

EXPERIMENT – 3 and 4

Name: - Shashwat. Dnyaneshwar Kamdi
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.

```
kamdi@DESKTOP-P4AQHPQ MINGW64 ~/eclipse Workspce/devops-b2-cicd-lab3
$ git init
Initialized empty Git repository in C:/Users/kamdi/eclipse Workspce/devops-b2-cicd-lab3/.git/

kamdi@DESKTOP-P4AQHPQ MINGW64 ~/eclipse Workspce/devops-b2-cicd-lab3 (master)
$ git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        .classpath
        .project
        .settings/
        Dockerfile
        pom.xml
        src/
        target/

nothing added to commit but untracked files present (use "git add" to track)
kamdi@DESKTOP-P4AQHPQ MINGW64 ~/eclipse Workspce/devops-b2-cicd-lab3 (master)
$ git add .

kamdi@DESKTOP-P4AQHPQ MINGW64 ~/eclipse Workspce/devops-b2-cicd-lab3 (master)
$ git commit -m "first commit"
[master (root-commit) 39d25f7] first commit
 8 files changed, 104 insertions(+)
 create mode 100644 .classpath
 create mode 100644 .project
 create mode 100644 .settings/org.eclipse.jdt.core.prefs
 create mode 100644 .settings/org.eclipse.m2e.core.prefs
 create mode 100644 Dockerfile
 create mode 100644 pom.xml
 create mode 100644 src/main/java/devops/b2/cicd/lab3/MyClass.java
 create mode 100644 target/classes/devops/b2/cicd/lab3/MyClass.class

kamdi@DESKTOP-P4AQHPQ MINGW64 ~/eclipse Workspce/devops-b2-cicd-lab3 (master)
$ git branch -M main

kamdi@DESKTOP-P4AQHPQ MINGW64 ~/eclipse Workspce/devops-b2-cicd-lab3 (main)
$ git remote add origin https://github.com/kamdishashwat-17/CICD-LAB3.git

kamdi@DESKTOP-P4AQHPQ MINGW64 ~/eclipse Workspce/devops-b2-cicd-lab3 (main)
$ git push -u origin main
Enumerating objects: 24, done.
Counting objects: 100% (24/24), done.
Delta compression using up to 12 threads
Compressing objects: 100% (11/11), done.
Writing objects: 100% (24/24), 2.81 KiB | 958.00 KiB/s, done.
Total 24 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/kamdishashwat-17/CICD-LAB3.git
 * [new branch]      main -> main
branch 'main' set up to track 'origin/main'.
```

Docker file


```
devops-b2-cicd-lab1/pom.xml  MyClass.java  devops-b2-cicd-lab3/pom.xml  Dockerfile ×
1 FROM openjdk:11.0
2 COPY target/devops.b3.cicd.lab3-0.0.1-SNAPSHOT.jar devops.b3.cicd.lab3-0.0.1-SNAPSHOT.jar
```

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>
```

 **CID-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.


 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 .


 kamdishashwat-17 / CICD-LAB3

[Code](#) [Issues](#) [Pull requests](#) [Actions](#) [Projects](#) [Wiki](#) [Security](#)


[Java CI with Maven](#)
 **Create cicd.yml #1**


[Summary](#)

Jobs


 build


Run details


 Usage


 Workflow file


build
succeeded 36 minutes ago in 33s


>  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

 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

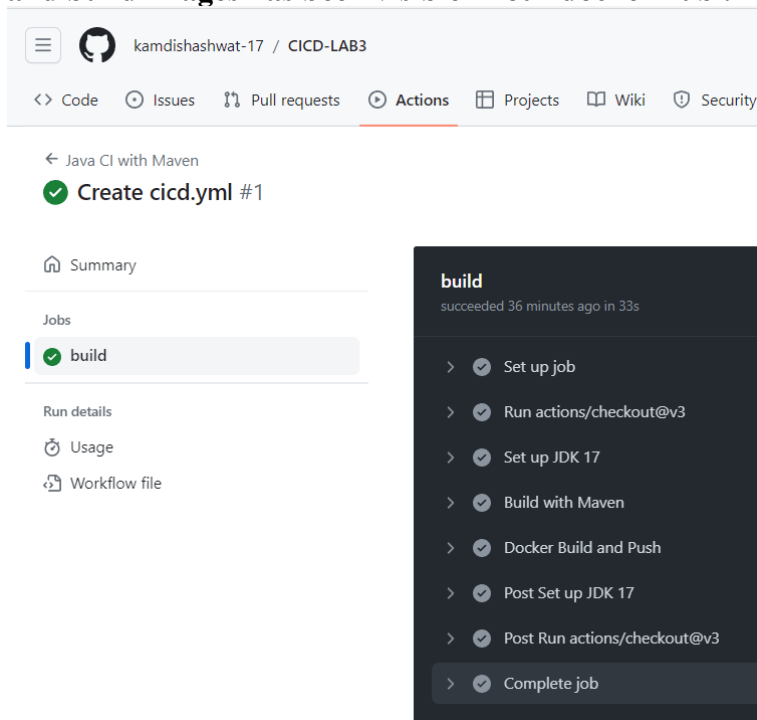
 DOCKER_USERNAME

Updated 2 weeks ago

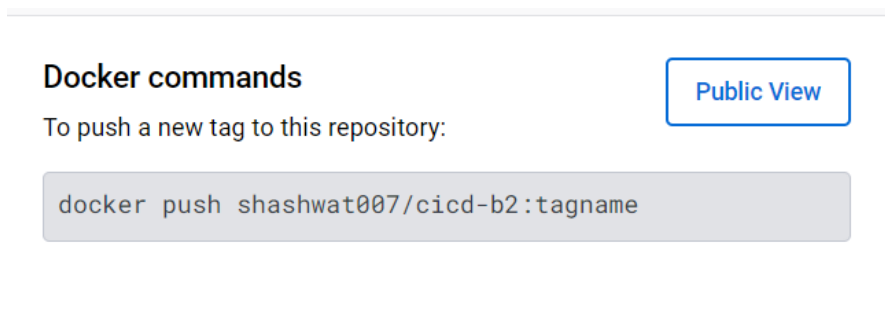
6] Commit and Push Changes

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 .



The screenshot shows the GitHub Actions interface for a workflow named 'Java CI with Maven'. The specific job is 'Create cicc.yml #1', which is marked as successful with a green checkmark. The left sidebar contains navigation links: Summary, Jobs, Run details, Usage, and Workflow file. The 'Jobs' section is expanded, showing a single job named 'build' with a green checkmark. The main area displays the job's status as 'succeeded 36 minutes ago in 33s' and lists the steps: 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, and Complete job. All steps are marked as successful.

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



The screenshot shows a section titled 'Docker commands' with a 'Public View' button. Below the title, it says 'To push a new tag to this repository:'. A code block contains the command: `docker push shashwat007/cicd-b2:tagname`.