CS436 Term Project Report 1

Team Members:

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GitHub Repository: https://github.com/ygzgrdmr/CS436-Term-Project

We are setting up the Infinity Search Solo application on Google Cloud, beginning with cloning its GitLab repository. We will automate resource provisioning using Terraform, managing components like GKE and Cloud SQL. The deployment process is visualized through a flowchart, outlining steps from Docker configuration to monitoring. Additionally, an ER diagram details the relationships between entities like Docker Containers, Cloud Build, and the Load Balancer, ensuring a clear understanding of the architecture and data flow.

Repository:

We're deploying the Infinity Search Solo, a self-hostable metasearch engine, on Google Cloud. The application’s code is stored in a GitLab repository which we will clone to begin the setup process.

Link of repo: https://gitlab.com/infinitysearch/infinity-search-solo

Flowchart:

To visualize the deployment process, we created a flowchart detailing each step from setting up Terraform to deploying on Google Kubernetes Engine (GKE). It includes steps like configuring Docker, setting up CI/CD pipelines, and implementing monitoring tools.

ekran görüntüsü, tasarım içeren bir resim

Açıklama otomatik olarak oluşturuldu

ER Diagram:

The ER diagram illustrates the relationships between various entities involved in the deployment. It includes Terraform managing the Cloud SQL and GKE Cluster, as well as interactions between Docker Containers, Cloud Build, and the Container Registry, with a Load Balancer managing client requests to the GKE Cluster.

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Açıklama otomatik olarak oluşturuldu