

FINAL PROJECT

DevOps-Day06:

JAVA APPLICATION DEPLOYEMENT IN MINIKUBE

PIPELINE:

```
pipeline {
    agent any

    stages {
        stage('SCM') {
            steps {
                git branch: 'main', url: 'https://github.com/MugeshS-04/guvidevopsday1.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-package') {
    steps{
        sh 'mvn package'
    }
}

stage('build to images') {
    steps {
    script{
        sh "docker build -t mugeshs04/webapplication ."
    }
    }
}

stage('docker push hub') {
    steps {
    script{
        withDockerRegistry(credentialsId: 'docker-hub-cred', url:
'https://index.docker.io/v1/') {
            sh 'docker push mugeshs04/webapplication'
```

```

    }

    }

    }

}

stage('deploy webapp') {

    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'

        }

    }

}

}

}

}

```

```

^C Stopping tunnel for service my-service.
mugesh@DESKTOP-ELKSV5N:~$ curl http://192.168.49.2:30002
<!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:white;background-color:#525D76;} h1 {font-size:22px;} h2 {font-size:16px;}
h3 {font-size:14px;} p {font-size:12px;} a {color:black;} .line {height:1px;background-color:#525D76;border:none;}</st
yle></head><body><h1>HTTP Status 404 - Not Found</h1><hr class="line" /><p><b>Type</b> Status Report</p><p><b>Descriptio
n</b> The origin server 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>mugesh@DESKTOP-ELKSV5N:~$ curl http://192
.168.49.2:30002/my-app/
<html>
<body>
<h2>Hello World!</h2>
</body>
</html>
mugesh@DESKTOP-ELKSV5N:~$ minikube service my-service

```

NAMESPACE	NAME	TARGET PORT	URL
default	my-service	9000	http://192.168.49.2:30002

```

Starting tunnel for service my-service.

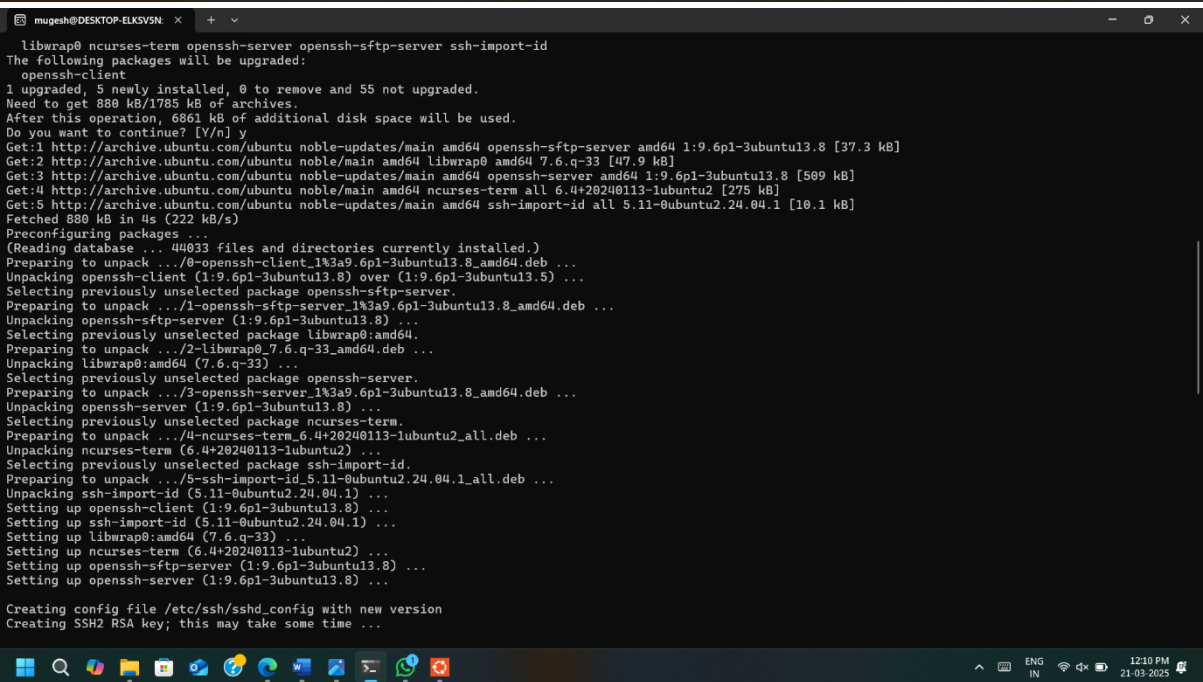
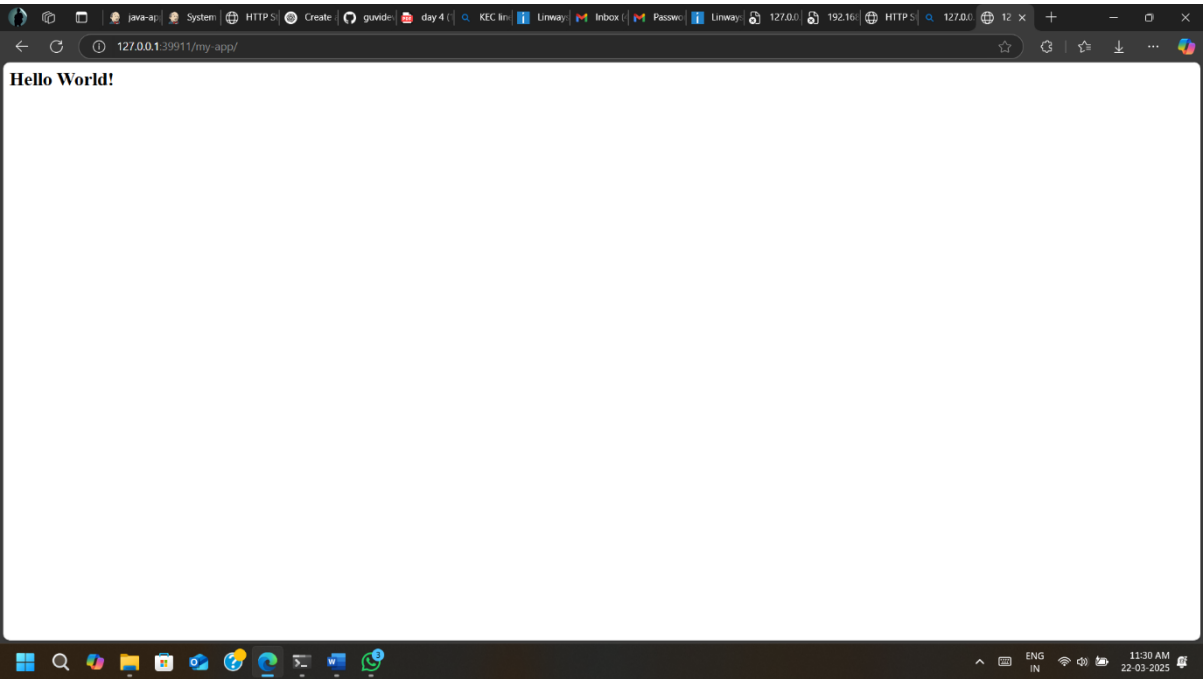
```

NAMESPACE	NAME	TARGET PORT	URL
default	my-service		http://127.0.0.1:39033

```

Opening service default/my-service in default browser...
http://127.0.0.1:39033
! Because you are using a Docker driver on linux, the terminal needs to be open to run it.

```



Jenkins

Dashboard > java-app > Full Stage View

java-app - Stage View

Average stage times:
(full run time: ~58s)

1611

1

	SCM	Build-clean	Build-validate	Build-compile	Build-test	Build-package	build to images	docker push hub	deploy webapp
1611	2s	2s	2s	3s	3s	3s	767ms	32s	904ms
1610									
1609									
1342	1s	2s	2s	6s	3s	3s	548ms	39s	

127.0.0.1:39033/my-app/

Hello World!

Dashboard > java-app > Configuration

Configure

- General
- Triggers
- Pipeline**
- Advanced

Definition

Pipeline script

```
1 pipeline {
2   agent any
3
4   stages {
5     stage('SCM') {
6       steps {
7         git branch: 'main', url: 'https://github.com/MugeshS-04/guvidevopsday1.git'
8       }
9     }
10    stage('Build-clean') {
11      steps {
12        sh 'mvn clean'
13      }
14    }
15    stage('Build-validate') {
16      steps {
17        sh 'mvn validate'
18      }
19    }
20  }
21 }
```

☒ Use Groovy Sandbox ?

[Pipeline Syntax](#)

Advanced

Advanced

[Save](#) [Apply](#)

Dashboard > Manage Jenkins > Credentials > System > Global credentials (unrestricted)

Global credentials (unrestricted)

[+ Add Credentials](#)

Credentials that should be available irrespective of domain specification to requirements matching.

ID	Name	Kind	Description
docker-hub-cred	mugesh04/***** (credentials)	Username with password	credentials
minikube-cred	config (minikube credentials)	Secret file	minikube credentials

Icon: ☐ S ☐ M ☒ L

REST API Jenkins 2.492.2