

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 and “dev” repo can be public

Jenkins:

- Install and configure Jenkins build step as per needs to build, push & deploy the application
- Connect Jenkins to the github repo with auto build trigger from both dev & master branch
- If code pushed to dev branch, docker image must build and pushed 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 create application.

Configure SG 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 URI, deployed site URL, docker images name must be added in the submission.
- Upload the screenshots of below mentioned to 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