

PROJECT DEVELOPMENT PHASE

Containerization and Deployment SPRINT 4

Dockerfile

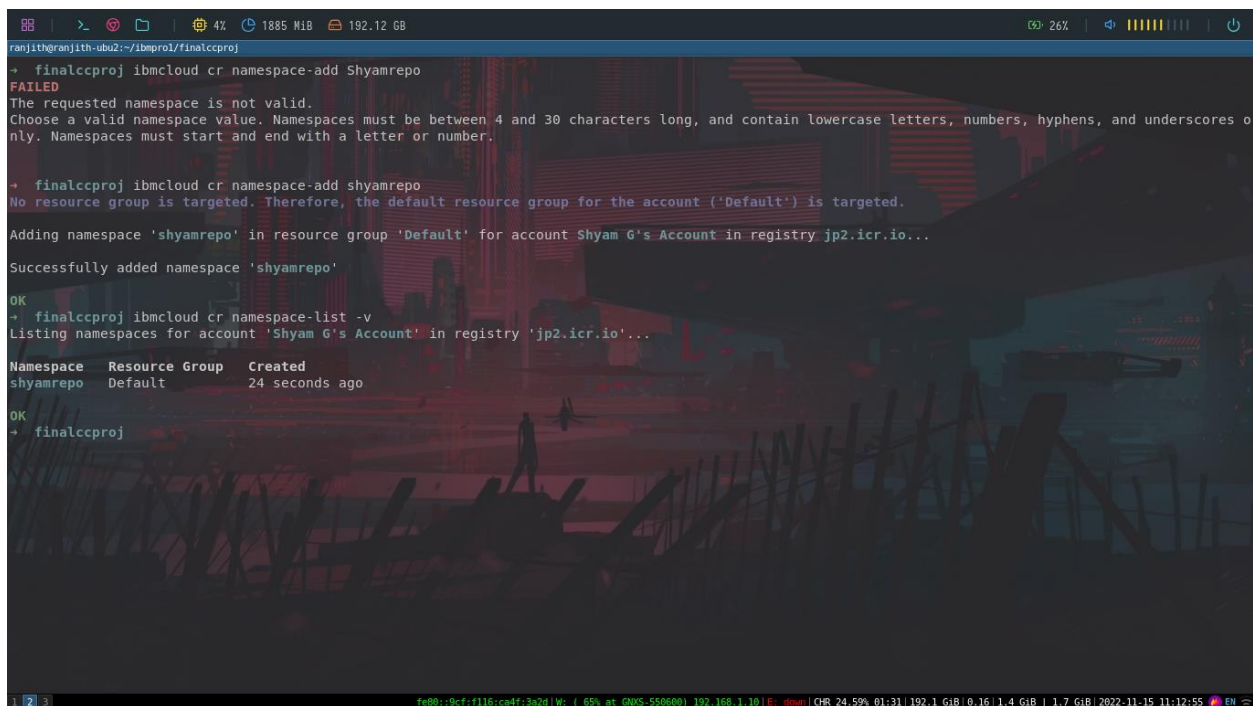
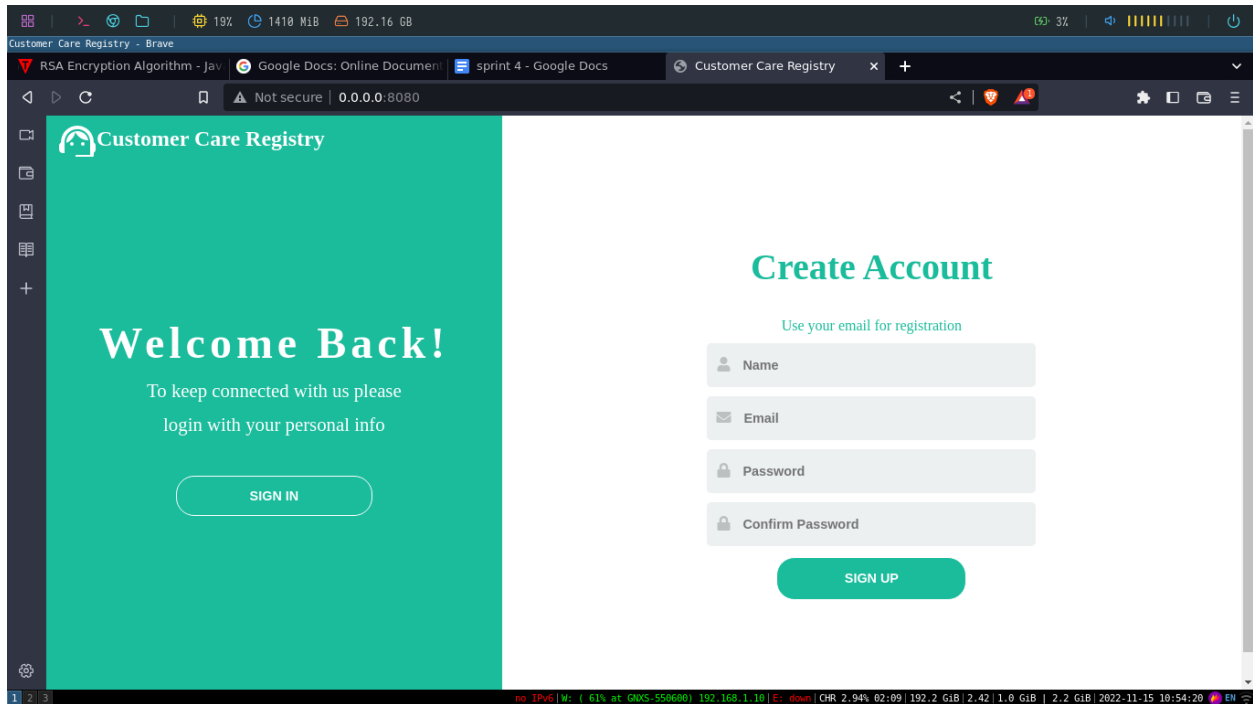
```
ranjith@ranjith-ubu2:~/ibmp1/finalccproj
→ finalccproj cat Dockerfile
FROM python:3.10-slim-bullseye
WORKDIR /app
ADD . /app

RUN apt update \
    && apt install -y gcc \
        libc-dev \
        libxml2 \
        python3-dev \
    ;
COPY requirements.txt /app
RUN pip install -r requirements.txt
CMD ["python","src/app.py"]
EXPOSE 8080
```

Docker images

```
→ finalccproj sudo docker image ls
REPOSITORY          TAG          IMAGE ID      CREATED        SIZE
ccproj5             latest       58a507abff64  About an hour ago  631MB
ranjithrk18/customer  latest       58a507abff64  About an hour ago  631MB
```

Running container



Kubernetes cluster creation

The image shows two screenshots of the IBM Cloud interface. The top screenshot displays the Kubernetes cluster creation progress for a cluster named 'customerarent'. The bottom screenshot shows the Container Registry 'Namespaces' page.

Top Screenshot: Kubernetes cluster creation progress

The browser address bar shows the URL: `cloud.ibm.com/kubernetes/clusters/cdpj34uf0rn1pd5lhq3g/overview`.

The IBM Cloud dashboard shows the cluster 'customerarent' in the 'Overview' tab. The status is 'Preparing master, workers...'. A warning banner indicates 'Expires in 30 days: Be sure to back up your data, your cluster will be deleted in 30 days. To access the full capabilities of the service, try out a [standard cluster](#).'

The cluster details are as follows:

Node status	Add-on status	Master status	Ingress status
1 of 1 Pending	0 of 0 Normal	Unknown	Pending

The 'Details' section shows the following information:

Cluster ID	Version	Infrastructure	Zones
cdpj34uf0rn1pd5lhq3g	1.24.7_1542	Classic	Milan 01

Bottom Screenshot: Container Registry Namespaces

The 'Namespaces' page shows the location 'Osaka'. The 'Resource group' is set to 'Filter...'. The 'Create' button is visible.

Name	Resource group	Repository count	Image count	Retention policy
shyamrepo	Default	1	1	Retain all images

The bottom of the page shows 'Items per page: 25' and '1-1 of 1 item'.