

Experiment 3

Maven Build Using GitHub Actions

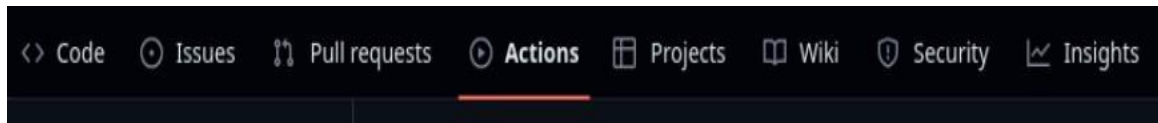
Objective: Setup a GitHub Actions workflow to automatically build a Maven Project whenever changes are pushed to a GitHub repository.

1. Create a Maven Project and Push the Project to GitHub Repository.

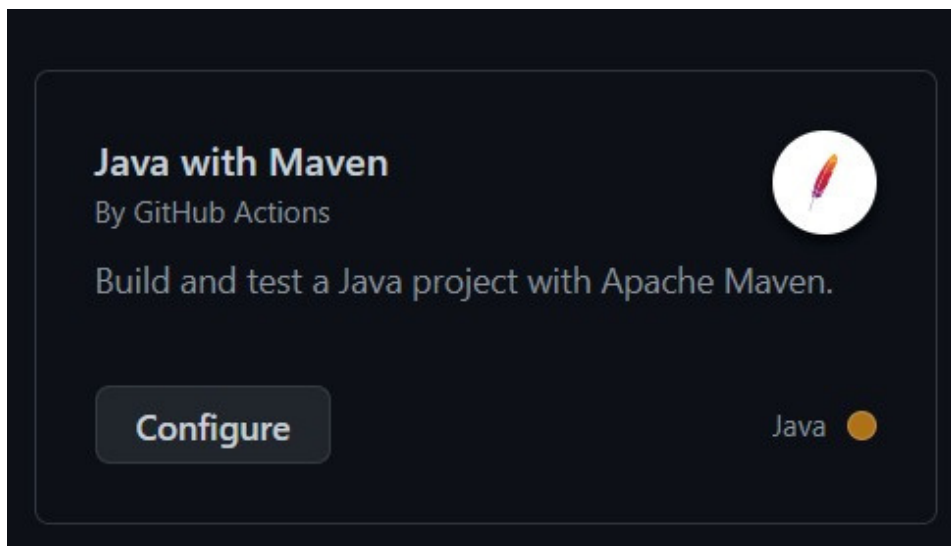
ghanshree2311 Update MyCalss.java			✓ 8b36850 on Sep 26	🕒 13 commits
📁 .github/workflows	Update cicd.yml	3 months ago		
📁 .settings	GitHub Actions	3 months ago		
📁 src/main/java/devops/b3/cicd/lab3	Update MyCalss.java	3 months ago		
📄 .classpath	GitHub Actions	3 months ago		
📄 .gitignore	GitHub Actions	3 months ago		
📄 .project	GitHub Actions	3 months ago		
📄 Dockerfile	Update Dockerfile	3 months ago		
📄 pom.xml	GitHub Actions	3 months ago		

2. Set up GitHub Actions:

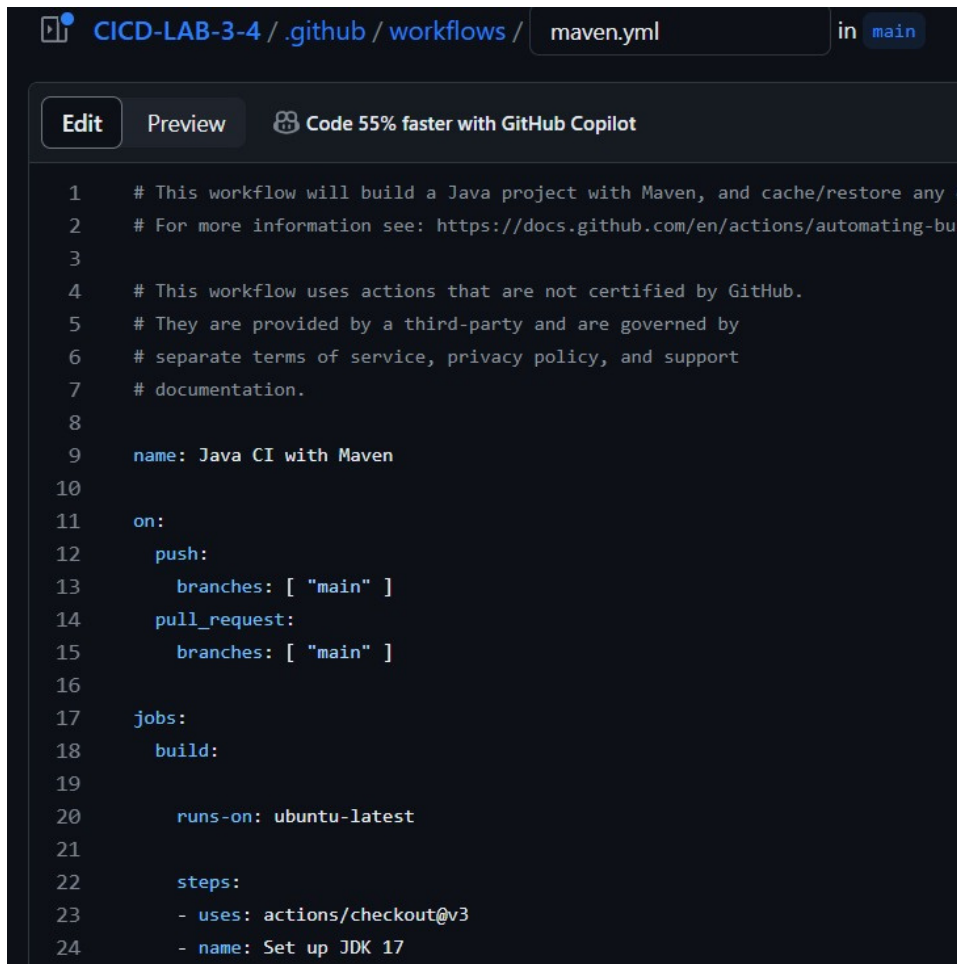
(a) Click on Actions tab



(b) Click on Java with Maven



(c) Configure maven.yml file and commit changes.



The screenshot shows the GitHub Actions workflow editor for a file named `maven.yml` in the `main` branch. The interface includes tabs for `Edit` and `Preview`, and a banner for GitHub Copilot. The workflow is a YAML file that defines a job named `build` to run on `ubuntu-latest`. It includes steps for checking out the code and setting up JDK 17.

```
1  # This workflow will build a Java project with Maven, and cache/restore any d
2  # For more information see: https://docs.github.com/en/actions/automating-bui
3
4  # This workflow uses actions that are not certified by GitHub.
5  # They are provided by a third-party and are governed by
6  # separate terms of service, privacy policy, and support
7  # documentation.
8
9  name: Java CI with Maven
10
11  on:
12    push:
13      branches: [ "main" ]
14    pull_request:
15      branches: [ "main" ]
16
17  jobs:
18    build:
19
20      runs-on: ubuntu-latest
21
22      steps:
23        - uses: actions/checkout@v3
24        - name: Set up JDK 17
```

(d) An initial automatic Build is Triggered.



(e) Pull the Code on Local Machine and push recent changes. This will Trigger new Automated Builds.

