

DAY 6 – Java Application Minikube deployment

minikube deployment of java:

Stage View of pipeline project:

- Minikube srv my-service

```
pipeline {
  agent any
  tools { maven "maven" }
  stages {
    stage('Clone Repository') {
      steps {
        git branch: 'main', url: 'https://github.com/RahulSiddharth04/webapp.git'
      }
    }
    stage('Clean Project') {
      steps {
        sh 'mvn clean'
      }
    }
    stage('Validate') {
      steps {
        sh 'mvn validate'
      }
    }
    stage('Compile') {
```

```
    steps {
        sh 'mvn compile'
    }
}

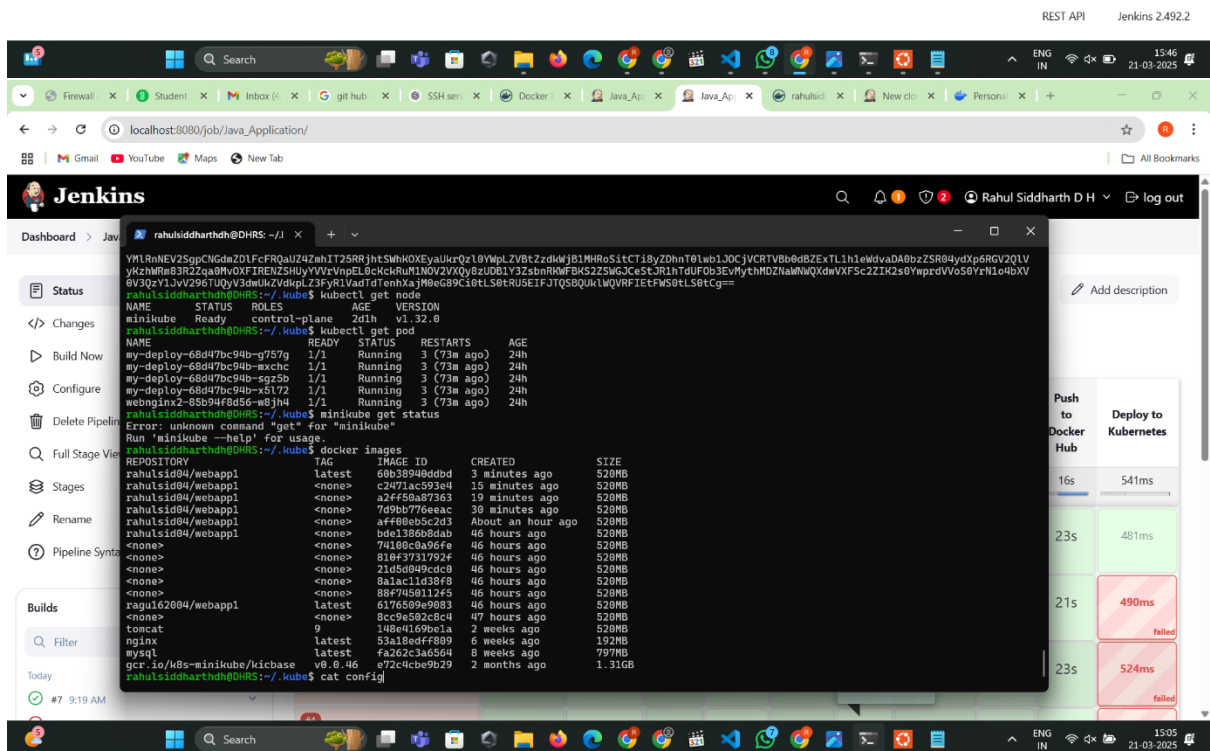
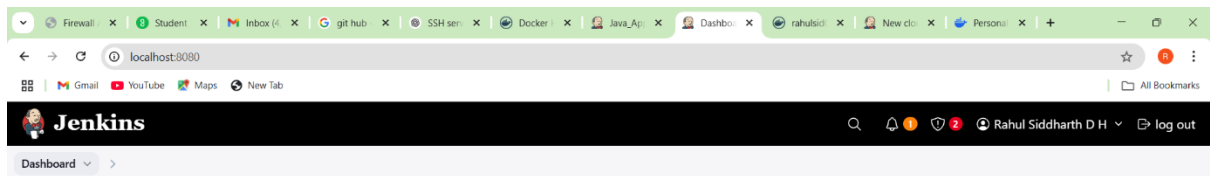
stage('Run Tests') {
    steps {
        sh 'mvn test'
    }
}

stage('Package Application') {
    steps {
        sh 'mvn package'
    }
}

stage('Build Docker Image') {
    steps {
        script {
            sh 'docker build -t rahulsid04/webapp1 .'
        }
    }
}

stage('Push to Docker Hub') {
    steps {
        script {
            withDockerRegistry(credentialsId: 'docker_cred', url:
'https://index.docker.io/v1/') {
                sh 'docker push rahulsid04/webapp1'
            }
        }
    }
}
```

```
}  
stage('Deploy to Kubernetes') {  
    steps {  
        withKubeConfig(  
            caCertificate: "",  
            clusterName: 'minikube',  
            contextName: 'minikube',  
            credentialsId: 'kub_id',  
            namespace: "",  
            restrictKubeConfigAccess: false,  
            serverUrl: 'https://192.168.39.226:8443'  
        ) {  
            sh 'kubectl apply -f my-deploy.yml --validate=false'  
        }  
    }  
}  
}
```



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Jenkins

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Status

Changes

Build Now

Configure

Delete Pipeline

Full Stage View

Stages

Rename

Pipeline Syntax

Java_Application

Add description

Stage View

Average stage times:
(full run time: ~33s)

| | Declarative: Tool Install | Clone Repository | Clean Project | Validate | Compile | Run Tests | Package Application | Build Docker Image | Push to Docker Hub | Deploy to Kubernetes |
|--------------------|------------------------------|---------------------|------------------|----------|---------|--------------|------------------------|--------------------------|-----------------------------|-------------------------|
| #7 1449 2 | 71ms | 1s | 1s | 1s | 1s | 1s | 2s | 452ms | 23s | 481ms |
| #6 1437 1 | 73ms | 1s | 1s | 1s | 1s | 1s | 2s | 458ms | 21s | 490ms failed |
| #5 1433 No Changes | 106ms | 1s | 1s | 1s | 1s | 1s | 2s | 463ms | 23s | 524ms failed |

Builds

Filter

Today

#7 9:19 AM

21-03-2025

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localhost:8080

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Build History

Project Relationship

Check File Fingerprint

Manage Jenkins

My Views

Build Queue

No builds in the queue.

Build Executor Status

0/2

Cloud Statistics

Add description

All

+

| S | W | Name | Last Success | Last Failure | Last Duration |
|---|---|--------------------------|----------------|----------------|---------------|
| ✓ | ☁ | Java_Application | 56 min #7 | 1 hr 8 min #6 | 34 sec |
| ⋮ | ☀ | simple_web_app | N/A | N/A | N/A |
| ✓ | ☁ | simple_web_app1_pipeline | 1 day 22 hr #9 | 1 day 22 hr #8 | 35 sec |

Icon: S M L

...

REST API

Jenkins 2.492.2

127.0.0.1:46509/my-web/ - Brave

http://127.0.0.1:46509/my-web/

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Hello World!

11:24 AM 22-03-2025