

**Project Design Phase-II**  
**Solution Requirements (Functional & Non-functional)**

Date	16 April 2025
Team ID	SWTID1743315733
Project Name	Personal Finance Tracker
Maximum Marks	4 Marks

**Functional Requirements:**

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Authentication	- Register new user via email and password form. - Log in existing user with email and password. - Log out user.
FR-2	Dashboard Display	- Display financial summary (Total Income, Total Expenses, Balance, Savings Rate). - Display expense breakdown chart (e.g., Pie Chart). - Display Income vs. Expense chart (e.g., Bar Chart). - Display list of recent transactions.
FR-3	Income Management	- Add new income transaction (Source, Amount, Date, Description). - View list of all income transactions (with pagination). - Edit existing income transaction. - Delete income transaction.
FR-4	Expense Management	- Add new expense transaction (Category, Amount, Date, Description). - View list of all expense transactions (with pagination). - Edit existing expense transaction. - Delete expense transaction.
FR-5	Budget Management	- Set monthly budget for expense categories. - View list of set budgets showing amount, spent, and remaining. - Edit existing budget amount. - Delete a set budget.
FR-6	Profile Management	- View user profile information (email). - Change user password. - Set preferred currency symbol.
FR-7	Reporting ( <i>Future</i> )	- Generate detailed income/expense reports for specific date ranges. - Export transaction data (e.g., CSV).
FR-8	Data Validation	- Validate user input on forms (e.g., email format, required fields, numeric amounts). - Provide feedback/error messages for invalid input.

### Non-functional Requirements:

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	The application interface should be intuitive, easy to navigate, and require minimal training for users to track their finances effectively.
NFR-2	Security	User data (credentials, financial information) must be protected through secure authentication (password hashing), authorization (JWT), and secure data transmission (HTTPS). Prevent common web vulnerabilities (e.g., XSS, CSRF).
NFR-3	Reliability	The application should function correctly and consistently. Calculations (e.g., balance, budget remaining) must be accurate. Data persistence must be reliable.
NFR-4	Performance	The application should respond quickly to user interactions. Data loading (dashboards, transaction lists) should be efficient, typically within 2-3 seconds under normal load.
NFR-5	Availability	The application should be accessible to users most of the time (e.g., aiming for 99.5% uptime), excluding planned maintenance windows.
NFR-6	Scalability	The backend architecture should be able to handle an increasing number of users and transactions without significant degradation in performance. The database schema should support future growth.
NFR-7	Maintainability	The codebase should be well-structured, documented, and follow consistent coding standards to facilitate future updates and bug fixes.
NFR-8	Responsiveness	The frontend UI should adapt gracefully to different screen sizes (desktops, tablets, potentially mobiles) for a consistent user experience.