

Experiment 3

Maven Build using GitHub Actions

Aim

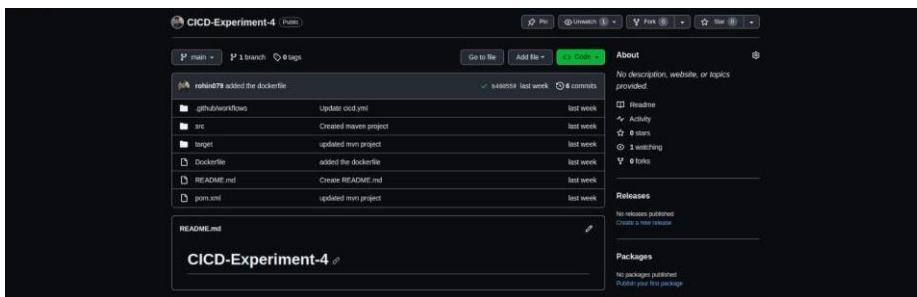
Set up a GitHub Actions workflow to automatically build a Maven project whenever changes are pushed to a GitHub repository.

Steps

1. Create a maven project

```
downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/archetype/maven-archetype-quickstart/1.0/maven-archetype-quickstart-1.0.pom
[INFO] -----
[INFO] Using following parameters for creating project from Old (1.x) Archetype: maven-archetype-quickstart:1.0
[INFO] -----
[INFO] Parameter: basedir, Value: /home/rohin/UPES/Sem 4/cicd/experiment 3
[INFO] Parameter: package, Value: DevOps
[INFO] Parameter: groupId, Value: DevOps
[INFO] Parameter: artifactId, Value: CICD-EXP3
[INFO] Parameter: packageName, Value: DevOps
[INFO] Parameter: version, Value: 1.0-SNAPSHOT
[INFO] project created from Old (1.x) Archetype in dir: /home/rohin/UPES/Sem 4/cicd/experiment 3/CICD-EXP3
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 02:58 min
[INFO] Finished at: 2023-09-19T09:02:58+05:30
[INFO] -----
uk133@device:~/UPES/Sem 4/cicd/experiment 3$
```

2. Create a Git Repository

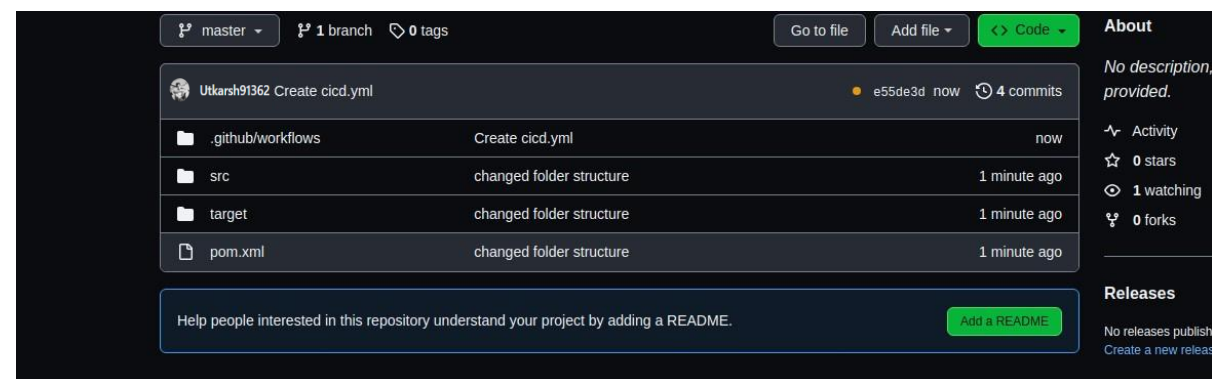
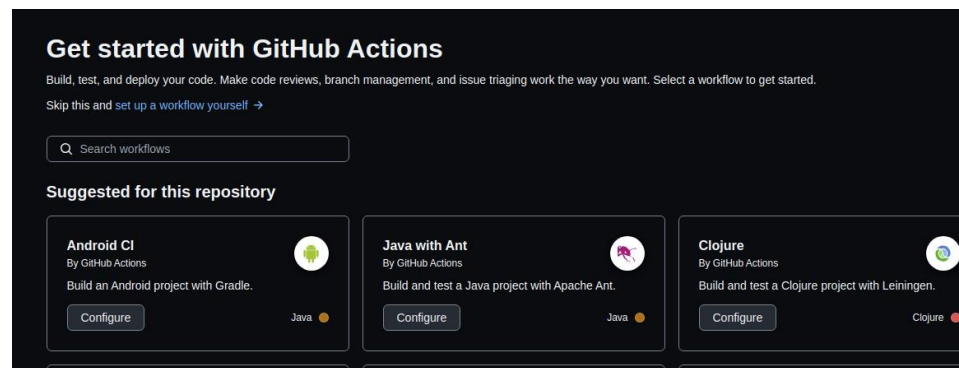


3. Commit and Push the changes on GitHub

```
uk133@device:~/UPES/Sem 4/cicd/experiment 3$ git init CICD-Experiment-3
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /home/rohin/UPES/Sem 4/cicd/experiment 3/CICD-Experiment-3/.git/
uk133@device:~/UPES/Sem 4/cicd/experiment 3$ git add .
fatal: not a git repository (or any of the parent directories): .git
uk133@device:~/UPES/Sem 4/cicd/experiment 3$ cd CICD-Experiment-3/
uk133@device:~/UPES/Sem 4/cicd/experiment 3/CICD-Experiment-3$ git add .
uk133@device:~/UPES/Sem 4/cicd/experiment 3/CICD-Experiment-3$

uk133@device:~/UPES/Sem 4/cicd/experiment 3/CICD-Experiment-3$ git commit -m "added maven project"
[master (root-commit) b131d4c] added maven project
 4 files changed, 69 insertions(+)
 create mode 100644 CICD-EXP3/pom.xml
 create mode 100644 CICD-EXP3/src/main/java/DevOps/App.class
 create mode 100644 CICD-EXP3/src/main/java/DevOps/App.java
 create mode 100644 CICD-EXP3/src/test/java/DevOps/AppTest.java
```


4. Setup GitHub workflow for the project




5. Configure the maven.yml file & commit the changes

```
uk133@device:~/UPES/Sem 4/cicd/experiment 3/CICD-Experiment-3$ git push origin master
Username for 'https://github.com': Utkarsh91362
Password for 'https://Utkarsh91362@github.com':
Enumerating objects: 24, done.
Counting objects: 100% (24/24), done.
Delta compression using up to 12 threads
Compressing objects: 100% (13/13), done.
Writing objects: 100% (24/24), 2.89 KiB | 2.89 MiB/s, done.
Total 24 (delta 2), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (2/2), done.
To https://github.com/Utkarsh91362/CICD-Experiment-3.git
 * [new branch]      master -> master
uk133@device:~/UPES/Sem 4/cicd/experiment 3/CICD-Experiment-3$
```



5. Pull the updated code on local machine 6. An automatic build will be triggered

 **Help us improve GitHub Actions**
Tell us how to make GitHub Actions work better for you with three quick questions. [Give feedback](#)


2 workflow runs Event ▾ Status ▾ Branch ▾

 **Merge branch 'master' of https://github.com/rohin079/CICD-Experiment-3**
Java CI with Maven #2: Commit 3e3c050 pushed by rohin079


master



 now
 In progress



[← Java CI with Maven](#)

 **Merge branch 'master' of https://github.com/rohin079/CICD-Experiment-3 #2**

[Summary](#)

Jobs
 build

Run details
 Usage
 Workflow file


Triggered via push 1 minute ago
 rohin079 pushed  3e3c050 **master**

Status
Success

Total duration
27s

Artifacts
-

cicd.yml
on: push

 build 18s