EXPERIMENT – 3 and 4

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Batch – 2 [DevOps Non-Hons]
SAP ID- 500092140
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.

Docker file

MyClass.java file

```
📄 devops-b2-cicd-lab1/pom.xml    📄 MyClass.java ×    📄 devops-b2-cicd-lab3/pom.xml    📄 Dockerfile
 1  package devops.b2.cicd.lab3;
 2
 3  public class MyClass {
 4⊖     public void greeting()
 5      {
 6          System.out.println("Hello GitHub Actions");
 7      }
 8⊖     public void testMsg()
 9      {
10          System.out.println("This is Test Message");
11      }
12
13⊖     public static void main(String[] args) {
14          MyClass ob = new MyClass();
15          ob.greeting();
16      }
17
18  }
19
```

Pom.xml file

```
📄 devops-b2-cicd-lab1/pom.xml    📄 MyClass.java    📄 devops-b2-cicd-lab3/pom.xml ×    📄 Dockerfile
 1⊖ <project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/:
 2      <modelVersion>4.0.0</modelVersion>
 3      <groupId>devops.b2.cicd.lab3</groupId>
 4      <artifactId>devops.b3.cicd.lab3</artifactId>
 5      <version>0.0.1-SNAPSHOT</version>
 6
 7⊖     <properties>
 8          <maven.compiler.source>1.8</maven.compiler.source>
 9          <maven.compiler.target>1.8</maven.compiler.target>
10      </properties>
11  </project>
```

CICD-LAB3 Public   📌 Pin   👁 Unwatch 1

🎋 main ▾   🎋 1 branch   🏷 0 tags   Go to file   Add file ▾   <> Code ▾

👤 kamdishashwat-17 Create cicd.yml   ✓ 8afc163 34 minutes ago   🕐 2 commits

📁 .github/workflows	Create cicd.yml	34 minutes ago
📁 .settings	first commit	44 minutes ago
📁 src/main/java/devops/b2/cicd/lab3	first commit	44 minutes ago
📁 target/classes/devops/b2/cicd/lab3	first commit	44 minutes ago
📄 .classpath	first commit	44 minutes ago
📄 .project	first commit	44 minutes ago
📄 Dockerfile	first commit	44 minutes ago
📄 pom.xml	first commit	44 minutes ago

Help people interested in this repository understand your project by adding a README.   **Add a README**

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

CICD-LAB3 / .github / workflows / cicd.yml

kamdishashwat-17 Create cicd.yml ✓

Code   Blame   26 lines (26 loc) · 672 Bytes   Code 55% faster with GitHub Copilot

```
1    name: Java CI with Maven
2    on:
3      push:
4        branches: [ "main" ]
5      pull_request:
6        branches: [ "main" ]
7    jobs:
8      build:
9        runs-on: ubuntu-latest
10       steps:
11       - uses: actions/checkout@v3
12       - name: Set up JDK 17
13         uses: actions/setup-java@v3
14         with:
15           java-version: '17'
16           distribution: 'temurin'
17           cache: maven
18       - name: Build with Maven
19         run: mvn -B package --file pom.xml
20       - name: Docker Build and Push
21         uses: mr-smithers-excellent/docker-build-push@v6
22         with:
23           image: shashwat007/cicd-b2
24           registry: docker.io
25           username: ${{ secrets.DOCKER_USERNAME }}
26           password: ${{ secrets.DOCKER_PASSWORD }}
```

3] 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 .

4] Build image in docker hub

shashwat007 / cicd-b2

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.		

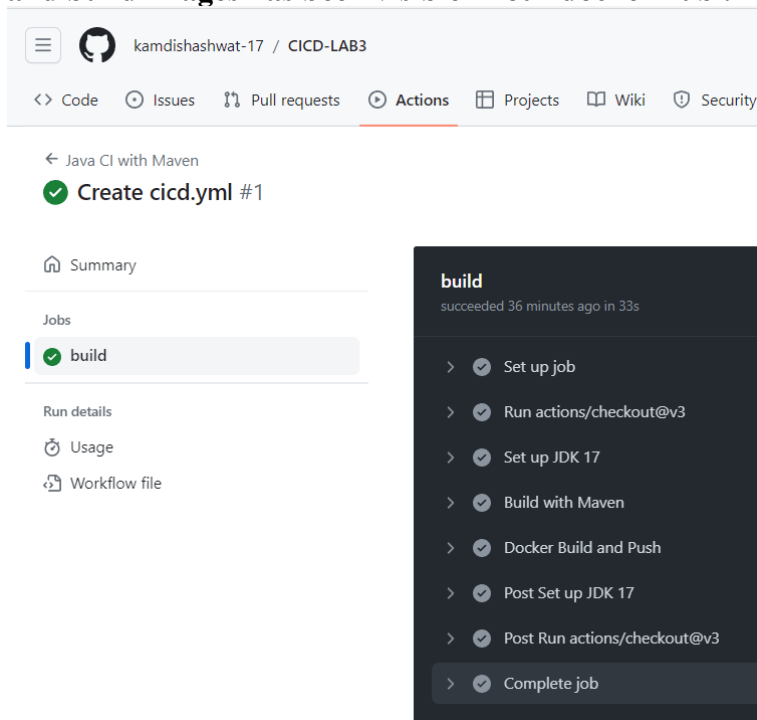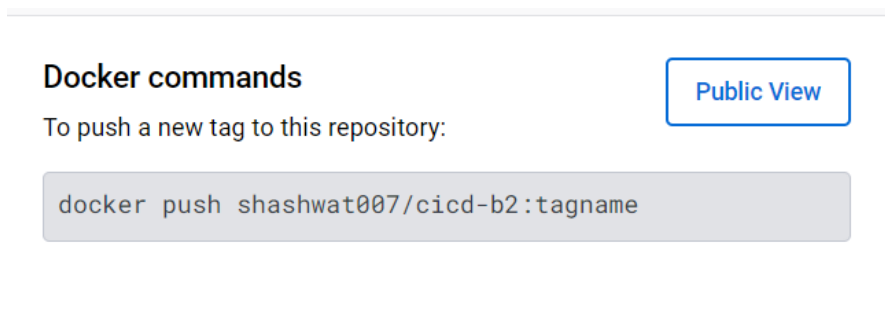| Repository secrets			
🔒 DOCKER_PASSWORD	Updated 2 weeks ago	✏️	🗑️
🔒 DOCKER_USERNAME	Updated 2 weeks ago	✏️	🗑️

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 .

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