

Project: Automating the Delivery of Highly Scalable Reddit Clone Application using CI/CD Pipeline with Docker, Docker Hub, and Kubernetes Minikube

Description: As part of a software development project, I designed and implemented a robust continuous integration (CI) and continuous deployment (CD) pipeline for a Reddit clone application. The pipeline incorporated Docker, Docker Hub, and Kubernetes Minikube technologies to achieve a seamless, automated flow from code changes to deployment.

For the CI component, I set up an automated pipeline that integrated code changes from the development team and tested them before pushing the updated container images to Docker Hub. This ensured that any changes made were thoroughly tested before deployment, thus improving the overall quality of the application.

For the CD component, I used Kubernetes Minikube to deploy the container images to the appropriate environment based on the results of the tests. The application was designed to be highly available and scalable, leveraging Kubernetes features such as services and ingress.

To ensure optimal performance, I also implemented monitoring and logging functionalities to identify and troubleshoot any issues that may arise. The pipeline was designed with automation in mind, minimizing manual interventions and reducing the likelihood of human errors.

Key technologies used: Docker, Docker Hub, Kubernetes, Minikube, CI/CD, Containerization, Automation, Monitoring, Logging, Reddit Clone Application.