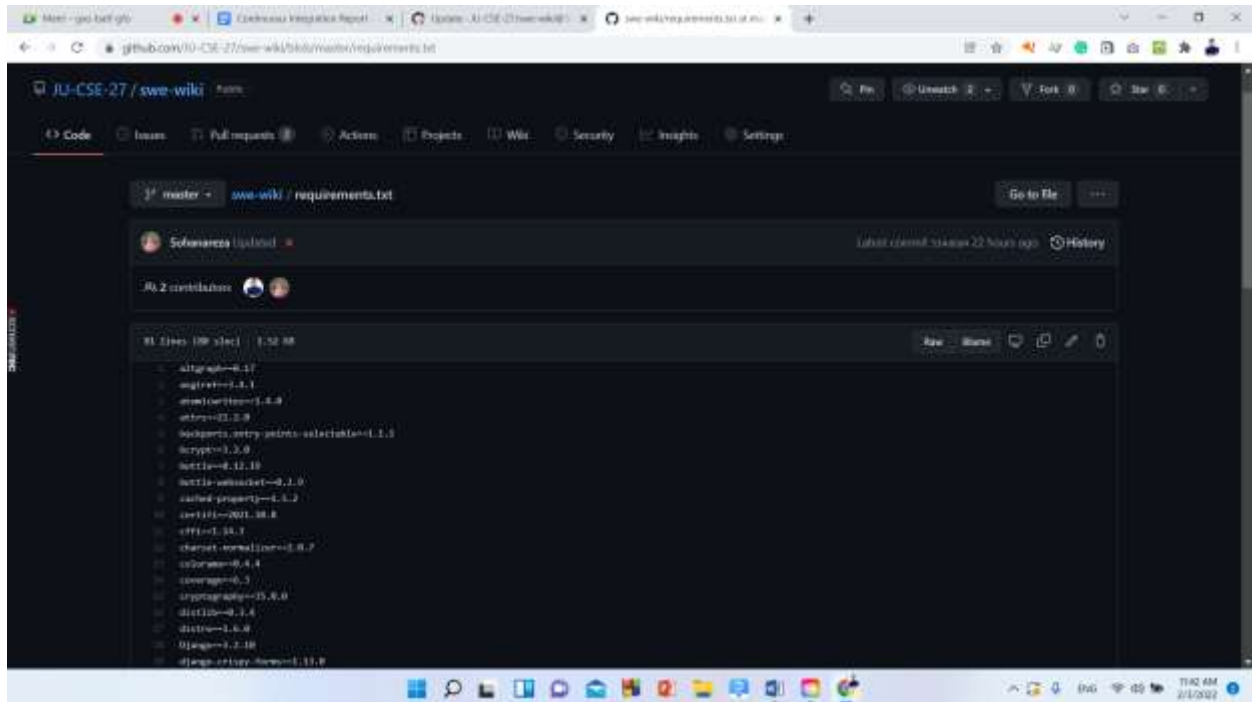
There are several tools that can be used like Jenkins, CircleCI, JitLab, GitHub Actions etc. As we used GitHub and It is very much a neighbour feature, That's why we selected Guthub actions as our CI tool.

### Working Procedure:

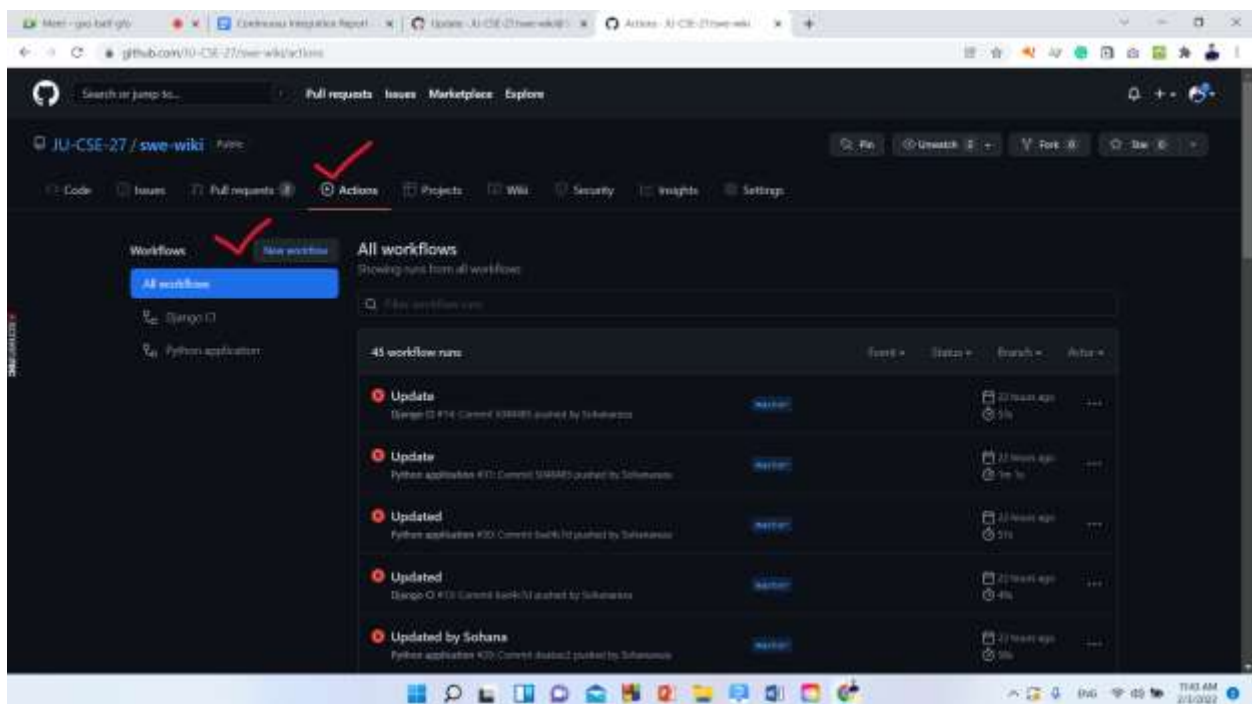
## Step-1: Merge All Branches into the main branch on GitHub.



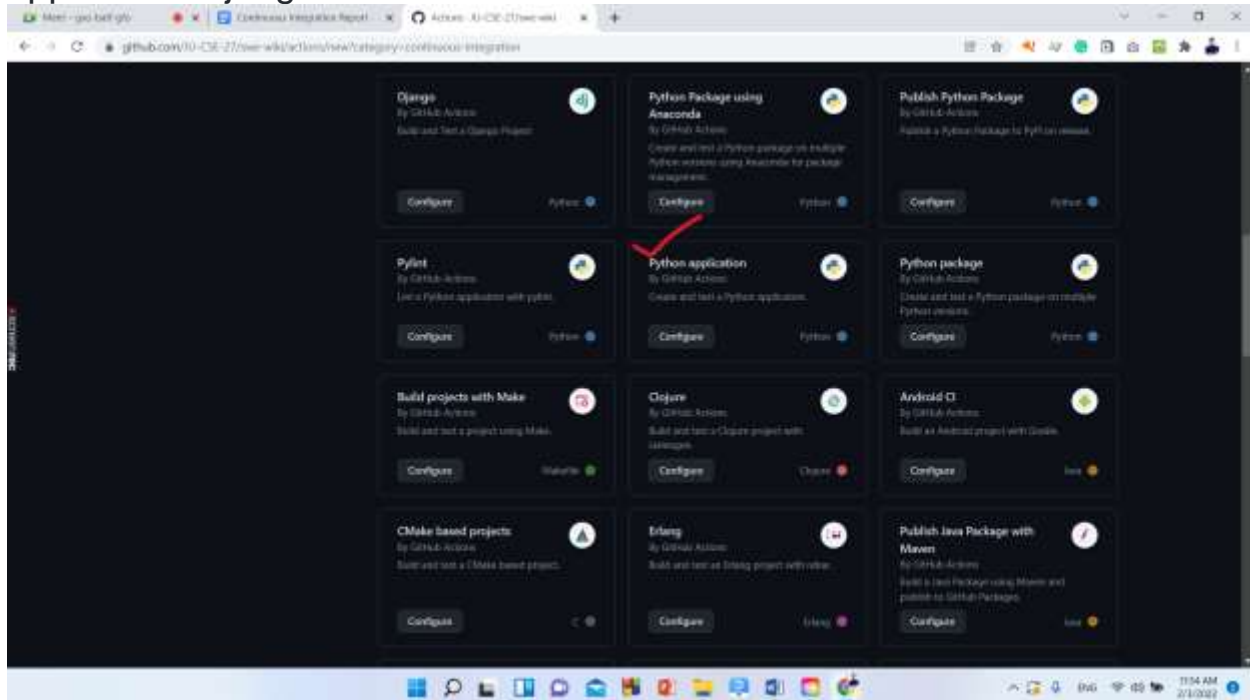
Step-2: Create a “requiriement.txt” file by VS code and pushed in the main branch



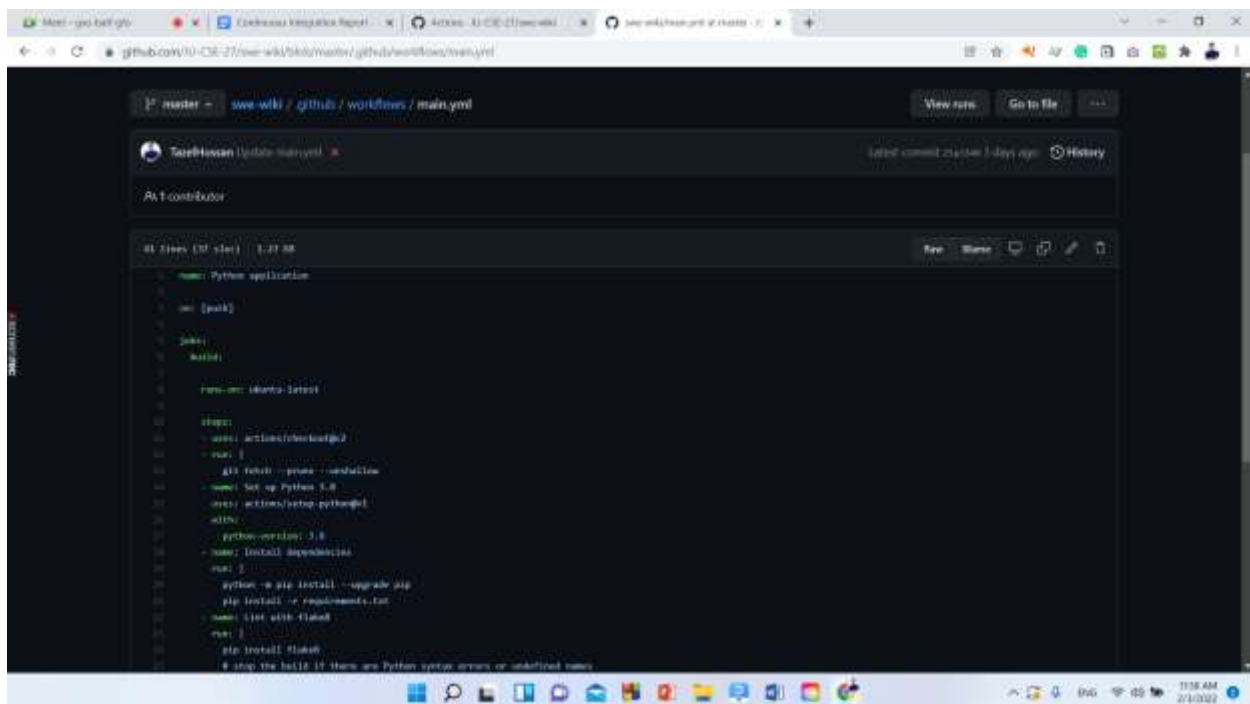
Step-3: Go to the “GitHub Actions” option and create a “new wrokflow”



Step-4: Choose a frame work according to our project for CI, “Python application-Django”



Step-5: Update Django .yml file belongs to in “.github/workflows” in main repo on Github path for committing the CI test and build



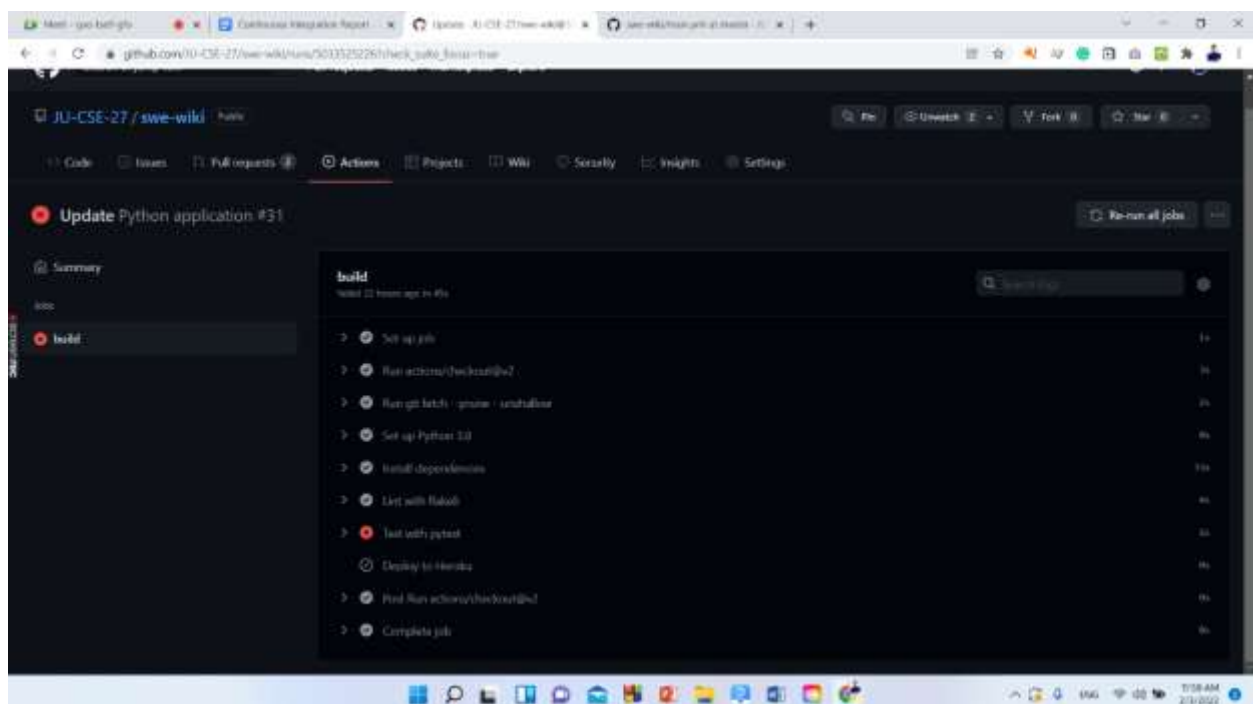
## Step-6: Build States execution

### Accept phases:

1. Setup Job
2. Run actions/checkout@v2
3. Run git fetch --prune --unshallow
4. Set up Python 3.8
5. Install dependencies
6. Lint with flake8
7. Post Run actions/checkout@v2
8. Complete job

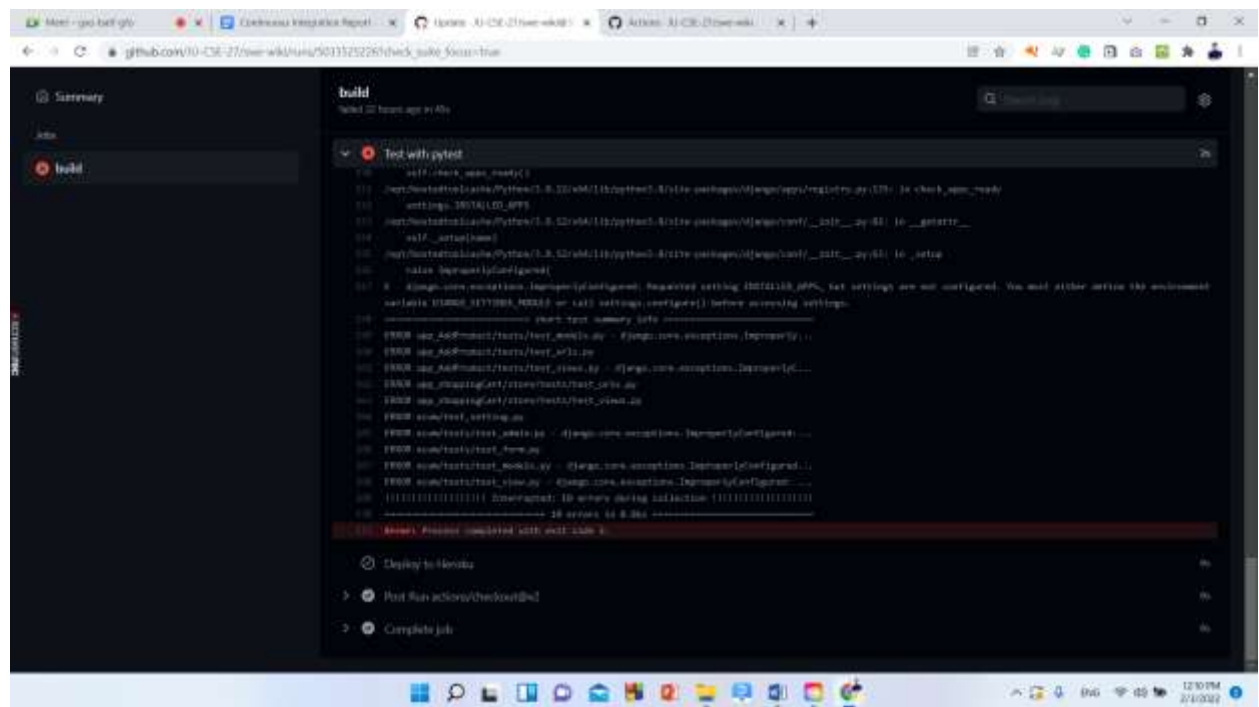
### Error phase:

1. Test with pytest

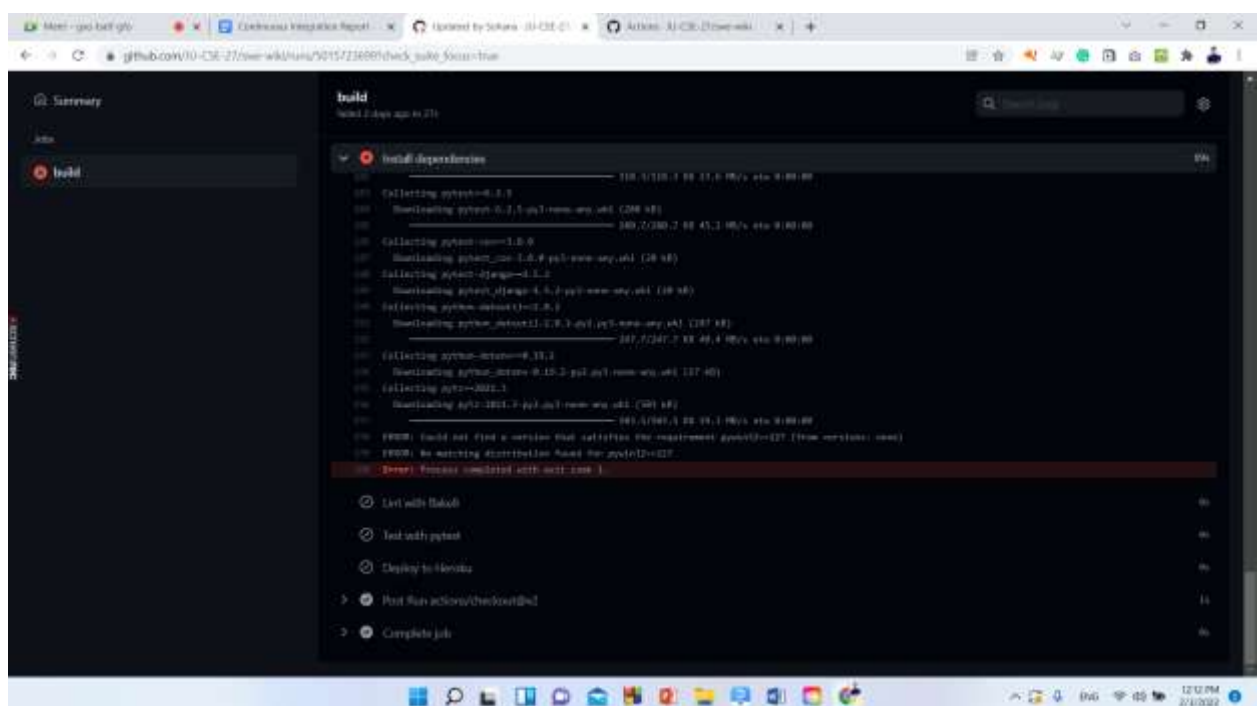


### Personal Experience:

When I run my individual feature task using Github CI, It performs well. But when I integrated my project features with my team member then show some error in pythst pahse.



And Install dependencies phase.



To resolve Install dependencies error “pywin32==227”, I update “pywin32==223”

Then it successfully run and other also successfully passed in 1)Setup Job, 2)Run actions/checkout@v2, 3)Run git fetch --prune --unshallow, 4)Set up Python 3.8, , 5)Lint with flake8, 6)Post Run actions/checkout@v2, 8)Complete job phases.

#### *Ref. Links:*

Step-1: <https://github.com/JU-CSE-27/swe-wiki>

Step-2: <https://github.com/JU-CSE-27/swe-wiki/blob/master/requirements.txt>

Step-3: <https://github.com/JU-CSE-27/swe-wiki/actions>

Step-4: <https://github.com/JU-CSE-27/swe-wiki/actions/new?category=continuous-integration>

Step-5: <https://github.com/JU-CSE-27/swe-wiki/blob/master/.github/workflows/main.yml>

Step-6: [https://github.com/JU-CSE-27/swe-wiki/runs/5033525226?check\\_suite\\_focus=true](https://github.com/JU-CSE-27/swe-wiki/runs/5033525226?check_suite_focus=true)