

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

Date	10-06-2025
Team ID	LTVIP2025TMID52034
Project Name	Grocery Web App
Maximum Marks	4 Marks

**Technical Architecture:**

The Grocery Web App follows a robust and scalable **client-server architecture**, with clearly separated concerns across the frontend, backend, and database layers. It supports seamless integration with external APIs like payment gateways and includes role-based access (Admin/User). The solution provides high performance, security, and maintainability.

**Table-1 : Components & Technologies:**

S.No	Component	Description	Technology
1.	User Interface	Web-based interface for customers to browse, shop, and manage orders	HTML, CSS, JavaScript, React.js
2.	Application Logic-1	Handles product browsing, cart, checkout, and user interactions	Node.js, Express.js
3.	Application Logic-2	Admin dashboard for managing products, orders, and users	React.js, Node.js
4.	Database	Stores user data, product catalog, cart, and order history	MongoDB

S.No	Characteristics	Description	Technology
5.	Open-Source Frameworks	Frontend & backend development with modern libraries	React.js, Node.js, Bootstrap, Tailwind CSS

**Table-2: Application Characteristics:**

<b>S.No</b>	<b>Characteristics</b>	<b>Description</b>	<b>Technology</b>
6.	Scalable Architecture	RESTful API-based 3-tier architecture with modular services	Microservices