**GUVI**

**Application Deployment**

(Deploy the given react application to a production ready state)

Application:

Clone the below mentioned repo and deploy the application. (Run the application in port 80 [HTTP])

Repo URL: https://github.com/sriram-R-krishnan/devops-build

**Docker:**

Dockerize the application by creating a Dockerfile

Create a docker-compose file to use the above image

**Bash Scripting:**

Write 2 scripts:

build.sh – for building docker images

deploy.sh – for deploying the image to server

**Version Control:**

Push the code to GitHub to dev branch (use .dockerignore & .gitignore files)

Note: Use only CLI for related git commands

**Docker Hub:**

Create 2 repos “dev” and “prod” to push images

“Prod” repo must be private

“Dev” repo can be public

**Jenkins:**

Install and configure Jenkins build steps as per needs to build, push & deploy the application

Connect Jenkins to the GitHub repo with auto build trigger from both dev & master branches

If code pushed to dev branch, docker image must build and push to dev repo in Docker Hub

If dev merged to master, then docker image must be pushed to prod repo in Docker Hub

**AWS:**

Launch t2.micro instance and deploy the created application

Configure Security Group as below:

Whoever has the IP address can access the application

Login to server can/should be made only from your IP address

**Monitoring:**

Setup a monitoring system to check the health status of the application. (Open-source)

Sending notifications only if the application goes down is highly appreciable

**Submission:**

GitHub repo URL, deployed site URL, and Docker image names must be added in the submission

Upload the screenshots of the following to the GitHub repo:

Jenkins (login page, configuration settings, execute step commands)

AWS (EC2 Console, SG configs)

Docker Hub repo with image tags

Deployed site page

Monitoring health check status