

## Project

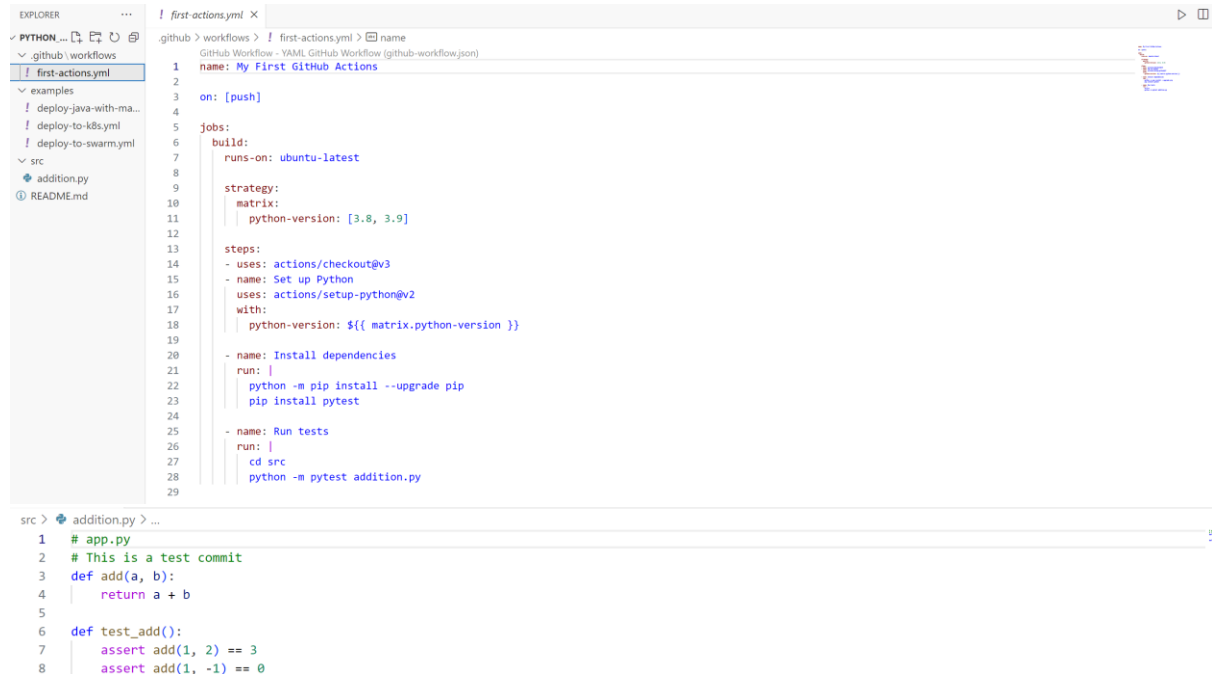
Reference GitHub Repo: <https://github.com/iam-veeramalla/GitHub-Actions-Zero-to-Hero>

SRC folder - Will have python code and on which we will write the GitHub Actions pipeline.

Examples folder – will have some sample templated that we can use in future if we are using any kind of same architecture.

.github/workflows folder – Will have the GitHub actions pipeline file.

Step -1: Clone the repo to local. Push it to GitHub to a new Separate Repo in order to execute GitHub Actions pipeline.

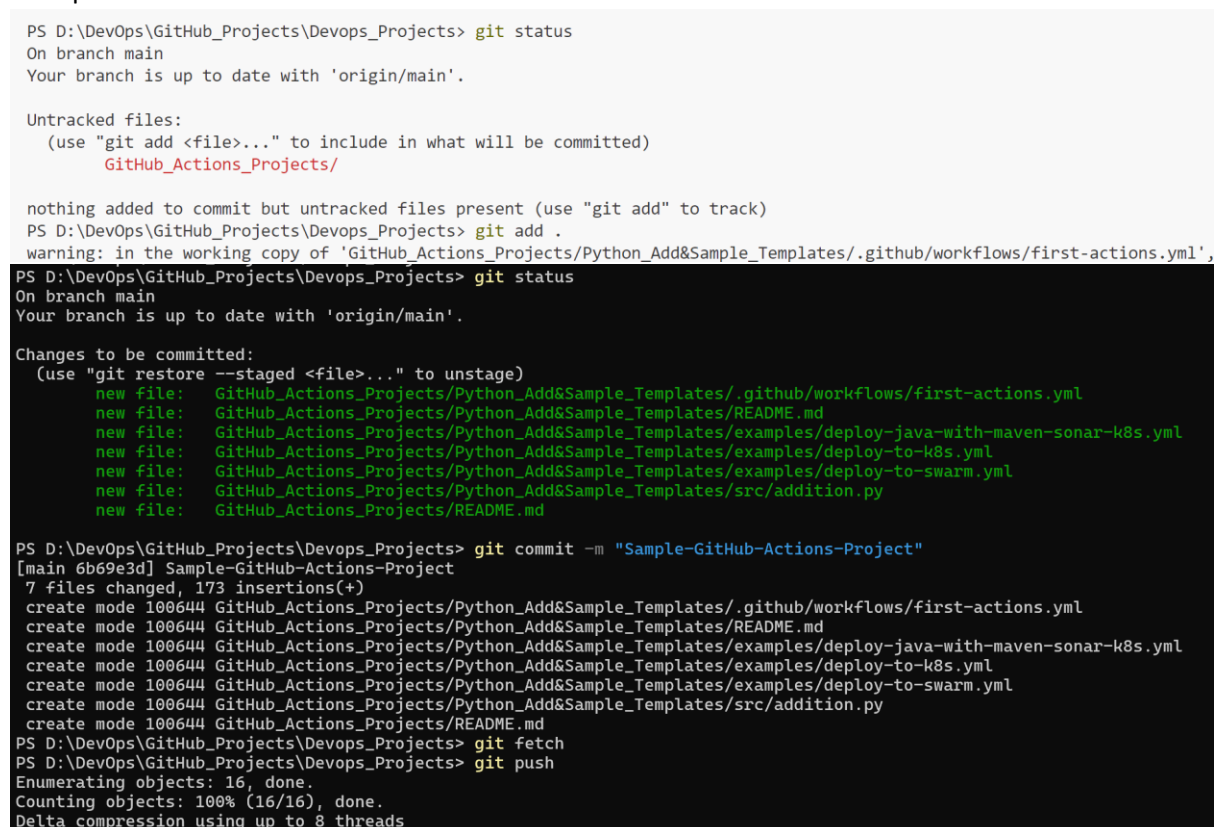


```
EXPLORER
PYTHON...
.github/workflows
  first-actions.yml
examples
  deploy-java-with-ma...
  deploy-to-k8s.yml
  deploy-to-swarm.yml
src
  addition.py
  README.md

first-actions.yml
1 name: My First GitHub Actions
2
3 on: [push]
4
5 jobs:
6   build:
7     runs-on: ubuntu-latest
8
9     strategy:
10      matrix:
11       python-version: [3.8, 3.9]
12
13     steps:
14      - uses: actions/checkout@v3
15      - name: Set up Python
16        uses: actions/setup-python@v2
17        with:
18         python-version: ${ matrix.python-version }
19
20      - name: Install dependencies
21        run: |
22         python -m pip install --upgrade pip
23         pip install pytest
24
25      - name: Run tests
26        run: |
27         cd src
28         python -m pytest addition.py
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src > addition.py > ...
1 # app.py
2 # This is a test commit
3 def add(a, b):
4     return a + b
5
6 def test_add():
7     assert add(1, 2) == 3
8     assert add(1, -1) == 0
```

Now push it to GitHub to check the GitHub Actions flow.



```
PS D:\DevOps\GitHub_Projects\Devops_Projects> git status
On branch main
Your branch is up to date with 'origin/main'.

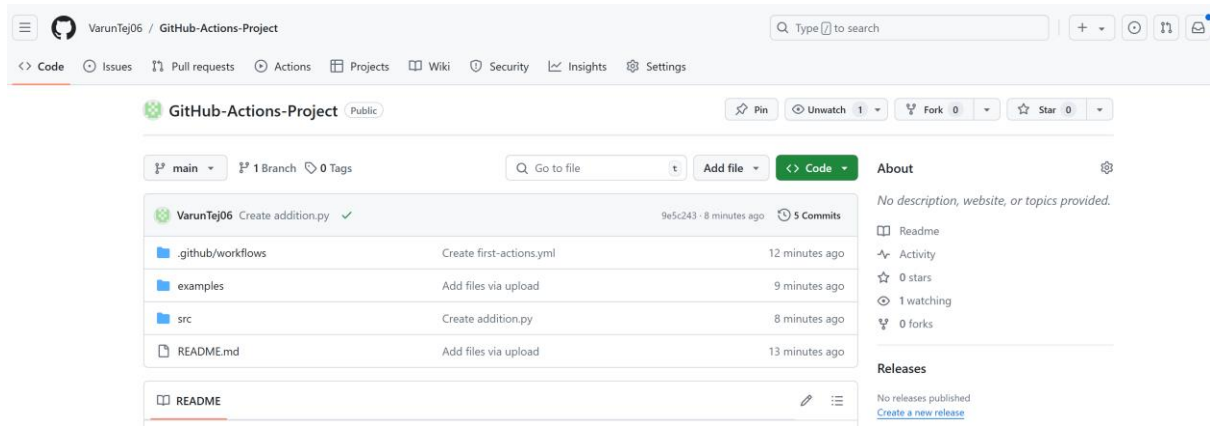
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    GitHub_Actions_Projects/

nothing added to commit but untracked files present (use "git add" to track)
PS D:\DevOps\GitHub_Projects\Devops_Projects> git add .
warning: in the working copy of 'GitHub_Actions_Projects/Python_Add&Sample_Templates/.github/workflows/first-actions.yml',
PS D:\DevOps\GitHub_Projects\Devops_Projects> git status
On branch main
Your branch is up to date with 'origin/main'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   GitHub_Actions_Projects/Python_Add&Sample_Templates/.github/workflows/first-actions.yml
    new file:   GitHub_Actions_Projects/Python_Add&Sample_Templates/README.md
    new file:   GitHub_Actions_Projects/Python_Add&Sample_Templates/examples/deploy-java-with-maven-sonar-k8s.yml
    new file:   GitHub_Actions_Projects/Python_Add&Sample_Templates/examples/deploy-to-k8s.yml
    new file:   GitHub_Actions_Projects/Python_Add&Sample_Templates/examples/deploy-to-swarm.yml
    new file:   GitHub_Actions_Projects/Python_Add&Sample_Templates/src/addition.py
    new file:   GitHub_Actions_Projects/README.md
PS D:\DevOps\GitHub_Projects\Devops_Projects> git commit -m "Sample-GitHub-Actions-Project"
[main 6b69e3d] Sample-GitHub-Actions-Project
 7 files changed, 173 insertions(+)
 create mode 100644 GitHub_Actions_Projects/Python_Add&Sample_Templates/.github/workflows/first-actions.yml
 create mode 100644 GitHub_Actions_Projects/Python_Add&Sample_Templates/README.md
 create mode 100644 GitHub_Actions_Projects/Python_Add&Sample_Templates/examples/deploy-java-with-maven-sonar-k8s.yml
 create mode 100644 GitHub_Actions_Projects/Python_Add&Sample_Templates/examples/deploy-to-k8s.yml
 create mode 100644 GitHub_Actions_Projects/Python_Add&Sample_Templates/examples/deploy-to-swarm.yml
 create mode 100644 GitHub_Actions_Projects/Python_Add&Sample_Templates/src/addition.py
 create mode 100644 GitHub_Actions_Projects/README.md
PS D:\DevOps\GitHub_Projects\Devops_Projects> git fetch
PS D:\DevOps\GitHub_Projects\Devops_Projects> git push
Enumerating objects: 16, done.
Counting objects: 100% (16/16), done.
Delta compression using up to 8 threads
```

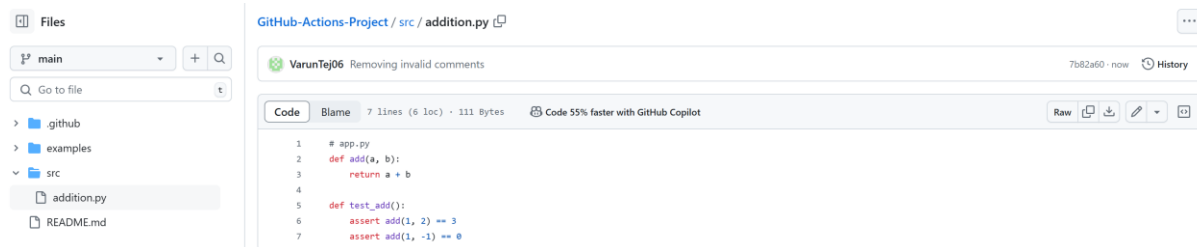
The Project Directory is in Separate GitHub repo now.

Repo URL: <https://github.com/VarunTej06/GitHub-Actions-Project>

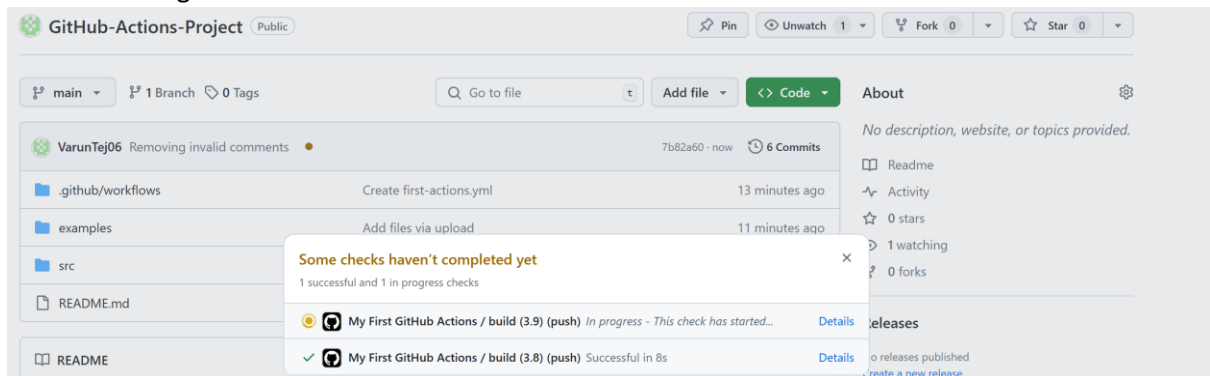


Now let's do some changes:

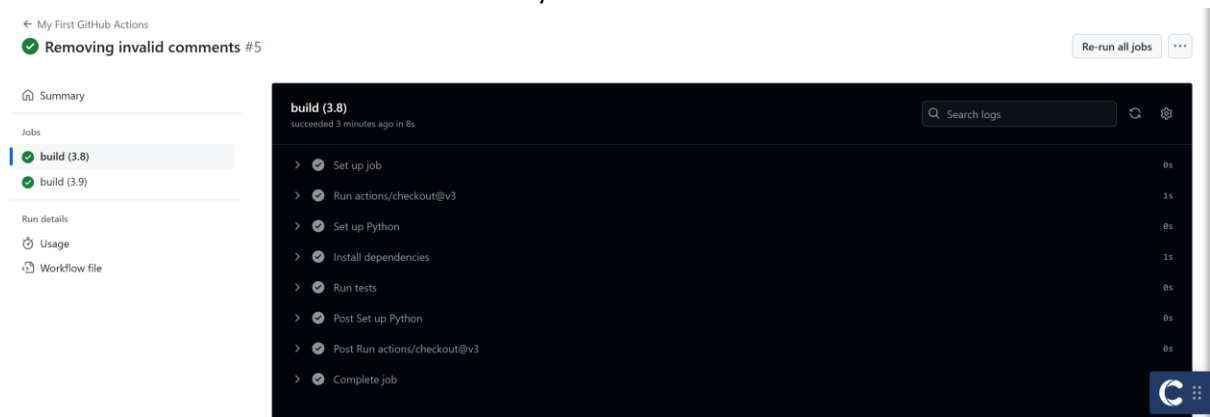
Can change in Local IDE and push to repo or directly change and commit in GitHub to invoke GitHub Actions pipeline. Remove line number 2 in addition.py file. After remove it will look like this.



Go to the Repo main directory. You can see brown color dot which indicates GitHub Actions pipeline started running.



Click on Details: You can see build flow clearly.



Once the build is success you can green tick mark indicating success.

