Auth API Micro Service

https://app.swaggerhub.com/apis-docs/nseethapathy/authService/1.0.0

API endpoints for user management and user authentication. It uses MySQL database for managing user data. When a new user is registered or logged in, the auth service creates an apiKey for the session. The API key is stored in redis for 8 hours. Other services can validate the token by either checking in redis for the apiKey or by hitting the auth serve `/api/user` endpoint.

Framework: Lumen 7.2 (PHP 7.3-fpm)
  Packages: php7.3-curl, php7.3-mysql, php7.3-common, php7.3-json, predis

MySQL (RDBMS)

Relational database to store user, products, orders for the application.

REDIS (cache)

Caching system for performance and used for storing **apiKey** for the auth service.

Inventory API Micro Service

API endpoints for inventory management, inventory search. Users MySQL database for managing products. Uses Elasticsearch to store product name and description in corresponding indexes, then elasticsearch is used for full text query search.

Elasticsearch(document store)

Inventory/Product data stored in elastic index so that the full text query search can be performed in an efficient way.

Apache Kafka (event queue system)

A queuing system to handle events from user activity in auth service and inventory service. All events triggered in those services are entered in their respective queues and a job processor transforms the job in to data suitable for analytics.

Job Queue Processing System

API / Lamda function which subscribes to Kafka/RabbitMq queues, processes jobs in queue and store the data in a data warehouse.

Amazon Redshift

Data warehouse to store large amounts of data which will later be used to perform business analysis, derive KPIs and insights.