Project Design Phase
Proposed Solution Template

Date	15 February 2025
Team ID	LTVIP2026TMIDS79179
Project Name	ShopSmart – A Full-Stack Digital Grocery Store Web Application
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in the proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Traditional grocery shopping is time-consuming, inconvenient for working professionals and elderly people, and lacks real-time stock visibility. Store owners also face difficulties in managing inventory manually and expanding their business reach.
2.	Idea / Solution description	ShopSmart is a full-stack digital grocery store web application that allows customers to browse products, search by category, add items to cart, and place orders online. It provides secure authentication (JWT-based), real-time cart updates, order tracking, and a cloud-based database. An admin dashboard enables product, category, and order management.
3.	Novelty / Uniqueness	The platform integrates real-time stock management, secure authentication, responsive UI, and cloud-based storage in a single system designed specifically for local grocery stores. It digitizes traditional grocery businesses with a scalable and modular architecture.
4.	Social Impact / Customer Satisfaction	The solution saves time, reduces physical effort, supports elderly and busy customers, and minimizes crowding in stores. It increases convenience, improves accessibility, and enhances customer satisfaction through a user-friendly and secure shopping experience.
5.	Business Model (Revenue Model)	Revenue can be generated through product sales margin, commission per order, subscription plans for store owners, delivery charges, and future integration of online payment gateway transaction fees.
6.	Scalability of the Solution	The system uses a three-tier architecture with MongoDB Atlas cloud database, allowing easy scaling to support more users, products, and stores. The modular design enables integration with mobile apps and future AI-based recommendation systems.