



Kaiburr DevOps Assessment

The goal of this coding assessment is for you to showcase your DevOps coding skills. Please complete as many of the tasks mentioned below as possible to give yourself a higher chance of being selected. Please upload all of your code to a public github repo and share the url with us. Please make sure all code written are tested and upload screenshots of the working pipelines and other code written to the same github repo. Please make sure all the tasks are documented in the same repo.

Task 1:

Create CI/CD pipeline for the application in the link -
<https://github.com/sahat/hackathon-starter.git>

Readme contains the details of building the app. Feel free to use a github actions or Jenkins multi-branch pipeline or azure devops pipeline for your CI. Please showcase your depth of knowledge on CI with pipelines that are well written.

Task 2:

Create separate step to your pipeline for scanning images - use Trivy to scan the container image for vulnerability. If the images have HIGH or Critical Vulnerabilities, the CI code should have a logic to abort the build.

Task 3:

Add a step in CI for code quality/code coverage – Use blackduck or sonarqube as a part of pipeline job.

Task 4:

As a part of CI Step, authenticate and deploy this container image in kubernetes backed by required kubernetes service.

Task 5:

Deploy this code with argocd and using helm or Kustomize. Design the helm charts in such way that charts can be deployed across multiple environments just by updating the values.yaml

This application requires mongodb, use terraform as IAC to bring up an ec2 instance and ansible or any configuration management tool of your choice to install mongodb in ec2 instance. Use the mongo db endpoints in kubernetes configmaps and mongodb authentication in kubernetes secret.