Project Design Phase
Proposed Solution

Date	15 April 2025
Team ID	SWTID1743870329
Project Name	Personal Expense Tracker
Maximum Marks	2 Marks

Proposed Solution :

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	● Many individuals and businesses struggle with tracking daily expenses and maintaining financial discipline. ● Traditional methods like spreadsheets or manual logs are inefficient, error-prone, and lack real-time insights. ● Users lack an integrated, secure, and user-friendly platform that provides analytics, alerts, and comprehensive budget management.
2.	Idea / Solution description	● Develop a full-stack **Personal Expense Tracker App** using the **MERN** stack. ● Provide features such as expense logging, category-wise tracking, budgeting, real-time notifications, and detailed analytics through charts. ● Secure login system with encryption, allowing users to manage multiple accounts (for

		personal or business use).
		● Admin panel for handling user queries, managing data accuracy, and performance monitoring.
3.	Novelty / Uniqueness	● Combines real-time budget alerts, visual spending insights, and business-level expense management into one platform.
		● Offers a clean, responsive UI with custom categories, downloadable reports, and personalized dashboards.
		● Scalable architecture using MERN stack that supports both personal and enterprise use cases.
		● Emphasis on data security with features like password hashing and JWT-based session management.
4.	Social Impact / Customer Satisfaction	● Promotes financial literacy and responsible spending habits among users.
		● Helps individuals avoid debt and financial stress by providing clarity on where their money is going.
		● For businesses, simplifies expense reporting, tracking departmental budgets, and improving accountability.
		● Offers a seamless user experience and builds customer trust through transparency and security.
5.	Business Model (Revenue Model)	**Freemium Model:**

		● Free access to basic features. ● Subscription plans for premium features like advanced analytics, multi-account management, data export, and custom categories. **In-App Ads (Optional):** ● Non-intrusive ads for free users. **Enterprise Licensing:** ● Offer tailored plans for businesses to manage multiple employees or projects. **Affiliate Marketing:** 6. Partner with financial services like budgeting tools, investment apps, or insurance providers.
7.	Scalability of the Solution	**Technical Scalability:** ● Built on a modular MERN architecture to support thousands of users with smooth performance. ● MongoDB Atlas supports scalable cloud-based database solutions. **Feature Scalability:**

		● Easily extensible to include AI-based budget suggestions, goal setting, or bill reminders. **Market Scalability:** ● Can target individual users, families, and businesses. ● Potential to expand into related domains like savings planning, credit monitoring, or investment tracking.