

Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	18-07-2025
Team ID	PNT2025TMID10144
Project Name	ShopEZ E-commerce Website
Maximum Marks	4 Marks

Technical Architecture:

The ShopEZ E-commerce platform is designed using a scalable 3-tier architecture that includes the presentation layer (frontend), application layer (backend), and data storage layer. The architecture supports modularity, security, and ease of integration with third-party APIs (e.g., map APIs).

Table-1 : Components & Technologies:

S.No.	Component	Description	Technology
1.	User Interface	Web-based interface for customers and admins	HTML, CSS, JavaScript
2.	Application Logic - 1	Product listing, filtering, cart, wishlist	JavaScript (ES6), Node.js, Express.js
3.	Application Logic - 2	Admin dashboard, order management, user management	Express.js
4.	Backend APIs	RESTful APIs for cart, orders, users, payments	Node.js, Express.js
5.	Database	Persistent data storage for products, users, orders	MongoDB
6.	Hosting & Deployment	Live hosting of frontend and backend services	Render