

EXPERIMENT – 3 and 4

Name: - Pranay Mayal

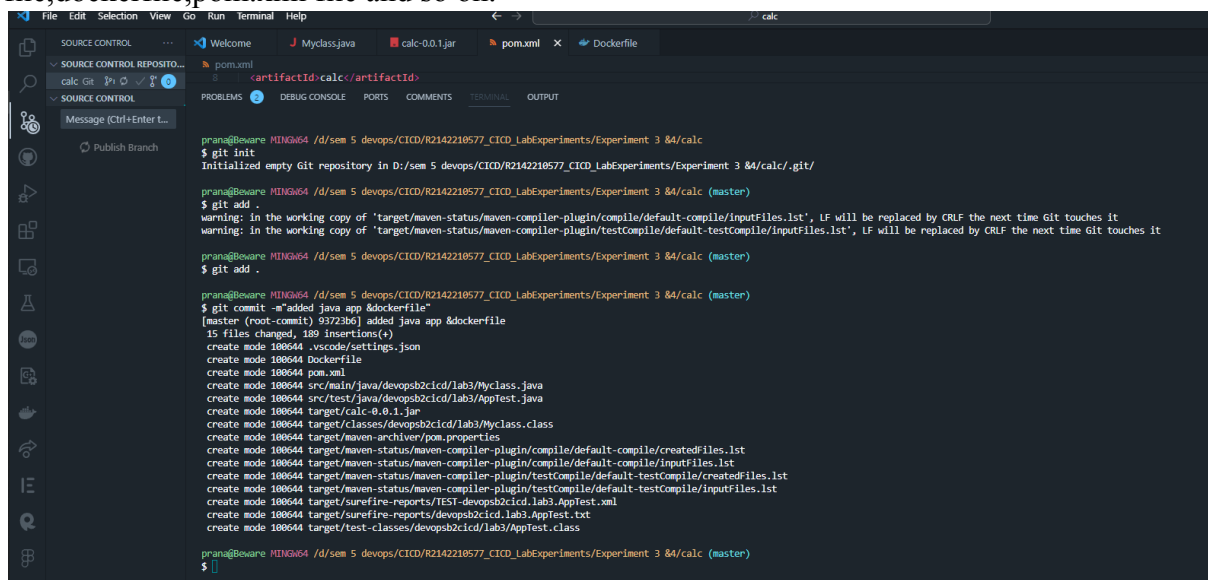
Batch – 2 [DevOps Non-Hons]

SAP ID- 500094093

Subject – Continuous Integration and Continuous Delivery Lab

Aim: Maven Build using GitHub Actions

1] Push our file on git repo name as CICD-lab3 which contain class file,dockerfile,pom.xml file and so on.



```
prana@Beware MINGW64 /d:/sem 5 devops/CICD/R2142218577_CICD_LabExperiments/Experiment 3 &4/calc
$ git init
Initialized empty Git repository in D:/sem 5 devops/CICD/R2142218577_CICD_LabExperiments/Experiment 3 &4/calc/.git/

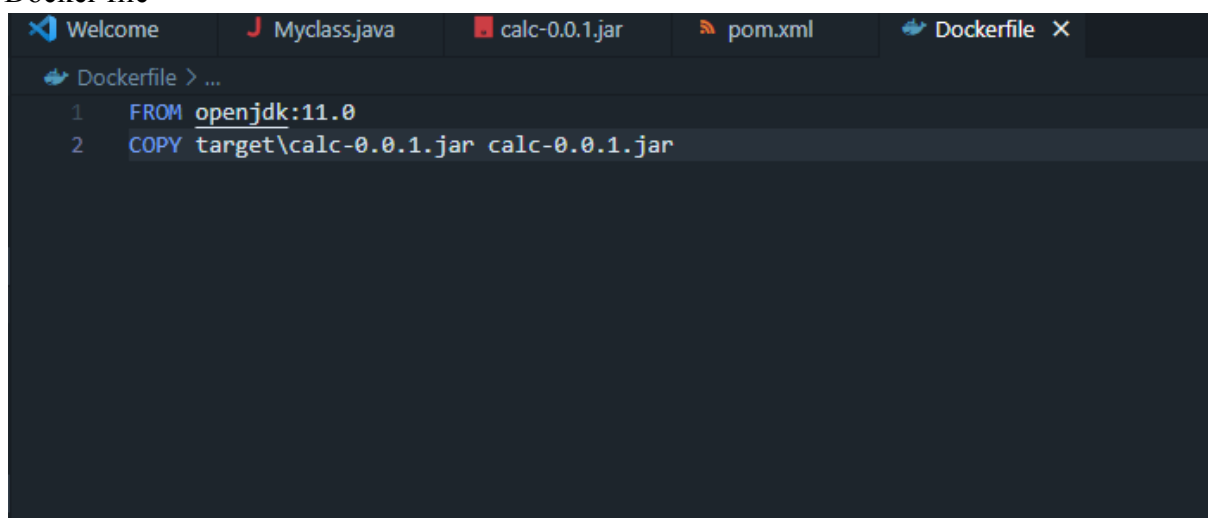
prana@Beware MINGW64 /d:/sem 5 devops/CICD/R2142218577_CICD_LabExperiments/Experiment 3 &4/calc (master)
$ git add .
warning: in the working copy of 'target/maven-status/maven-compiler-plugin/compile/default-compile/inputFiles.lst', LF will be replaced by CRLF the next time Git touches it
warning: in the working copy of 'target/maven-status/maven-compiler-plugin/testCompile/default-testCompile/inputFiles.lst', LF will be replaced by CRLF the next time Git touches it

prana@Beware MINGW64 /d:/sem 5 devops/CICD/R2142218577_CICD_LabExperiments/Experiment 3 &4/calc (master)
$ git add .

prana@Beware MINGW64 /d:/sem 5 devops/CICD/R2142218577_CICD_LabExperiments/Experiment 3 &4/calc (master)
$ git commit -m"added java app &dockerfile"
[master (root-commit) 93723b6] added java app &dockerfile
15 files changed, 189 insertions(+)
create mode 100644 .vscode/settings.json
create mode 100644 Dockerfile
create mode 100644 pom.xml
create mode 100644 src/main/java/devops2cicd/lab3/MyClass.java
create mode 100644 src/test/java/devops2cicd/lab3/AppTest.java
create mode 100644 target/calc-0.0.1.jar
create mode 100644 target/classes/devops2cicd/lab3/MyClass.class
create mode 100644 target/maven-archiver/pom.properties
create mode 100644 target/maven-status/maven-compiler-plugin/compile/default-compile/createdFiles.lst
create mode 100644 target/maven-status/maven-compiler-plugin/compile/default-compile/inputFiles.lst
create mode 100644 target/maven-status/maven-compiler-plugin/testCompile/default-testCompile/createdFiles.lst
create mode 100644 target/maven-status/maven-compiler-plugin/testCompile/default-testCompile/inputFiles.lst
create mode 100644 target/surefire-reports/TEST-devops2cicd.lab3.AppTest.xml
create mode 100644 target/surefire-reports/devops2cicd.lab3.AppTest.txt
create mode 100644 target/test-classes/devops2cicd/lab3/AppTest.class

prana@Beware MINGW64 /d:/sem 5 devops/CICD/R2142218577_CICD_LabExperiments/Experiment 3 &4/calc (master)
$
```

Docker file



```
Welcome | MyClass.java | calc-0.0.1.jar | pom.xml | Dockerfile X
Dockerfile > ...
1 FROM openjdk:11.0
2 COPY target\calc-0.0.1.jar calc-0.0.1.jar
```

MyClass.java file

```
src > main > java > devopsb2cicd > lab3 > J Myclass.java > Myclass > main(String[])
1 package devopsb2cicd.Lab3;
2
3 /**
4  * Hello world!
5  *
6  */
7 public class MyClass {
8     public void greetings() {
9         System.out.println(x:"Hello Github Actions");
10    }
11
12    public void testMsg() {
13        System.out.println(x:"This is the test msg");
14    }
15
16    Run | Debug
17    public static void main(String[] args) {
18        }
19    }
20 }
```

Pom.xml file

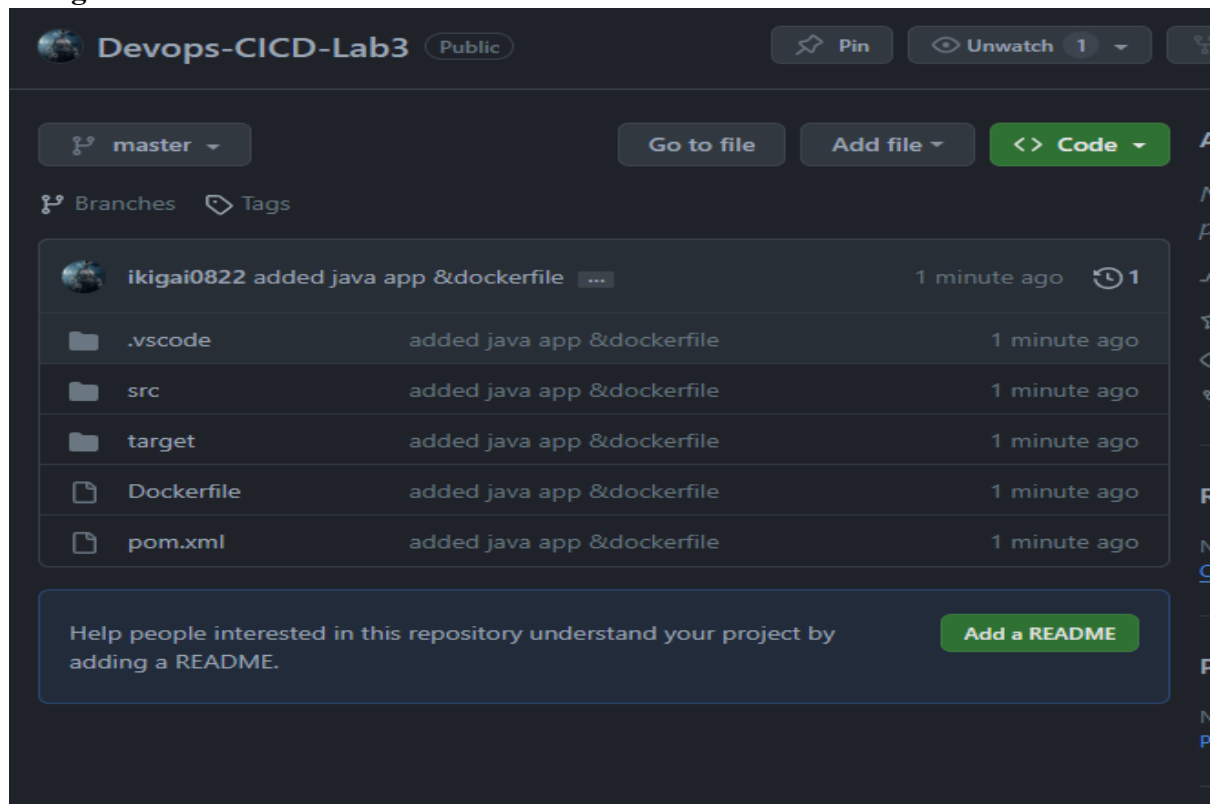
```
<artifactId>calc</artifactId>
<version>0.0.1</version>

<name>calc</name>
<!-- FIXME change it to the project's website -->
<url>http://www.example.com</url>

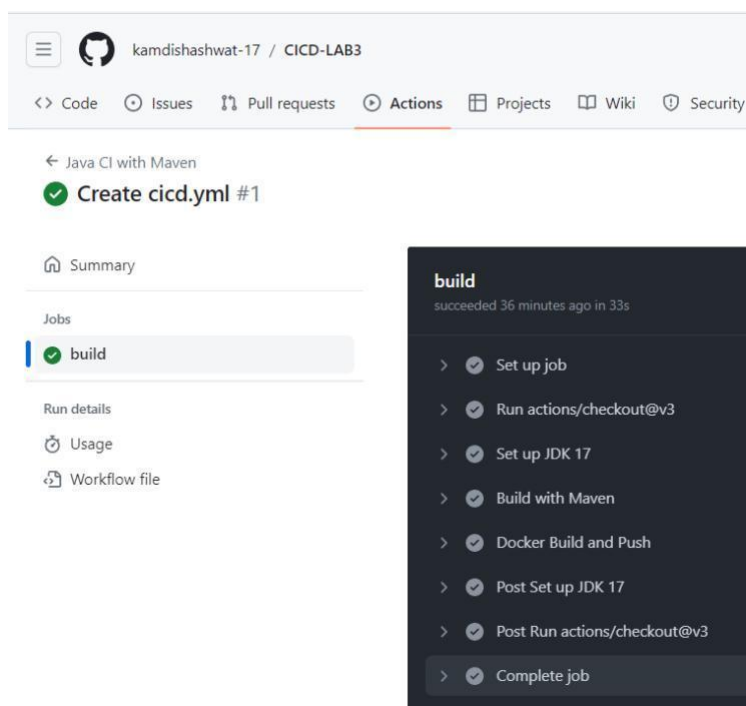
<properties>
    <project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>
    <maven.compiler.source>1.8</maven.compiler.source>
    <maven.compiler.target>1.8</maven.compiler.target>
</properties>

<dependencies>
    <dependency>
        <groupId>junit</groupId>
        <artifactId>junit</artifactId>
        <version>4.11</version>
        <scope>test</scope>
    </dependency>
</dependencies>
```



2] Create a GitHub Actions Workflow name as `cicd.yml` and click on commit and push changes.





3] Check the Workflow Status in that you will notice that our build has been completed and build images have been visible in our Docker hub.



4] Build image in docker hub

Description
This repository does not have a description 
 Last pushed: 35 minutes ago

Tags
This repository contains 1 tag(s).

Tag	OS	Type	Pulled	Pushed
 main-8afc163		Image	---	35 minutes ago

EXPERIMENT – 4

Aim : - Docker build and push using Github actions.

5] Add Docker Hub Credentials to GitHub Secrets

Actions secrets and variables

Secrets and variables allow you to manage reusable configuration data. Secrets are **encrypted** and are used for sensitive data. [Learn more about encrypted secrets](#). Variables are shown as plain text and are used for **non-sensitive** data. [Learn more about variables](#).

Anyone with collaborator access to this repository can use these secrets and variables for actions. They are not passed to workflows that are triggered by a pull request from a fork.

Secrets

Variables


New repository secret

Environment secrets



Manage environments


There are no secrets for this repository's environments.

Repository secrets



 DOCKER_PASSWORD

Updated 2 weeks ago

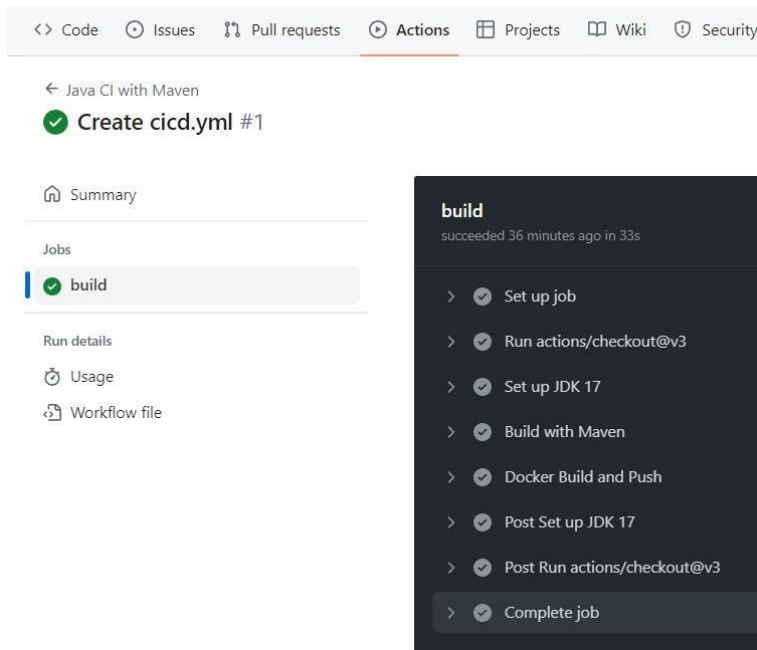
 DOCKER_USERNAME

Updated 2 weeks ago

6] Commit and Push Changes

7] Check the Workflow Status in that you will notices that our build has been completed and build images has been visible in our docker hub .



The screenshot shows the GitHub Actions interface for a workflow named "Java CI with Maven". The workflow is in a "Completed" state, indicated by a green checkmark and the text "Create cicd.yml #1". The left sidebar shows the "Summary" tab selected, with a "Jobs" section listing a single job named "build" which is also completed. The main content area displays the "build" job details, showing it "succeeded 36 minutes ago in 33s". A list of steps follows, each with a green checkmark indicating success:

- > Set up job
- > Run actions/checkout@v3
- > Set up JDK 17
- > Build with Maven
- > Docker Build and Push
- > Post Set up JDK 17
- > Post Run actions/checkout@v3
- > Complete job

4] Build image in docker hub and docker command in a public view.



The screenshot shows a "Docker commands" section. It includes a "Public View" button and a text prompt "To push a new tag to this repository:". Below this, a code block contains the following command:

```
docker push shashwat007/cicd-b2:tagname
```