**Project Design Phase**

**Solution Architecture**

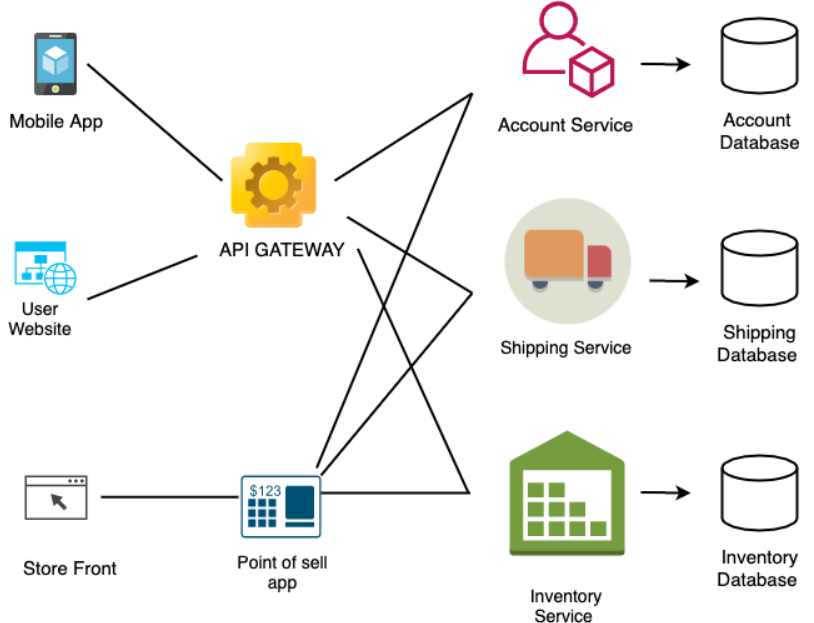
| Date | 26-06-2025 |
| --- | --- |
| Team ID | LTVIP2025TMID59448 |
| Project Name | ShopSmart |
| Maximum Marks | 4 Marks |

### **Solution Architecture:**

To provide a **user-centric, efficient, and scalable online grocery platform** that connects customers with multiple vendors for a seamless shopping experience.

* **User-Friendly Product Browsing & Filtering** Intuitive UI/UX with category-based browsing, smart filters (price, brand, availability), and real-time product search.
* **Multi-Vendor Store Management** Separate dashboards for vendors to manage inventory, product listings, and orders.
* **Scalable User Authentication & Role-Based Access** Secure login and access for customers, vendors, and admins using JWT-based authentication.
* **Cart, Wishlist & Order Processing** Smooth shopping cart flow, wishlist saving, and robust order management with tracking and confirmation.
* **Secure Payment Gateway Integration** Integration with reliable payment services supporting UPI, cards, and wallet payments.
* **Scheduled Delivery & Real-Time Notifications** Delivery time-slot booking and alerts for order status, promotions, and restocks via email/SMS.
* **Admin Dashboard & Analytics** Admin control over user management, vendor onboarding, sales reports, and system monitoring.

**Example - Solution Architecture Diagram:**

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