## Devops class guvi (DAY-5)

\*\*21 March 2025\*\*

\*\*Granting Jenkins Sudo Privileges\*\* – The jenkins ALL=(ALL) NOPASSWD: ALL entry in the sudoers file allows the Jenkins user to run any command without a password prompt.

\*\*Restarting SSH Services\*\* – Commands like sudo systemctl restart ssh.service and sudo systemctl restart sshd.service restart the SSH service, ensuring remote login functionality.

\*\*Installing OpenSSH Server\*\* – The commands sudo apt update and sudo apt install openssh-server update package lists and install the OpenSSH server for secure remote access.

\*\*Checking SSH Service Status\*\* – sudo systemctl status ssh checks if the SSH service is running and displays its current status.

\*\*Systemd Service File Lookup\*\* – ls /etc/systemd/system/sshd.service or ls

/usr/lib/systemd/system/sshd.service helps locate the SSH daemon's systemd service file.

- \*\*Reloading Systemd Daemon\*\* sudo systemctl daemon-reload ensures that systemd picks up changes in service configurations without requiring a reboot.
- \*\*Encoding Minikube Certificate\*\* cat /home/david/.minikube/ca.crt | base64 -w 0; echo encodes the Minikube CA certificate in base64 format, likely for authentication.
- \*\*Changing Docker Socket Permissions\*\* sudo chmod 666 /var/run/docker.sock grants read and write access to all users for Docker's Unix socket, allowing non-root users to interact with Docker.
- \*\*Deploying Kubernetes Resources\*\* sh 'kubectl apply -f deployment.yml --validate=false' applies a Kubernetes deployment file, ignoring validation errors.
- \*\*Accessing Minikube Service\*\* minikube service my-service --url | xargs curl retrieves the Minikube service URL and sends an HTTP request to test its accessibility.

## ## Commands:

```
jenkins ALL=(ALL) NOPASSWD: ALL
sudo systemctl restart ssh.service
sudo systemctl restart sshd.service
sudo apt update
sudo apt install openssh-server
sudo systemctl restart ssh
sudo systemctl status ssh
ls /etc/systemd/system/sshd.service or ls
/usr/lib/systemd/system/sshd.service
sudo systemctl daemon-reload
sudo systemctl status ssh
sudo systemctl restart ssh.service
cat /home/david/.minikube/ca.crt | base64 -w 0; echo
sudo chmod 666 /var/run/docker.sock
[https://192.168.39.226:8443](https://192.168.39.226:
8443/)
sh 'kubectl apply -f deployment.yml --validate=false'
minikube service my-service --url | xargs curl
## Pipeline codes:
pipeline {
agent any
environment {
```

```
DOCKER_CREDENTIALS = credentials('docker-
hub-cred') // Docker Hub Credentials ID
stages {
  stage('SCM') {
     steps {
       git branch: 'main', url:
'<https://github.com/PJK-
Prahalath/devops.git>'
  stage('Build') {
     steps {
       sh "mvn clean"
       sh "mvn install"
  stage('Build Docker Image') {
     steps {
       script {
          sh 'docker build -t image/devops.'
```

```
stage('Push to Docker Hub') {
      steps {
         script {
docker.withRegistry('<https://index.docker.io/v1/>',
'docker-hub-cred') {
               sh 'docker push PJK-Prahalath/devops'
pipeline {
agent any
stages {
   stage('SCM') {
      steps {
         git branch: 'main', url:
'<a href="https://github.com/PJK-Prahalath/devops.git">https://github.com/PJK-Prahalath/devops.git</a>
```

```
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 prahalath99/webapp1"
  stage('docker push hub') {
     steps {
     script{
       withDockerRegistry(credentialsId: 'cred-2', url:
'<https://index.docker.io/v1/>') {
       sh 'docker push prahalath99/webapp1'
```

praha@PJK: ory usage: IPv4 address for eth0: 172.27.203.222 Swap usage:

This message is shown once a day. To disable it please create the /home/praha/.hushlogin file. raha@PJK:~\$ sudo cat /home/praha/.minikube/ca.crt | base64 -w 0; echo sudo] password for praha:

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Set is few passant or to prame. TURNEES6QTJNalUwTUZvddZURVRNQkVHQTFVRQpBeE1LYldsdWFXdDFZbVZEUVRDQ0FTSXdEUVIXS29aSWh2Y05BUUVCQJFBRGdnRVBBRENDQVFvQ2dnRUJBTUp3ClVpad96RHBLc1Q0WXB1VUliT1dZREZGc29MQVdSYmWYNmFR aG1KQmxEMkFrQ000bzBUU0tNR1p2dVNReXdBR0kKS11SQ11BM31SNXJSV05YV0dMaDVQSEVQRm1vRjdZcTNGQ1dSR1N4U3BYUzNodmdwbVpHQ1JLaStSbjRBa0ZwSwp4dEpzaXVjUGRJbzZsejhGNjA4U1hnS1Y4L1FsejRDL29z dkRJaU5CLzcvUUxad3V3NHI5SGdIaTQzVmV5Nm9FCklmc1h2NzFiYwhTbThDemdUaytZT3UyM2gvwHU1Nys3d2kzckVEVVpuWHBqdz1iN1NIZCtFT1dGZHcrbjh6SFEKZ3V6Zm9TwmduN1hoVwFTOVpHOGRIV0xwdEhIeDREcw5K dkR3aUSCLzcvUUxad3v3hHI5SGdIaTQzvmvShm9FCklmclh2NzFivMhTbThDemduaytZT3UyMzgvHUINys3d2kzckVeVvpuM+Bddz1iN1NIZCtFT1dGZHcrbjh6SFEKZ3V6Zm9TwhduN1hoWHTOVpHOGRIV0xWdEhTeDREcVISCekwFCvpuM+Bddz1iN1NIZCtFT1dGZHcrbjh6SFEKZ3V6Zm9TwhduN1hoWyFT0VpHOGRIV0xWdHbTh2DRECVISCekwFCvpUM+Bddz1iN1NIZCtFT1dGZHcrbjh6SFEKZ3V6Zm9TwhdDWyFXBJZNCZdyCymfAFXpVBRDFKPQ Qmd0VkhSTUJBZjhFQ1RBREFRSC9NQjBHQTFVZERnUvCkQkJTbEQ4bkHxhE14dEFFbXprSw1xM6hHL0Nua2ZUQUSCZ2txaGtpRz13MEJBUXNGQUFPQ0FRUFjWJJUUNSKwovMuxjdHhdc1krdGhqcnZ3V1NkZW5sNTQydDkxS6dE b1ZENm5rQUZSRGV4cktCcDEreGNJbC9PWVrempBYVBZCkxDTmMMZUMuH2RGWzQwNEtiTEdywNTdU11d3hwS03WagEtQ3oeUUESWD1tb7J6WcxQ04yd59DVhByU1JPSEMKSUUyWDZvZW5xZ1VLLztjWTFaem9MOFFZZFEIR1pq ZVJIdkVEaGWh0b3hSkiyMSUSU40RWUrxK1ZrRmxqSZp3egprRz8FSVDVzcnhVcEMXOXYPA3dSMIZ3EgzYCQAAAXINSTSZSYCPQAALNWRU12EQmowz11MbE8zRTkwdUJUK1A4CmFKbnNTc1JFN09QK3FSNVFyd0Z4UGprcTJVQWJO VVVqQX16wHvSUks3S1JwNE00dFVGUU5NKzJkV3A0Y21vWU4KZWgvRTZtaVFFYT1zc1E9PQctL50tLUV0RCBDRVJUSUZJQ0FURSetL50tCg== prahagPJK:~\$ suod cat /home/praha/.minikube/profiles/minikube/lient.ort | base64 -w 0; echo LS0tLS1CRUdJTiBDRVJUSUZJQ0FURSetLS0tCk15USRVPUNOQW4Z0F3SSUJS2Q1CQWpBTX.ha3Fa32IHOXxcwQkFRc02BREFWTVJMd0VRWRWUVFEXXddGFXXXXKYTNWaVpVTkJNQjRYRFJMU1ETXhPREEyTWpVME16b1hEVEk0 TURNeE9EQTJNa1LWTUZvd0JURVMNQJV4QTFVRQD0a51PY2MsemR4VnRPbTFOY2NSbGNUTXhGakFVQmd0Vk3BTVREVzFwYm1scmRXSmxWMFZ6k1ln3d2dnRkJNQTBFkkNTzcUdTSw1zRFFFQKFRVUFBNE1CRHd8d2dnRUEb061CQVFD ck1UbemNkfjF100duZ0hskjf10TRVMfw5aSDc2SCskaFRcFBRG/TVNSFJ71z2pCG061EM3RXduRnoSdNNTWMW/WZNVZSQ1ZRVVRLWddJYWYSVQVdBWNNrMDFXSN3JQMDFXHTLANDEXBRTAINSBVNSTT1NSbVRRTR1iNBSDKRTR1iNBZSUF3dJZpHDV1Y4TTdNOSDSW1Y4TJMOSDSW1Y4TJMOSDSW17SddyKNFSQmfd0jJA4S1FJRXNRS0e2RLTM0SJ0XZSMJ3QhUNDFNNTSH3DCXSNJ3VJMCHANGXSW1Y4TTJMOSDSW17STJMOSDSW1Y4TJMOSDSW17SJMOKYSDM7SDJAAFFJFXXNS0e2RLTM0SJAASTSJAANAAAXDEZFRSSHOTNOVMA1b0Vy1Y4TTJMOSDSW197TTSMOSDSW17SJMOKYSDM7SDJAASFJFXXNRS0e2RLTM0SJAASTSJAANAAAAAACAFRASEZFRSSHOTNOVMA1b0Vy1Y4TTJMOSDSW17SJMOKYSDM7SJAAAAAAACAFRASEZFRSSHOOTNOVMA1b0Vy1Y4TTJMOSDSW17SJMOKYSDM7SJAASFJFXXNRS0e2RLTM0SJAASTSJAAAAAAAACAFRASEZFRSSHOOTNOVMA1b0Vy1Y4T

ZHBpTkk0ckpoM30zZmR6Wm9yNlRCbEdsSy96TlIvCjMwTit4WVc1UnR1QnbURUcvSGRqUHozdTcyVUtiSndkMXFsQmFGUjA4SlFIKzNRS0c0ZklTM0JJeWZ5N3JqUnkKanZMa2ErR3hCOThoVHA1b0Vyb1Y4TTdNOC9pTmI5VnVp ZS9JVKSEGZSVZNEOMVABNYLZF45mIRSJpXMB15UgpZHE1150pPeFdPMUdGUjAVUT]OWKVpZE1ERUpCcFH2NTZHZKROcm5VV]htV09Sa1dDa2R351VtbkFnTUJ9QUdqCl1EQmMNQTHHQTFVZERARUJVdJFPQXdJRm9EQwRCZ9BW SFNVRUZqQVVCZ2dyQmdFRkJRY0RBUV1JS3dZQkJRVUgKQXdJd0RBWJRWJBUQVFIL0JBSXdBREFmQmdOVkhTTUVHREFXZ0JTbEQ4bkMxNE14dEFFbXprSW1xMGhHL0NuawpmVEFOQmdrcWhraUc5dzBCQVFzRkFBT0NBUUVBWU93 Z05XUG0yaTNuYjV1ZW0yRVREVFVzVjBDWXA4ZkxJc1c4CkhIwUtwcGdKVVk0aDdZM2xEY2RzQWJ6UXNqa0tVN1EwQzh1OUo5RUZnMUQ3RFNocmZTL01Pc2x1TXJsbFhZN1IKdGwyZmZvaW9NR31YRmhLOHFIce1ZbjcrZCtCb2VV

Z95XUG9yaTNUYjVIZW9yRVREVFVZVjBDWXA4ZkXJclo4CkINUtwcGdKVVk0aDdZM2xEYZRZQNJGUXNqa0tVNIEWQzhIOU5RUZnMUQ3RFNocmZTL01Pc2x1TXJsbFhZNIIKdGwyZmZvaW3NR31YRmhLOHFICE1ZbjcrZCtCb2VcTdR0cZQwRNa2poTkRJa2FIT0hTNmZjLpjRnBuUJXdqpxU0qXuJ3sL019631ZJK1AwM2hpdm5wYnkU09kVEXStVJUb5pQbHL0NFNRM1Ry5nV59WFcQ3pmUm35UlQT3ALCkEXVzdm3NR0VZiOU5zWllaV0MzdlUvdldPUZM1
NZSGWZVOMFhD91HcWFID5DHCFNZ5bDFCFSCVKS2dtWkldTmwwNZxHKQ16ZJ21SzAFT2BOUJJOVWYZVTVUTNJKVjMzSWhIZ09AmFFbwC9PQctLSGtLUVORCBDRVJUSUZJQOFURSetLSGtCg==
pra1ma@7%:-\$ sudo cat /home/pra1ma/.minikube/profiles/minikube/profile

```
praha@PJK: ~
  The connection to the server 127.0.0.1:32769 was refused - did you specify the right host or port?
                      PJK:~/devops/Devops_Guvi_WAR$ cd ..
    praha@PJK:~/devops$ cd ...
  praha@PJK:~$ kubectl get node
E0322 03:54:30.966541 4624
praha@PJK:~$ kubectl get node
E0322 03:54:30.966541 4624 memcache.go:265] "Unhandled Error" err="couldn't get current server API group list: Get \"https://127.0
.0.1:32769/api?timeout=32s\": dial tcp 127.0.0.1:32769: connect: connection refused"
E0322 03:54:30.968178 4624 memcache.go:265] "Unhandled Error" err="couldn't get current server API group list: Get \"https://127.0
.0.1:32769/api?timeout=32s\": dial tcp 127.0.0.1:32769: connect: connection refused"
E0322 03:54:30.969891 4624 memcache.go:265] "Unhandled Error" err="couldn't get current server API group list: Get \"https://127.0
.0.1:32769/api?timeout=32s\": dial tcp 127.0.0.1:32769: connect: connection refused"
E0322 03:54:30.971510 4624 memcache.go:265] "Unhandled Error" err="couldn't get current server API group list: Get \"https://127.0
.0.1:32769/api?timeout=32s\": dial tcp 127.0.0.1:32769: connect: connection refused"
E0322 03:54:30.972947 4624 memcache.go:265] "Unhandled Error" err="couldn't get current server API group list: Get \"https://127.0
.0.1:32769/api?timeout=32s\": dial tcp 127.0.0.1:32769: connect: connection refused"
E0322 03:54:30.972947 4624 memcache.go:265] "Unhandled Error" err="couldn't get current server API group list: Get \"https://127.0
.0.1:32769/api?timeout=32s\": dial tcp 127.0.0.1:32769: connect: connection refused"
The connection to the server 127.0.0.1:32769 was refused - did you specify the right host or port?

praha@PJK:-$ minikube start
                      PJK:~$ minikube start
              minikube v1.35.0 on Ubuntu 24.04 (amd64)
Using the docker driver based on existing profile
              Starting "minikube" primary control-plane node in "minikube" cluster
Pulling base image v0.0.46 ...
   d
G
              Restarting existing docker container for "minikube" ...
Preparing Kubernetes v1.32.0 on Docker 27.4.1 ...
               Verifying Kubernetes components...

    Using image gcr.io/k8s-minikube/storage-provisioner:v5
    Enabled addons: default-storageclass, storage-provisioner
    Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default aha@PJK:~$ kubectl get node

ME STATUS ROLES AGE VERSION
  NAME STATUS
minikube Ready
praha@PJK:~$
                                                                     control-plane 2d21h
                                                                                                                                               v1.32.0
```

