1. Create the Project Folder

Folder is structured like this:

movieflix/

├── app.py

├── requirements.txt

├── Dockerfile

└── templates/

└── index.html

1. Install Docker

Check if the docker package is available:

dnf list docker

install the docker

dnf install docker

start the docker

systemctl start docker

Enable the docker to start docker on every reboot

systemctl enable docker

1. Build the Docker Image

docker build -t movieflix-app .

docker image ls (check if image is created)

1. Run the Docker Container

docker run -d -p 5000:5000 movieflix-app

docker container ls (check if container is running)

1. Stop and Remove the Container (if needed)

docker stop containerid

docker rm containerid

1. Tag the docker image

docker tag movieflix-app bhanureddy/abctest:v1

docker login

docker push bhanureddy/abctest:v1

1. Install Kubectl
2. Configure kubectl
3. Deply Manifests
4. Tag the Subnets
5. Sometimes pod may not create due to error saying

“0/1 nodes are available: 1 node(s) had untolerated taint {CriticalAddonsOnly: }. preemption: 0/1 nodes are available: 1 Preemption is not helpful for scheduling”

Remove the Taint from the Node (Recommended for personal/test clusters)

kubectl taint nodes <node-name> CriticalAddonsOnly=true:NoSchedule-

1. Create Jenkins using the below:  
   docker run -u 0 --privileged --name jenkins -it -d -p 8080:8080 -v /var/run/docker.sock:/var/run/docker.sock -v $(which docker):/usr/bin/docker -v /home/jenkins\_home:/var/jenkins\_home jenkins/jenkins:latest
2. Create aws creds plugin and configure aws-eks-creds
3. Create secret file eks-kubeconfig and upload the public access kubeconfig.yaml

aws eks update-kubeconfig --region ap-south-2 --name ferocious-pop-painting --alias public-access-cluster --kubeconfig kubeconfig.yaml