CI/CD using Dockerfile and Jenkins pipeline

Create a docker-file and pushed to git:

 FROM maven:3.8.2-openjdk-8 AS builder

WORKDIR /build

COPY . .
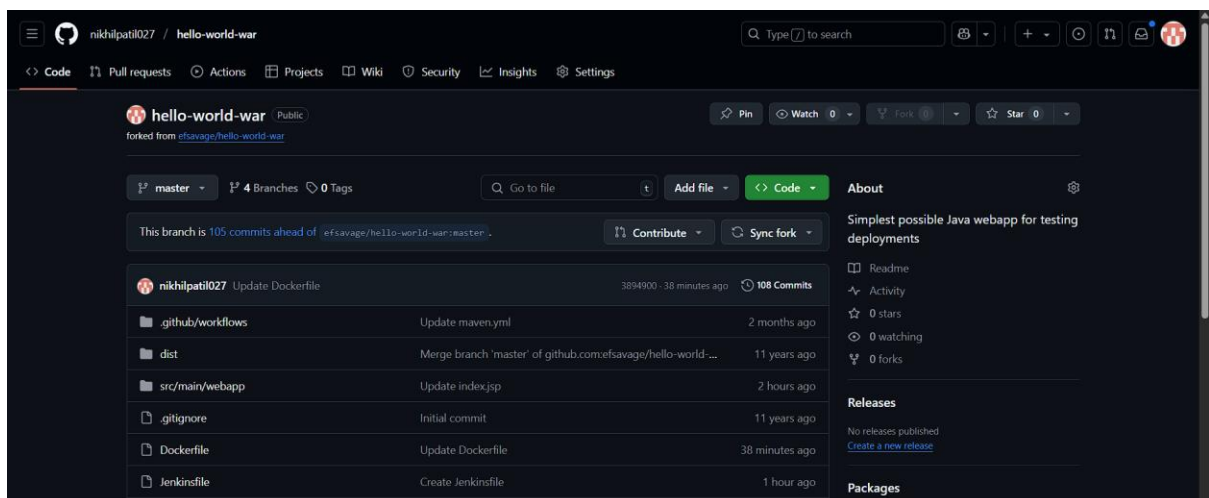
RUN mvn clean package

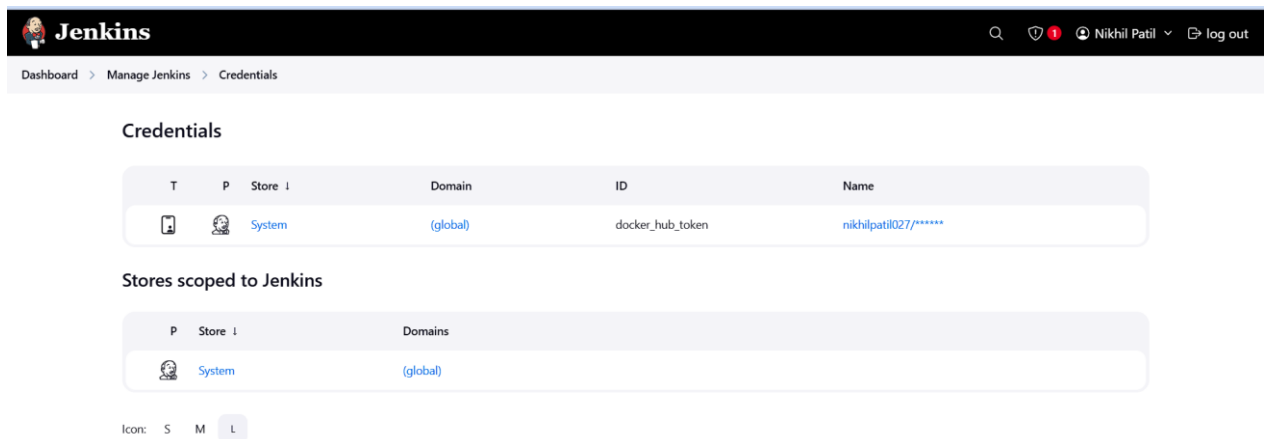RUN ls target/

FROM tomcat:jre8-temurin-focal

 COPY --from=builder /build/target/hello-world-war*.war /usr/local/tomcat/webapps

Install Jenkins and docker on same server

Writing a jenkins file and Docker file inside a Git repo
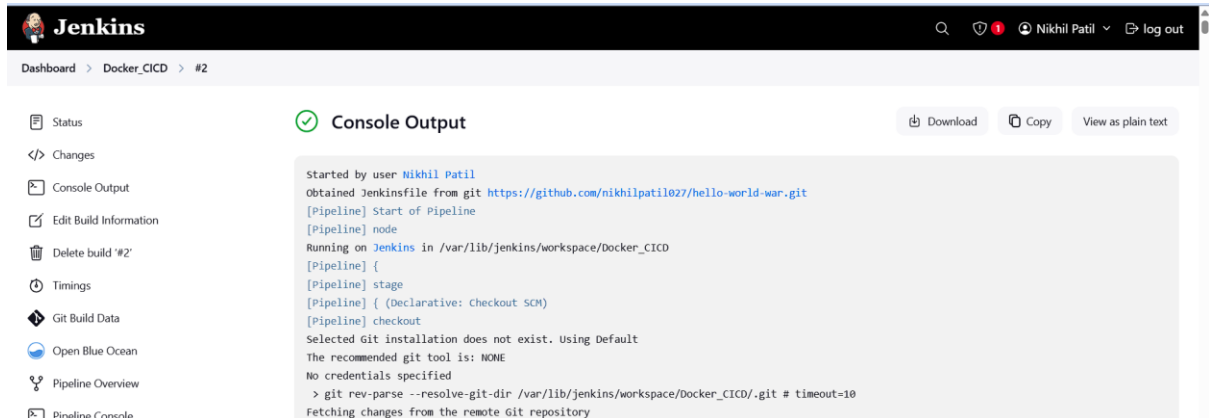
Set up credentials in Jenkins

Create a jenkins pipeline and Running it

```
[Pipeline] { (Run Docker Container)
[Pipeline] echo
Running Docker container...
[Pipeline] sh
+ docker run -d --name hello-world-container -p 8090:8080 nikhilpatil027/tomcat_cicd:latest
e6acdf44df99e7115907babe0f812cd4b194b26293827defae0871d7ca658edd
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Declarative: Post Actions)
[Pipeline] echo
Pipeline completed!
[Pipeline] echo
Container running at http://localhost:8090
[Pipeline] }
[Pipeline] // stage
[Pipeline] }
[Pipeline] // withEnv
[Pipeline] }
[Pipeline] // withEnv
[Pipeline] }
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS
```

✓ Docker_CICD < 2   Pipeline   Changes   Tests   Artifacts   ↻   ⚙ ⊡ Logout ✕

| Branch: — | ⊘ 57s | No changes |
| Commit: — | ⏱ 16 minutes ago | Started by user Nikhil Patil |

Start — Checkout — Find Dockerfile — Build Docker Image — Login to Docker Hub — Push Docker Image — Remove Existing Container — Run Docker Container — End

Run Docker Container - <1s   ↻ Restart Run Docker Container ⧉ ⬇

✓	› Running Docker container... — Print Message	<1s
✓	› docker run -d --name hello-world-container -p 8090:8080 nikhilpatil027/tomcat_cicd:latest — Shell Script	<1s
✓	› Pipeline completed! — Print Message	<1s
✓	› Container running at http://localhost:8090 — Print Message	<1s

Pushed the image to docker HUB through Jenkins job

🐳 docker hub   Explore   My Hub   🔍 Search Docker Hub   Ctrl+K ⓘ 🔔 ☾ ⠿ Ⓝ

Explore / nikhilpatil027/tomcat_cicd

nikhilpatil027/tomcat_cicd
By nikhilpatil027 · Updated 5 minutes ago
IMAGE
☆ 0   ⬇ 0   Manage Repository

Overview   **Tags**

Sort by   Newest ⌄   🔍 Filter tags

TAG
● latest   docker pull nikhilpatil027/tomcat_cicd:latest   Copy
Last pushed 10 minutes by nikhilpatil027

Digest	OS/ARCH	Last pull	Compressed size ⓘ
bd72117a7a92	linux/amd64	less than 1 day	95.19 MB

Out Put :

13.233.9.104:8090/hello-world-war-1.0.0/

Nikhil Patil from Hello World!

It is now Fri Mar 21 16:22:27 UTC 2025

You are coming from 171.76.85.33

13.233.9.104:8090/hello-world-war-1.0.0/

Nikhil Patil from Hello World!

It is now Fri Mar 21 16:22:27 UTC 2025

You are coming from 171.76.85.33