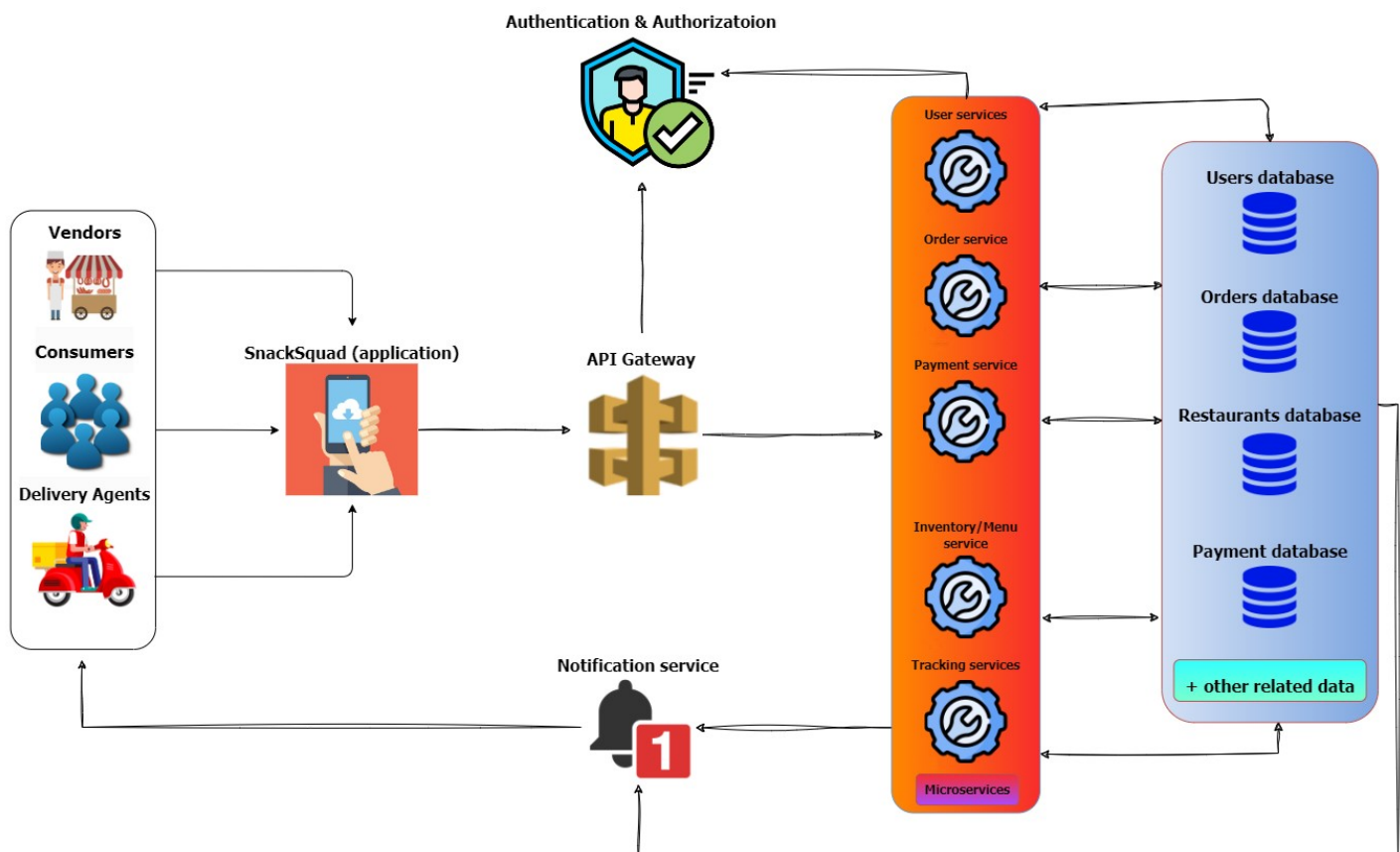


# Project Design Phase-I

## Solution Architecture

Date	23 October 2023
Team ID	Team-591037
Project Name	Snack Squad: A Customizable Snack Ordering And Delivery App
Maximum Marks	4 Marks

### Solution Architecture:



## **Different layers of the application's architecture involve:**

- **Front-End:**

The front-end of the Android app consists of user interfaces and user experience components.

- **Back-End:**

- **API Gateway:**

An entry point for the Android app that routes requests to the appropriate microservices and handles authentication.

- **Microservices:**

- **User Service:** Manages user registration, authentication, and profile information.
    - **Product Service:** Maintains the catalog of snacks, including details such as product information, pricing, and availability.
    - **Order Service:** Manages the ordering process, order history, and payment processing.
    - **Delivery Service:** Coordinates snack delivery, including driver assignment and real-time tracking.
    - **Authentication:** Handles user authentication using Firebase Authentication.

- **Database:**

A relational database (e.g., PostgreSQL, MySQL) stores user data, order information, product details, and delivery status.

- **Third-Party Services:**

- **Payment Gateway:** Integrates with a secure payment gateway (e.g.,UPI, PayPal) for processing payments.
    - **Push Notifications:** Implements a push notification service (e.g., Firebase Cloud Messaging) to send order updates and promotional messages.

- **Cloud Infrastructure**