directeam

ArgoCD Interview project

Tip: Make sure to read carefully before approaching the project.

Project Overview

In this project, you will build a CD as GitOps using ArgoCD and continuously deploy a demo web application without losing connection to the service.

Make sure to document the commands you use along the way.

Task flow:

- Download and unzip the attached file “DevOps-Interview-ArgoCD.zip”
- Ceate a public GitHub repository, push DevOps-Interview-ArgoCD code and enable GitHub Actions on the repository.
- Spin up a local Minikube cluster.
- Install ArgoCD on the cluster and log in to the UI.
- Edit the README to trigger the CI pipeline to make sure that a new image is now stored in the GitHub Container Registry.
- Create a Kubernetes deployment manifest for the image on a specific tag (not latest) with 3 replicas and a declarative ArgoCD application that deploys this manifest with auto sync configured.
- Apply the ArgoCD Application and make sure ArgoCD deploys the web application and it is up & running.
- Add a Service of type NodePort to the web application that is deployed by ArgoCD.
- Connect to the web application using the NodePort service.
- Edit some print text in the source code, commit and push the changes.
- After the build is done, edit the image version in the deployment manifest, push the changes and make sure ArgoCD deploys the new version automatically.
- Connect to the service again and make sure you now see your changes.

Bonus

- Do the same but the this time the repository will be private and not public.
- Add an ingress and connect to the web service via the ingress

Success criteria

- A zipped repository with all of the files required for this system and a README file with all of the commands required to reproduce.