

Jenkins-Project-2

BUILDING DOCKERFILE AND CONTAINER USING JENKINS PIPELINE: DEVOPS PROJECT 2

Objectives

- i. Create a new job in Jenkins
- ii. Give a name and select Pipeline template
- iii. Write the Jenkins pipeline with the following instructions:
 1. Fetch the code using Github plugin
 2. Build the code using maven plugin
 3. Write a shell command to build an image out of .war file using Docker commands
 4. Push the image into the Docker Hub repo
 5. Deploy the image
- iv. Run the Jenkins Job
- v. Check the results on each of Terminal, Web browser, Docker hub website.

Jenkins Pipeline Code

```
pipeline{  
  
    tools{
```

```

        maven 'mymaven'
    }

    agent any

    stages{

        stage('Fetch the code')
        {
            steps{
                git 'https://github.com/Sonal0409/MavenBuild-
                Docker-GitHubActions.git'
            }
        }

        stage('Build the Code'){
            steps{
                sh 'mvn package'
            }
        }

        stage('Build the dockerfile')
        {
            steps{
                sh 'docker build -t mycontimage .'
            }
        }

        stage('Push the image to Docker hub')
        {
            steps{
                sh 'docker tag mycontimage  mahmouuud123123/dev
opsproject'
                sh 'docker login --username mahmouuud123123 --p
assword mahmouuud123123'
            }
        }
    }

```

```
        sh 'docker push mahmouuud123123/devopsproject '
    }
}

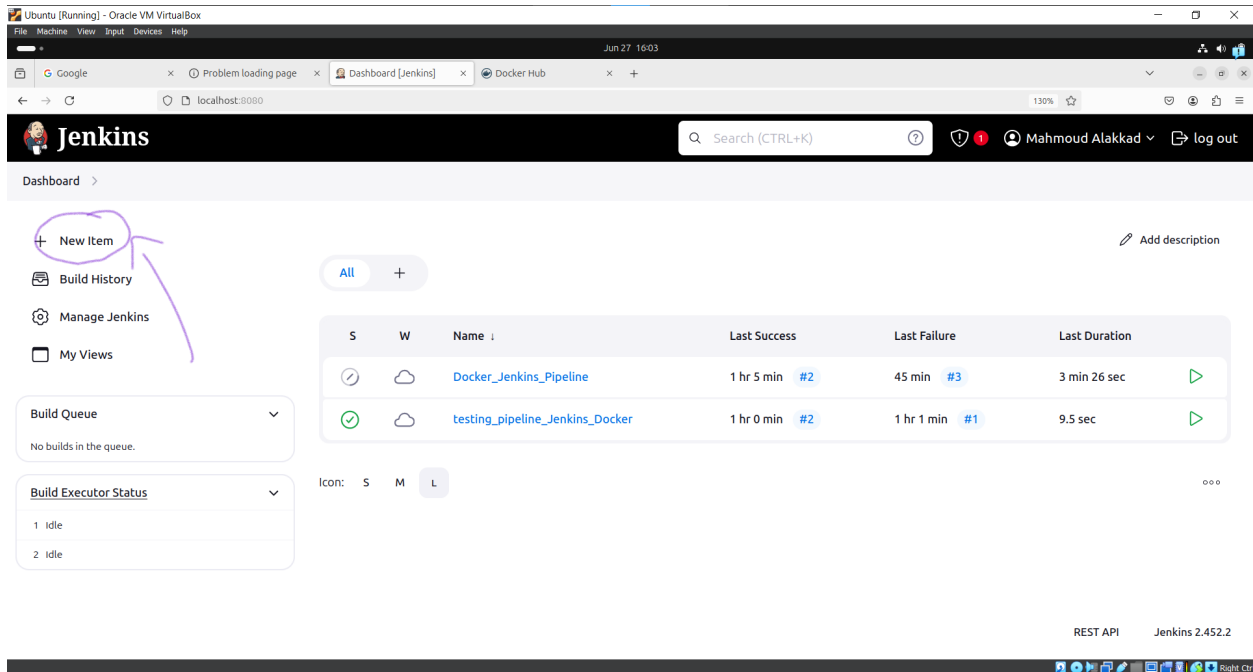
stage('Deploy the Image')
{
    steps{
        sh 'docker run -d -P mycontimage '
    }
}

}

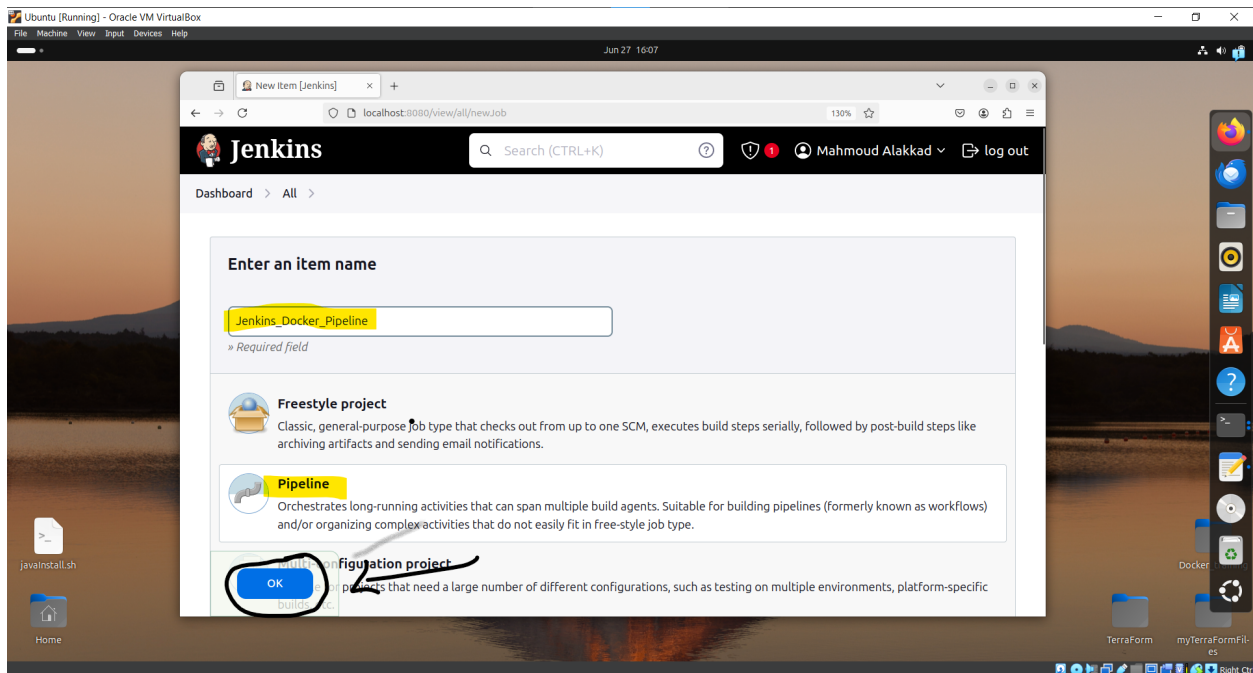
}
```

Project Implementation

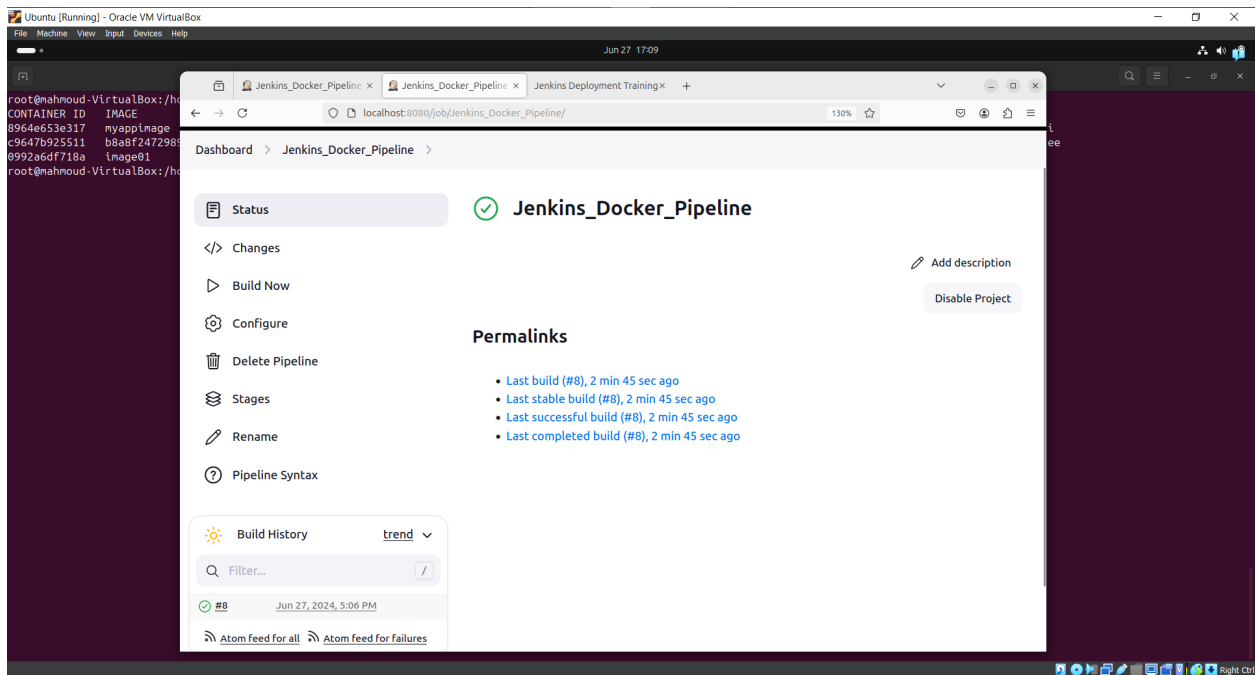
i. Creating a new Job in Jenkins



ii. Give a name and select Pipeline template



iii. Implementing Jenkins Pipeline



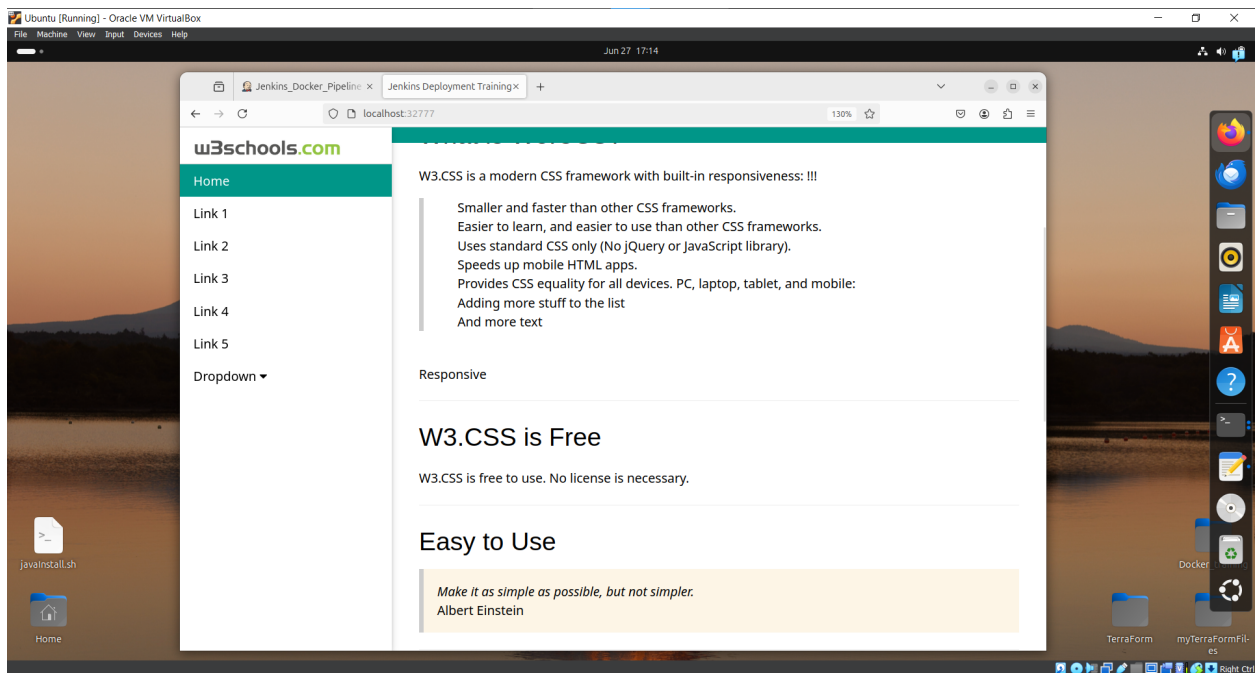
Checking Results:

Terminal

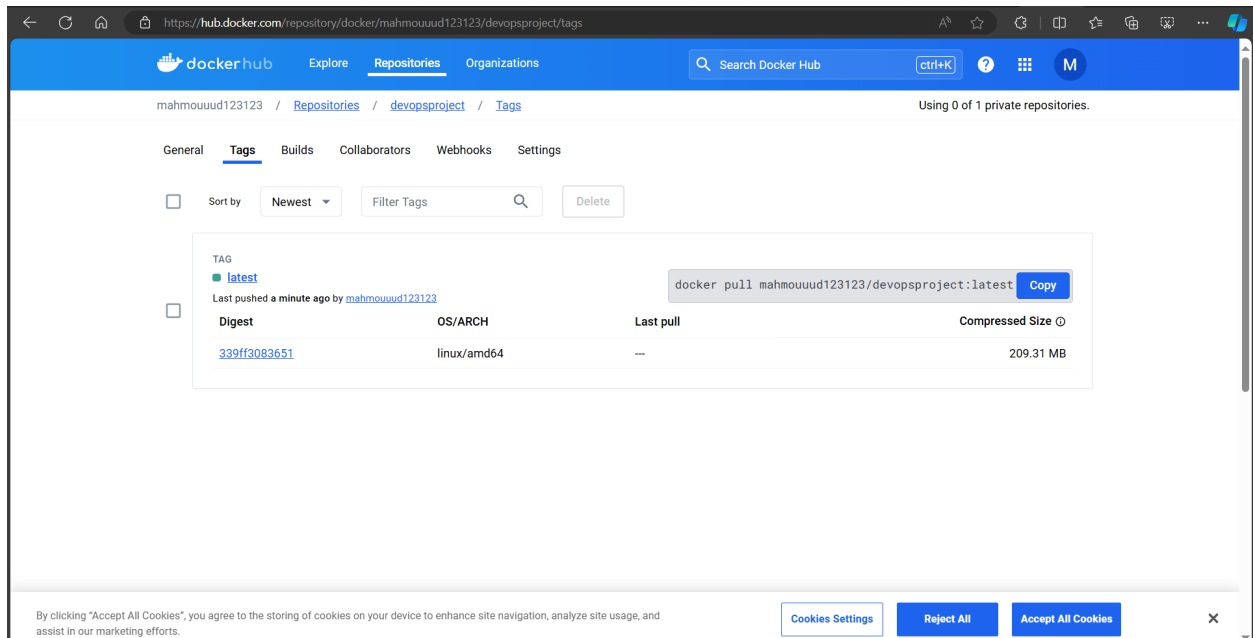
```
Ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Jun 27 17:11
root@mahmoud-VirtualBox: /home/mahmoud/Desktop/Docker_training/Docker_file

root@mahmoud-VirtualBox:/home/mahmoud/Desktop/Docker_training/Docker_file# docker ps -a
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS                    NAMES
667c20a61ba3   mycontinimage  "catalina.sh run"       4 minutes ago  Up 4 minutes  0.0.0.0:32777->8080/tcp, :::32777->8080/tcp  infallible_murdock
root@mahmoud-VirtualBox:/home/mahmoud/Desktop/Docker_training/Docker_file#
```

Web Browser



Docker Hub



The screenshot shows the Docker Hub interface for a repository named 'devopsproject' under the user 'mahmouud123123'. The 'Tags' tab is selected, showing a single tag 'latest' pushed 'a minute ago'. The tag details table includes the digest '339ff3083651', OS/ARCH 'linux/amd64', and a compressed size of '209.31 MB'. A 'docker pull' command is displayed with a 'Copy' button. The bottom of the page features a cookie consent banner.

https://hub.docker.com/repository/docker/mahmouud123123/devopsproject/tags

dockerhub Explore **Repositories** Organizations

Search Docker Hub ctrl+K

mahmouud123123 / [Repositories](#) / [devopsproject](#) / [Tags](#) Using 0 of 1 private repositories.

General **Tags** Builds Collaborators Webhooks Settings

☐ Sort by **Newest** Filter Tags Delete

☐ TAG **latest** Last pushed a minute ago by [mahmouud123123](#)

`docker pull mahmouud123123/devopsproject:latest` [Copy](#)

Digest	OS/ARCH	Last pull	Compressed Size
339ff3083651	linux/amd64	---	209.31 MB

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