**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 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 URL, 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