Software Construction and Development

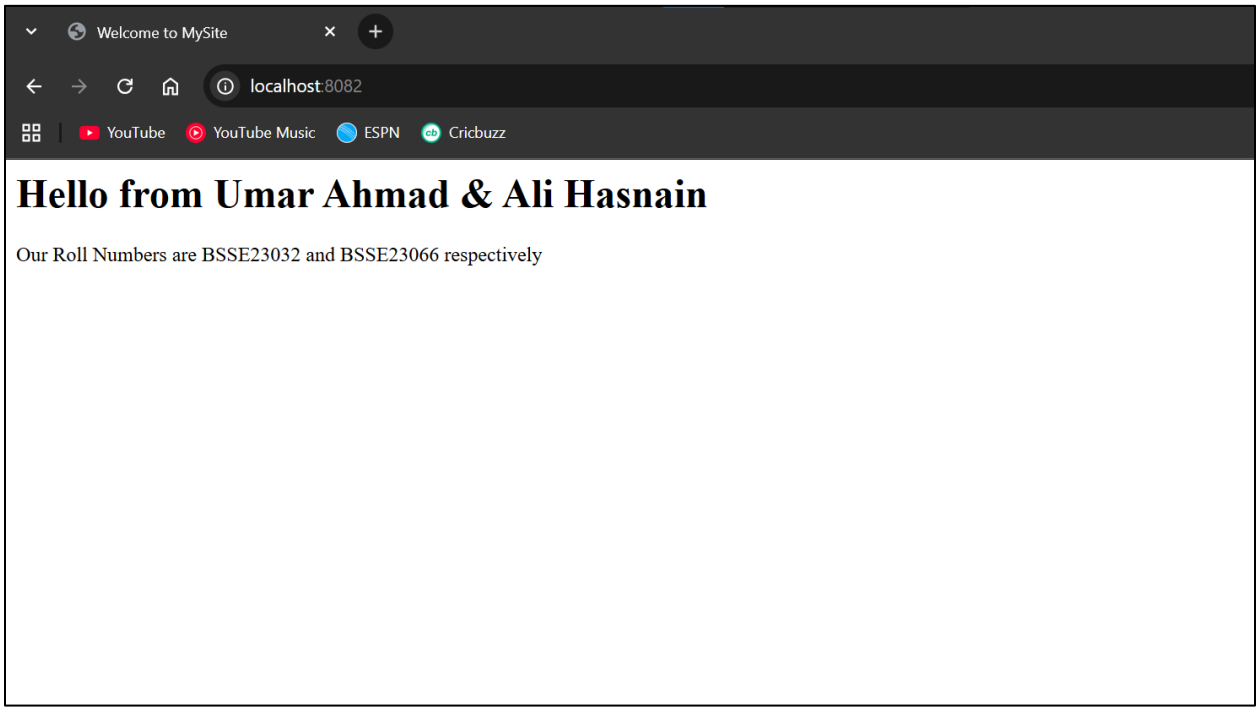
Quiz Activity#2

Group Members

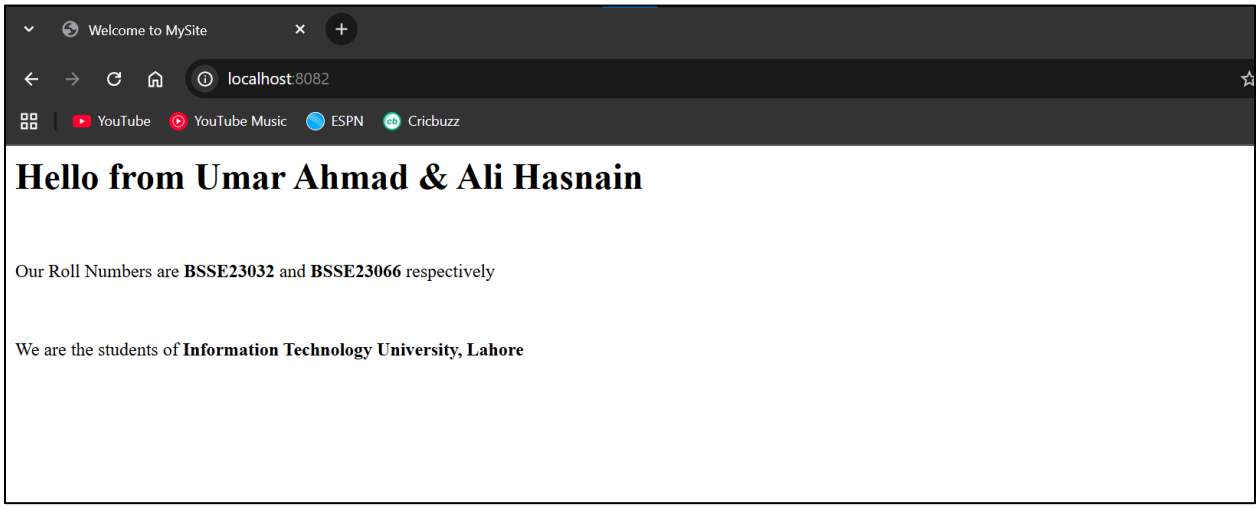
1. Umar Ahmad (BSSE23032)
2. Ali Hasnain (BSSE23066)

GitHub Link: https://github.com/BSSE23032/scd-quiz-activity2-32-66.git

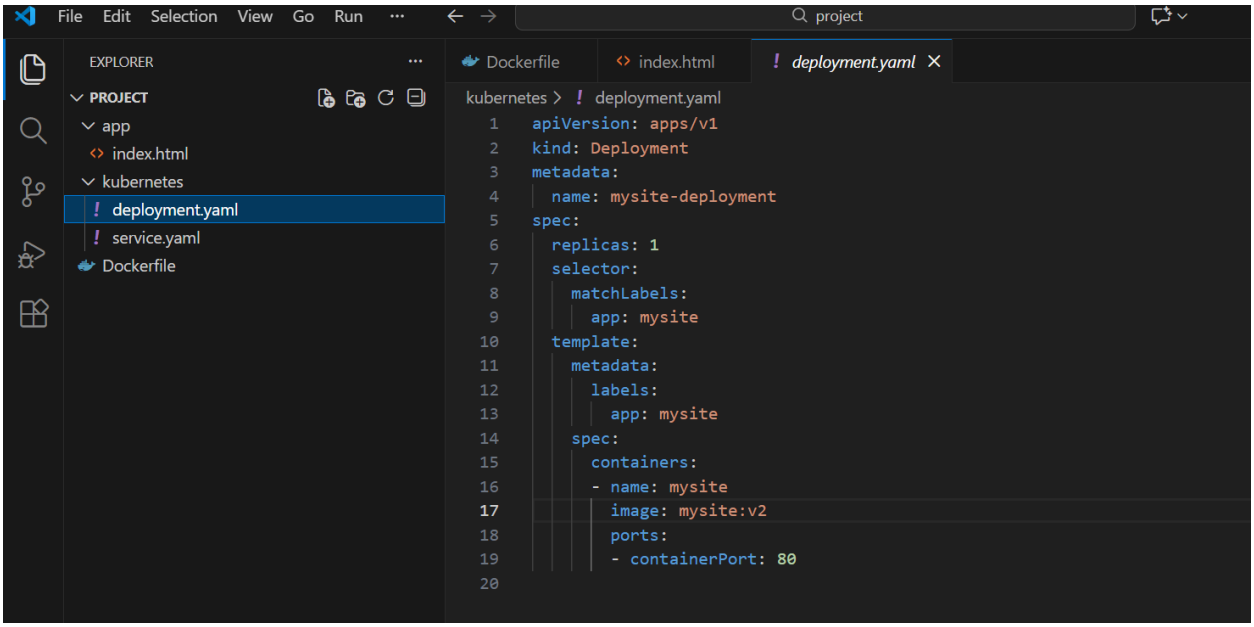
Phase 1:

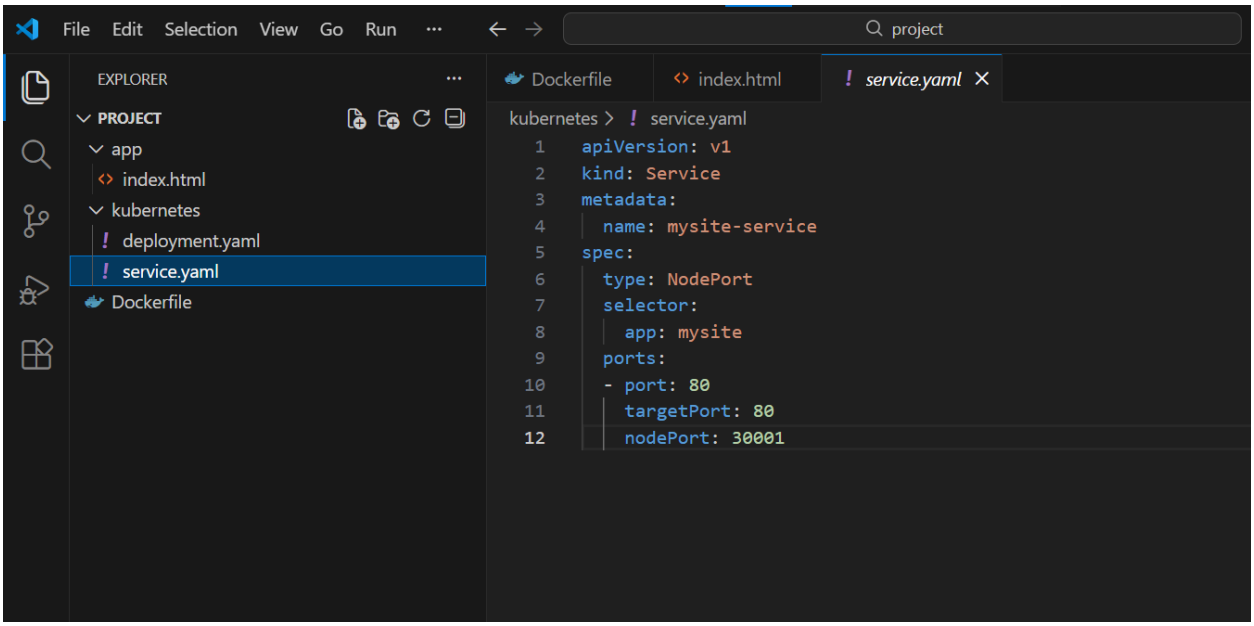


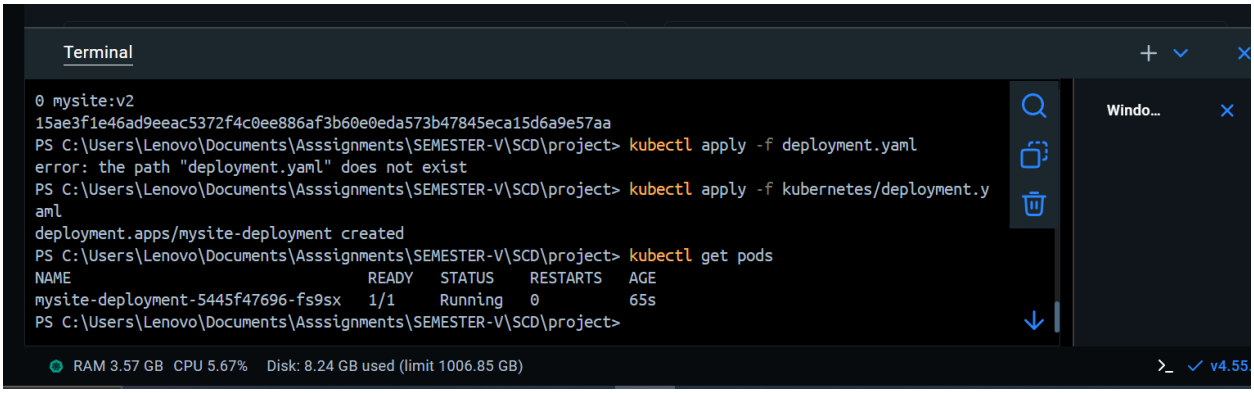
AFTER CHANGES:

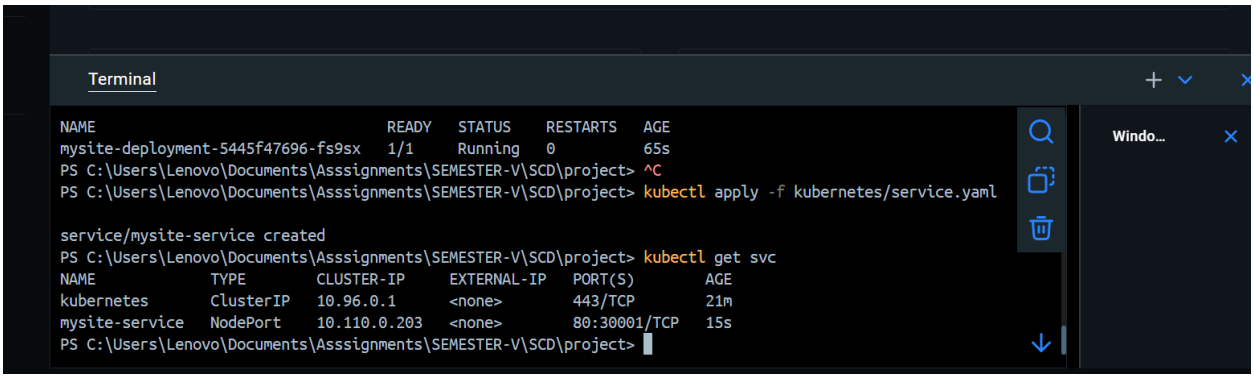


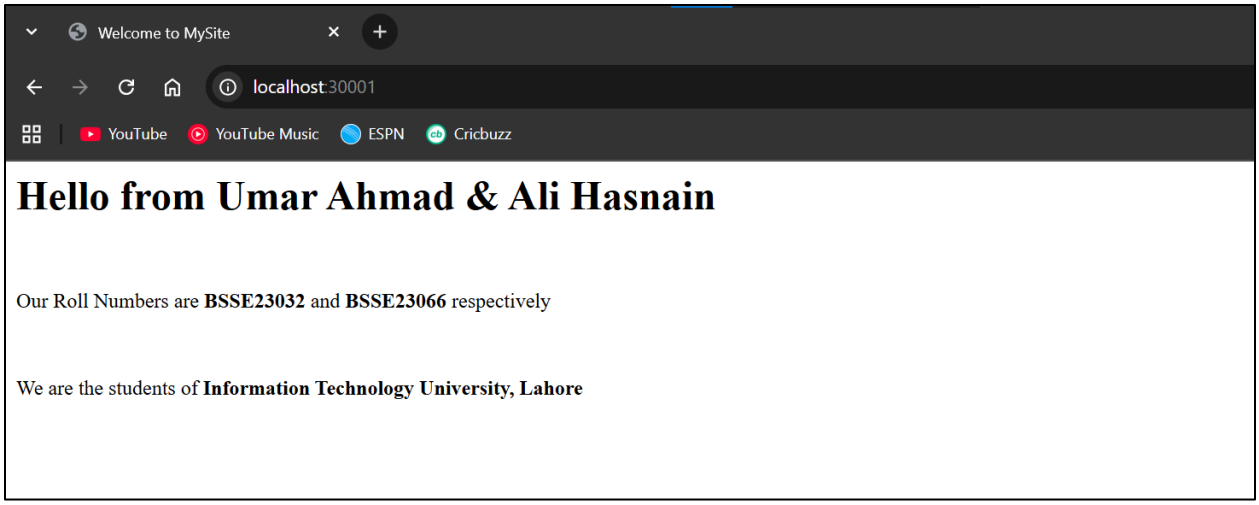
Phase 2:



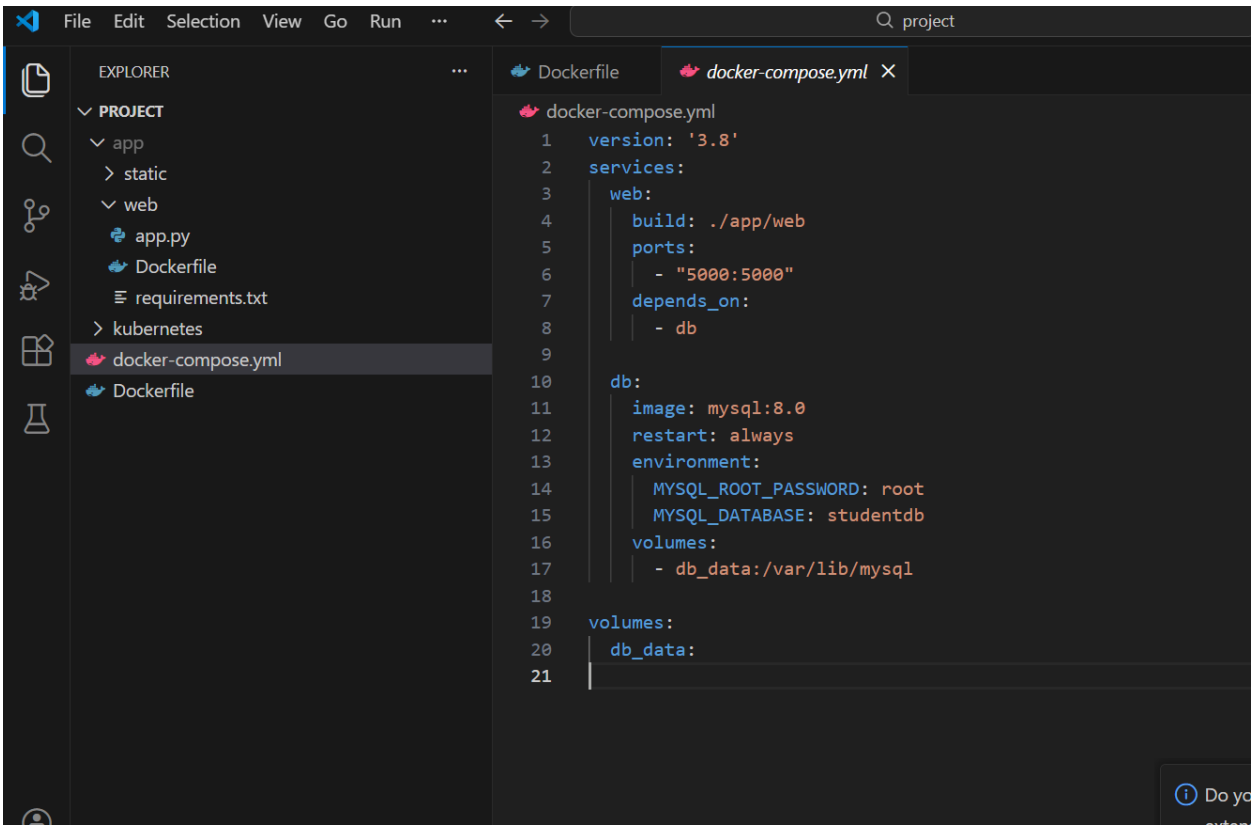

File Edit Selection View Go Run
project
EXPLORER
PROJECT
app
index.html
kubernetes
deployment.yaml
service.yaml
Dockerfile
Dockerfile
index.html
service.yaml
kubernetes > service.yaml
1 apiVersion: v1
2 kind: Service
3 metadata:
4 name: mysite-service
5 spec:
6 type: NodePort
7 selector:
8 app: mysite
9 ports:
10 - port: 80
11 targetPort: 80
12 nodePort: 30001

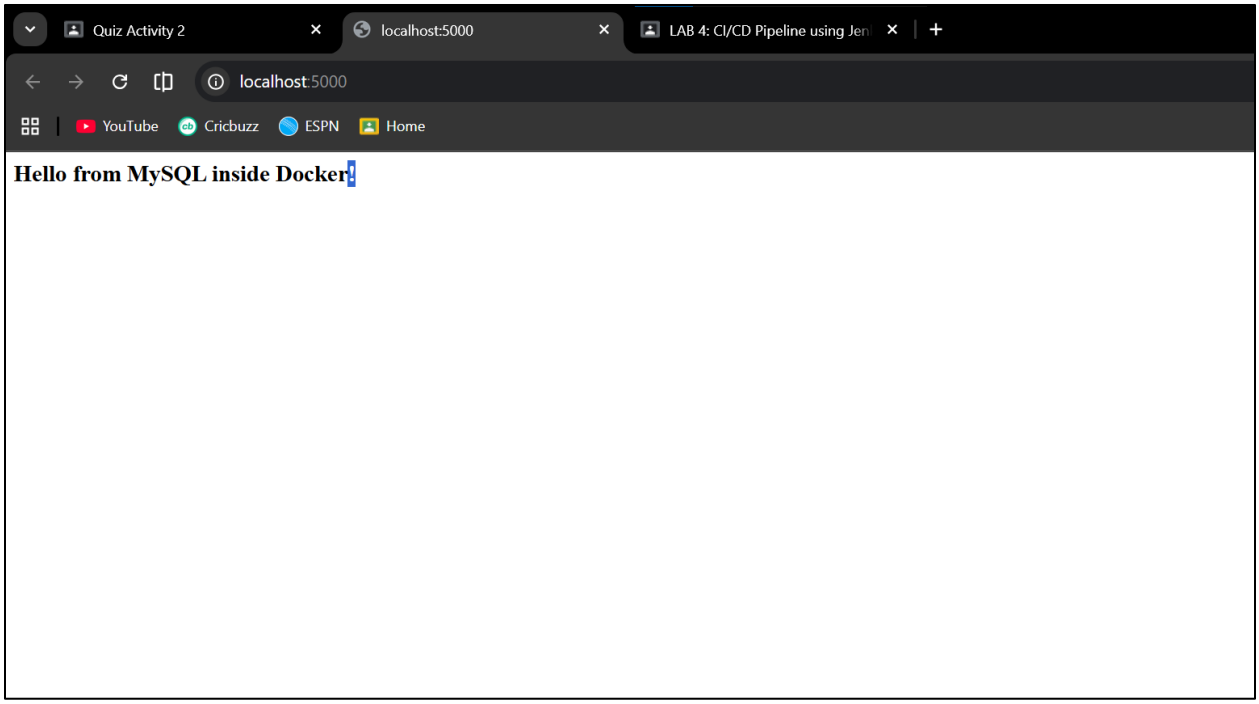

Terminal
0 mysite:v2
15ae3f1e46ad9eeac5372f4c0ee886af3b60e0eda573b47845eca15d6a9e57aa
PS C:\Users\Lenovo\Documents\Asssignments\SEMESTER-V\SCD\project> kubectl apply -f deployment.yaml
error: the path "deployment.yaml" does not exist
PS C:\Users\Lenovo\Documents\Asssignments\SEMESTER-V\SCD\project> kubectl apply -f kubernetes/deployment.yaml
deployment.apps/mysite-deployment created
PS C:\Users\Lenovo\Documents\Asssignments\SEMESTER-V\SCD\project> kubectl get pods
NAME READY STATUS RESTARTS AGE
mysite-deployment-5445f47696-fs9sx 1/1 Running 0 65s
PS C:\Users\Lenovo\Documents\Asssignments\SEMESTER-V\SCD\project>
Windo...
RAM 3.57 GB CPU 5.67% Disk: 8.24 GB used (limit 1006.85 GB)

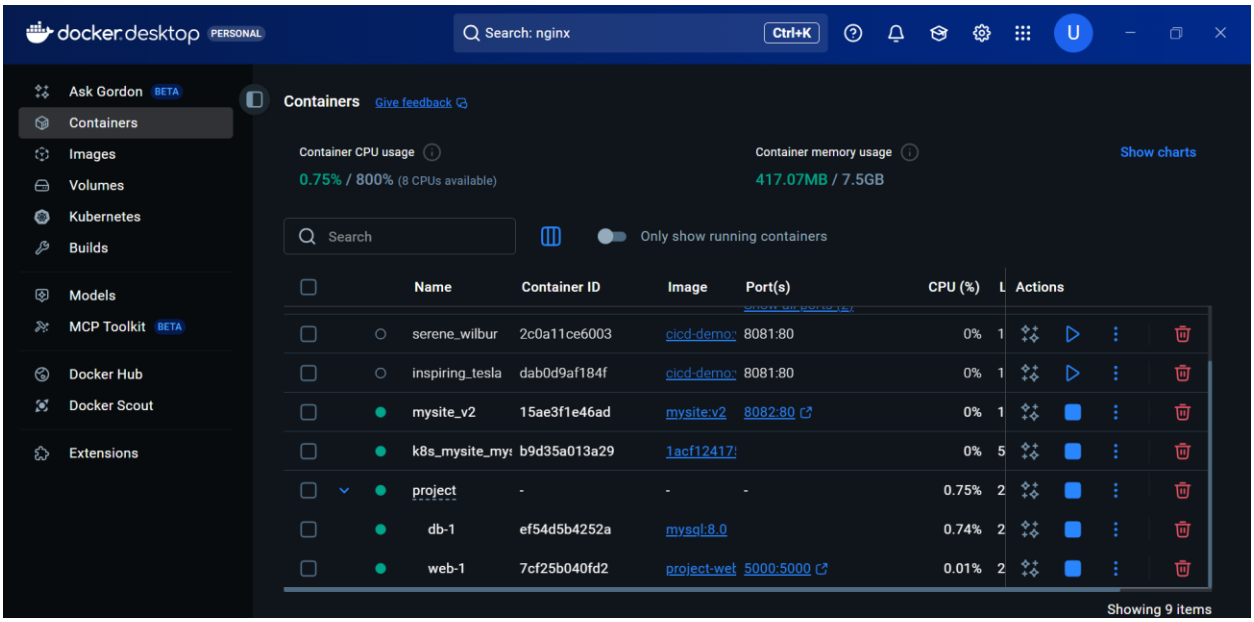

Terminal
NAME READY STATUS RESTARTS AGE
mysite-deployment-5445f47696-fs9sx 1/1 Running 0 65s
PS C:\Users\Lenovo\Documents\Asssignments\SEMESTER-V\SCD\project> ^C
PS C:\Users\Lenovo\Documents\Asssignments\SEMESTER-V\SCD\project> kubectl apply -f kubernetes/service.yaml
service/mysite-service created
PS C:\Users\Lenovo\Documents\Asssignments\SEMESTER-V\SCD\project> kubectl get svc
NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE
kubernetes ClusterIP 10.96.0.1 <none> 443/TCP 21m
mysite-service NodePort 10.110.0.203 <none> 80:30001/TCP 15s
PS C:\Users\Lenovo\Documents\Asssignments\SEMESTER-V\SCD\project>
Windo...


Welcome to MySite
localhost:30001
YouTube
YouTube Music
ESPN
Cricbuzz
Hello from Umar Ahmad & Ali Hasnain
Our Roll Numbers are BSSE23032 and BSSE23066 respectively
We are the students of Information Technology University, Lahore

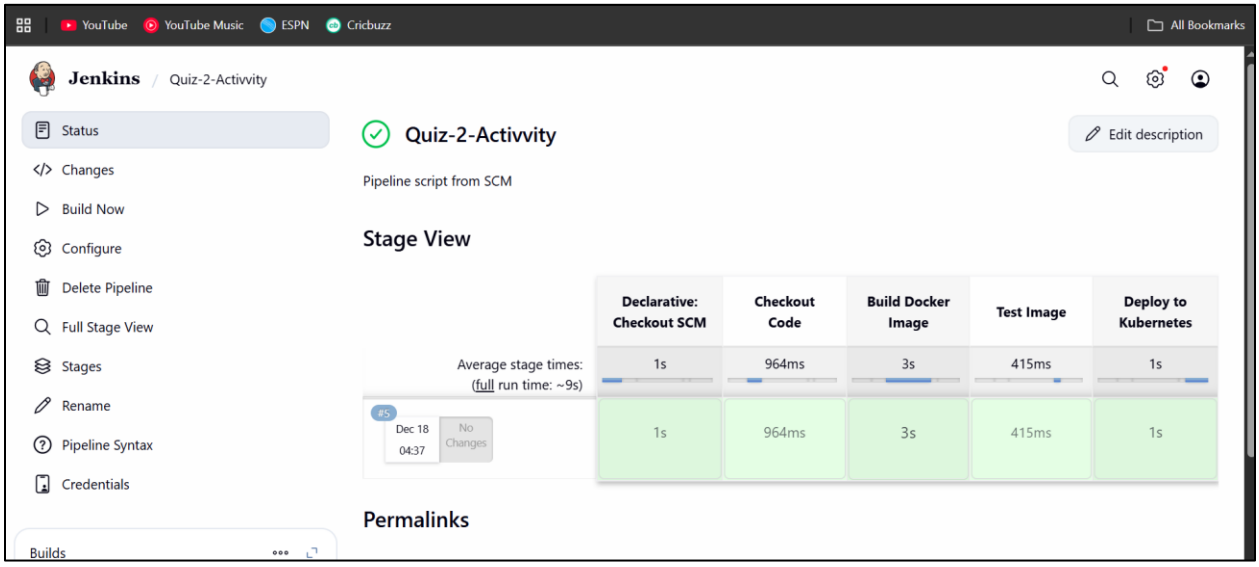
Phase 3:


File
Edit
Selection
View
Go
Run
project
EXPLORER
PROJECT
app
static
web
app.py
Dockerfile
requirements.txt
kubernetes
docker-compose.yml
Dockerfile
Dockerfile
docker-compose.yml
docker-compose.yml
version: '3.8'
services:
web:
build: ./app/web
ports:
- "5000:5000"
depends_on:
- db
db:
image: mysql:8.0
restart: always
environment:
MYSQL_ROOT_PASSWORD: root
MYSQL_DATABASE: studentdb
volumes:
- db_data:/var/lib/mysql
volumes:
db_data:


Quiz Activity 2
localhost:5000
LAB 4: CI/CD Pipeline using Jen
localhost:5000
YouTube
Cricbuzz
ESPN
Home
Hello from MySQL inside Docker!

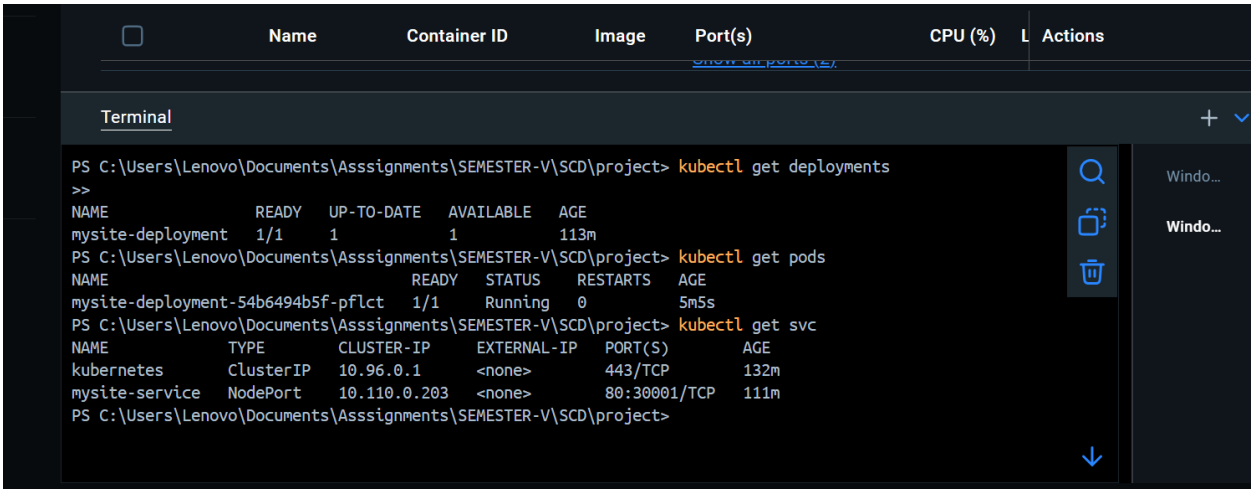

docker desktop
PERSONAL
Search: nginx
Ctrl+K
Ask Gordon
BETA
Containers
Images
Volumes
Kubernetes
Builds
Models
MCP Toolkit
BETA
Docker Hub
Docker Scout
Extensions
Containers
Give feedback
Container CPU usage
0.75% / 800% (8 CPUs available)
Container memory usage
417.07MB / 7.5GB
Show charts
Search
Only show running containers
Name
Container ID
Image
Port(s)
CPU (%)
Actions
serene_wilbur
2c0a11ce6003
cicd-demo:
8081:80
0%
inspiring_tesla
dab0d9af184f
cicd-demo:
8081:80
0%
mysite_v2
15ae3f1e46ad
mysite:v2
8082:80
0%
k8s_mysite_mys
b9d35a013a29
1acf12417
0%
project
0.75%
db-1
ef54d5b4252a
mysql:8.0
0.74%
web-1
7cf25b040fd2
project-wel
5000:5000
0.01%
Showing 9 items

Phase 4:




```
   d6360cd..3426906  main -> main
umar_ahmad@DESKTOP-VPNORBF:/mnt/c/Users/Lenovo/Documents/Asssignments/SEMESTER-V/SCD/project$ git log -1
commit 34269065b53d0022313134168 41f9a05c0376635 (HEAD -> main, origin/main)
Author: Umar Ahmad <bsse23032@itu.edu.pk>
Date:   Thu Dec 18 04:36:52 2025 +0500

    Fix test stage in Jenkins pipeline
```



THE END