

Project Design Phase

Solution Architecture

Date	19 February 2026
Team ID	LTVIP2026TMIDS45121
Project Name	shopsmart: your digital grocery store experience
Maximum Marks	4 Marks

Solution Architecture:

Solution architecture defines the overall structure of the ShopSmart grocery web application and explains how different components interact with each other. It bridges the gap between business requirements and technical implementation by organizing the frontend, backend, database, and external services in a structured manner.

The architecture ensures secure communication between users and the system, manages product and order processing efficiently, and supports scalability and performance. It also defines how authentication, APIs, database operations, and third-party integrations (like payment gateways) work together to deliver a seamless grocery shopping experience.

Solution Architecture Diagram:

