

**Objective:-**

- To implement CI/CD pipeline with **any CI-CD tool** and deploy the containerized application on Kubernetes. (You can use **minikube, K3s** etc to setup K8s on EC2 instance)
- AWS Infrastructure should be automated via Terraform/Cloud formation template.

**Application details:-**

We have created one sample application and the code is available on [Github Url](#).

**Perform the below steps:-**

- Create docker images for frontend and backend application
- Setup and Configure CI-CD pipeline. You can use Jenkins, Github action, Gitlab CI, etc.
- Provision required resources using Terraform and setup k8s cluster.
- Deploy microservices on Kubernetes and expose it to the outside world.

**Important Notes**

1. Please create trial accounts on all external systems to complete the problem.
2. Automation is important. You can choose the tool, language, and platform of your choice to automate, preferably Ansible, CHEF, or bash/shell script.
3. Once you are done with the code please revert to the same email with the Jenkins server access, Jenkins URL, deployed application URL, and docker file.

**You will be given 2-3 days to write a solution and once you complete the solution, you can upload it on google drive and share the link with us. Please DO NOT post your solution on Github or anywhere accessible to externals.**

**Please do not hesitate to reach out to us if you have any questions about any of the points :)**