Crypto Tracker Web System

As web to help people to track crypto price and send them alert for a predefined price point.

System Design

The database for the solution is a nosql to allow flexibility for user data and here is the ERD for the design.

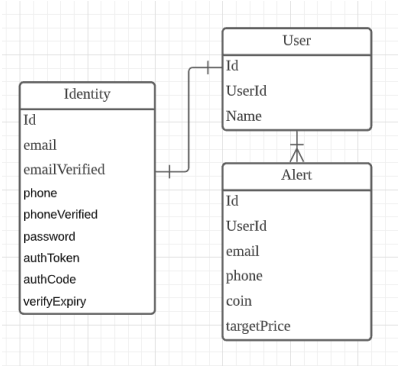

Diagram 1: ERD for the solution database

As mentioned earlier, the solution features a microservices architecture and here is the diagram to illustrate the solution's system design.

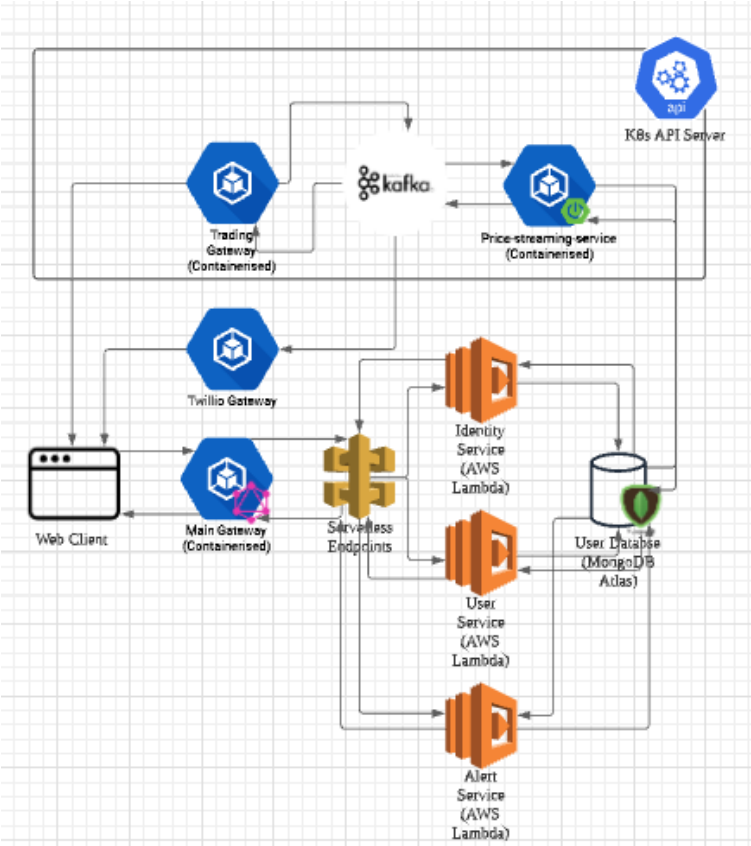

Diagram 2: Architecture for the solution database

Projects Overview

1. Web (crypto-tracker-web)

The first project that was developed was the web. This project serve as the working client for the solution and the development for it has been bootstrap with Nextjs Framework. The web has been named crypto tracker for the sake of having it to act as a site to display crypto price. However, all the data has been hard coded. The project is deploy to Vercel.

Below some is the screenshots from the web project:-

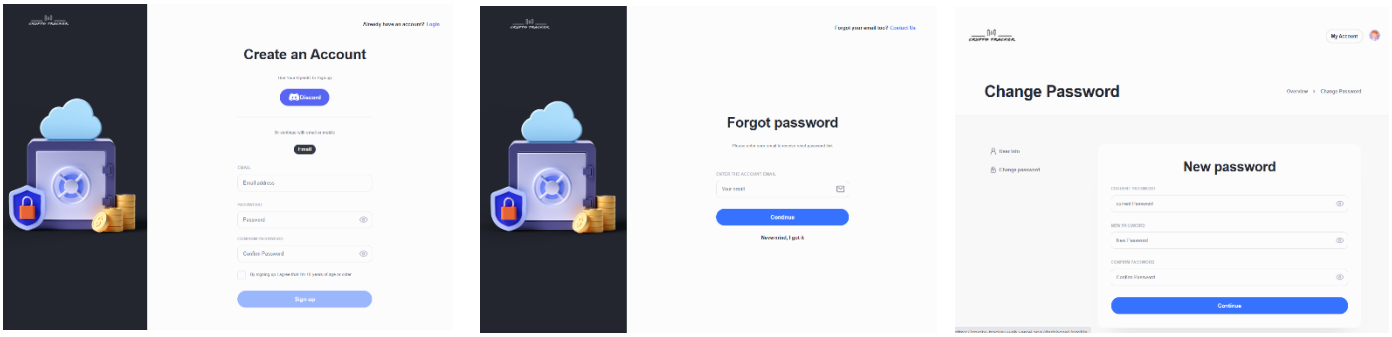

Diagram 2: Screenshot for the web

2. Gateway (crypto-tracker-gateway)

This was the second project that been developed. It acts as the middleware to aggregate request from web for the authentication and getting user details from database. It contains apollo graphql as a server to enable graphql query and mutation form the web and translate these requests into HTTP requests to identity and user service endpoints. This project has been containerized and deployed to GCP.

3. Identity Service (ct-identity-service)

This was the third project that has been work out which its main purpose is to serve authentication endpoints and communicate with the database in the solution. The project is using serverless framework and deployed in AWS. It was integrated with Mongodb on Atlas to store user auth credentials.

4. User Service (ct-user-service)

The last project for the solution is having similar setup with the third one the only difference is its purpose where this project is responsible for managing user details for the solution.