Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	20 Feb 2026
Team ID	LTVIP2026TMIDS91056
Project Name	ShopSmart: Your Digital Grocery Store Experience
Maximum Marks	4 Marks

Architecture Overview

The ShopSmart application follows a three-tier architecture consisting of the frontend, backend, and database layers. This architecture ensures modular development, easy maintenance, and scalability.

Frontend Technologies

- HTML — for structuring web pages

- CSS — for styling and responsive design

- JavaScript — for interactive user interface

- Bootstrap — for responsive layout and UI components

Backend Technologies

- Python — for server-side logic

- Flask — for web framework and API handling

Database

- MySQL / SQLite — for storing user data, products, orders, and transactions

Development Tools

- Visual Studio Code — code editor

- Git — version control system

- GitHub — repository management

Deployment Environment

- Web server for hosting application

- Browser-based access for users

Security Technologies

- HTTPS protocol for secure communication

- Authentication and authorization mechanisms

- Secure payment gateway integration