1. Farmers (Produce Suppliers)

Role: Farmers are the producers and the starting point of the supply chain. Their primary function is to manage the produce they have available and fulfill orders placed by customers.

Core Features & Actions:

- **Profile Management:** Register an account, manage farm details, and set up payment information.
- **Inventory Management:** List new produce in the system, including details like type, quantity, quality grade, and price. They can update availability in real-time as stock changes.
- **Order Fulfillment:** Receive and view new order requests assigned to them. They acknowledge orders and prepare them for pickup by distributors.
- **Communication:** Receive and respond to comments or custom requests from restaurants regarding specific batches.

Primary Microservice Interactions:

- They log in via the **API Gateway**, which authenticates them using the **User Service**.
- All actions related to listing and updating produce are handled by the **Product Service**.
- They view incoming purchase requests managed by the **Order Service**.
- They receive alerts about new orders or pickups via the **Notification Service**.

Farmer

Primary Interactions:
- Login via **User Service**.
- List/Update produce via **Product Service**.
- View/Acknowledge orders via **Order Service**.
- Receive alerts via **Notification Service**.

1. Manages Profile   2. Manages Inventory   3. Fulfills Orders   4. Communicates on Orders

Microservice Architecture

API Gateway

Sends alerts (Email, Push, SMS)

Services

User Service   Product Service   Order Service   Notification Service

Data Stores

User Database   Product Database   Order Database