

Project Design Phase-I
Proposed Solution Template

Date	2 JULY 2024
Team ID	SWTID1720091047
Project Name	Project – E-commerce Platform
Maximum Marks	3 Marks

Proposed Solution Template:

PS-1: User-Friendly and Responsive e-commerce platform.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Lack of a user-friendly and responsive e-commerce platform for small to medium-sized businesses
2.	Idea / Solution description	Development of a full-stack, responsive e-commerce application using the MERN stack. The solution includes secure user authentication, advanced product search and filtering, efficient product management, and a seamless shopping cart and checkout experience.
3.	Novelty / Uniqueness	Integration of the latest technologies (MERN stack) for a high-performance application.
4.	Social Impact / Customer Satisfaction	Provides a platform for small to medium-sized businesses to reach a broader audience.
5.	Business Model (Revenue Model)	- Commission: Charge a commission on each sale made through the platform. - Subscription: Offer premium subscription plans for advanced features and better visibility.
6.	Scalability of the Solution	Technical Scalability: Built on scalable technologies (MERN stack) that can handle increasing user loads.

PS-2: Managing the current products.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Inefficiencies in current product management, search, and checkout processes.
2.	Idea / Solution description	Development of a full-stack, responsive e-commerce application using the MERN stack. The solution includes secure user authentication, advanced product search and filtering, efficient product management, and a seamless shopping cart and checkout experience.
3.	Novelty / Uniqueness	Real-time search and filtering for better user engagement. Mobile-first responsive design ensuring a consistent user experience across all devices.
4.	Social Impact / Customer Satisfaction	Improves the shopping experience with a user-friendly interface and efficient processes.
5.	Business Model (Revenue Model)	Advertising: Provide advertising space for vendors to promote their products. Affiliate Marketing: Partner with other businesses for affiliate marketing opportunities.
6.	Scalability of the Solution	Business Scalability: Can easily onboard more vendors and expand to new markets.

PS-3: Improving the security for the e-commerce platform.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Security vulnerabilities in existing systems that jeopardize user data.
2.	Idea / Solution description	Development of a full-stack, responsive e-commerce application using the MERN stack. The solution includes secure user authentication, advanced product search and filtering, efficient product management, and a seamless shopping cart and checkout experience.
3.	Novelty / Uniqueness	Enhanced security measures with JWT and OAuth. Mobile-first responsive design ensuring a consistent user experience across all devices
4.	Social Impact / Customer Satisfaction	Enhances trust with robust security measures. Offers customer reviews and ratings, fostering a community-driven marketplace.
5.	Business Model (Revenue Model)	Affiliate Marketing: Partner with other businesses for affiliate marketing opportunities.
6.	Scalability of the Solution	Feature Scalability: Modular architecture allows for adding new features and integrations without significant rework.