

DevOps-Day 06 : Final-Project

Java-application in MiniKube

Command:

```
minikube start
```

```
kubectrl get endpoints my-service
```

```
curl http://192.168.49.2:31826/my-app/
```

```
kubectrl port-forward svc/my-service 9010:8080
```

Pipeline:

```
pipeline {
    agent any
    tools{maven "maven"}
    environment {
        DOCKER_CREDENTIALS = credentials('docker_cred')
    }

    stages {
        stage('SCM') {
            steps {
                git branch: 'main', url: 'https://github.com/sathiyas1/guvi-day1.git'
            }
        }

        stage('Build-clean') {
            steps {
                sh "mvn clean"
            }
        }
    }
}
```

```
    stage('Build-validate') {
    steps {
        sh "mvn validate"
    }
}

    stage('Build-compile') {
    steps {
        sh "mvn compile"
    }
}

    stage('Build-test') {
    steps {
        sh "mvn test"
    }
}

    stage('Build-install') {
    steps {
        sh "mvn install"
    }
}
```

```
stage('Build Docker Image') {
    steps {
        script {
            sh 'docker build -t sathiyaseelan12/web-app .'
        }
    }
}
```

```
}
```

```
stage('Push to Docker Hub') {
```

```
  steps {
```

```
    script {
```

```
      docker.withRegistry('https://index.docker.io/v1/', 'docker_cred') {
```

```
        sh 'docker push sathiyaseelan12/web-app'
```

```
      }
```

```
    }
```

```
  }
```

```
}
```

```
//stage('test') {
```

```
  // steps {
```

```
    // withKubeConfig(caCertificate: '', clusterName: 'minikube', contextName:  
'minikube', credentialsId: 'minikube_cred', namespace: '', restrictKubeConfigAccess: false,  
serverUrl: 'https://192.168.39.226:8443')
```

```
    // sh 'kubectl apply -f deployment.yml --validate=false'
```

```
  // }}
```

```
}
```

```
}
```

Dashboard

java-application

Status

Changes

Build Now

Configure

Delete Pipeline

Full Stage View

Stages

Rename

Pipeline Syntax

Builds

Filter

Today

#4 4:04 PM

#3 2:50 PM

#2 1:48 PM

java-application

Add description

Stage View

Average stage times:
(full run time: ~53s)

	Declarative: Tool Install	SCM	Build- clean	Build- validate	Build- compile	Build-test	Build- install	Build Docker Image	Push to Docker Hub	test
#4 16:04 No Changes	188ms	2s	5s	3s	4s	5s	6s	840ms	18s	335ms
#3 14:50 No Changes	117ms	1s	3s	3s	4s	4s	5s	858ms	20s	
#2 13:48 No Changes	231ms	2s	8s	3s	6s	5s	6s	757ms	22s	335ms failed
#1 13:47 No Changes	138ms	1s	4s	3s	4s	6s	8s	715ms	29s	
	266ms	5s	3s	3s	3s	4s	5s	1s failed	315ms failed	

Type here to search

Hot...

16:05 21-03-2025

```
sathiyaseelan@sathiyaseelan:~$ kubectl get svc my-service
NAME      TYPE      CLUSTER-IP      EXTERNAL-IP      PORT(S)      AGE
my-service NodePort    10.110.58.173    <none>           8080:31826/TCP 4m12s
sathiyaseelan@sathiyaseelan:~$ minikube service my-service
-----
| NAMESPACE | NAME      | TARGET PORT | URL              |
|-----|-----|-----|-----|
| default   | my-service | 8080        | http://192.168.49.2:31826 |
|-----|-----|-----|-----|
Starting tunnel for service my-service.
-----
| NAMESPACE | NAME      | TARGET PORT | URL              |
|-----|-----|-----|-----|
| default   | my-service | 8080        | http://127.0.0.1:44959 |
|-----|-----|-----|-----|
Opening service default/my-service in default browser...
http://127.0.0.1:44959
Because you are using a Docker driver on linux, the terminal needs to be open to run it.
^C Stopping tunnel for service my-service.
sathiyaseelan@sathiyaseelan:~$ curl http://192.168.49.2:31826
<doctype html><html lang="en"><head><title>HTTP Status 404 - Not Found</title><style type="text/css">body {font-family:Tahoma,Arial,sans-serif;} h1, h2, h3, b {color:w
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did not find a current representation for the target resource or is not willing to disclose that one exists.</p><hr class="line" /><h3>Apache Tomcat/9.0.102</h3></body>
</html>sathiyaseelan@sathiyaseelan:~$ curl http://192.168.49.2:31826/maven-web-app/
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my-app  my-app.war
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<h2>Hello World!</h2>
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