

## **Reflection**

Working on this project gave me hands-on experience with Infrastructure-as-Code using Terraform in two different environments: Docker and Kubernetes. I learned how to modularize infrastructure using Terraform modules, manage state, and pass sensitive variables securely with .tfvars files. The Docker part reinforced my understanding of container orchestration, networks, and multi-service deployments, while the Kubernetes part taught me how to manage namespaces, deployments, services, and ConfigMaps using Terraform. Adding enhancements like health checks, resource requests/limits, and ConfigMaps helped me think about real-world production considerations. Overall, this project strengthened my skills in automating infrastructure, improving repeatability, and maintaining clarity in deployment workflows.