

Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Label	Detail
Date	31 OCTOBER 2025
Team ID	NM2025TMID00036
Project Name	Family Expense Tracker on ServiceNow
Design Document Version	1.0

Functional Requirements:

Following are the functional requirements of the proposed solution, defining *what* the system must do.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Expense Data Capture	FR-1.1: Provide a simple form for users to input expense details (Amount, Date, Category, Description). FR-1.2: Implement an attachment field to allow users to upload receipts (PDF or Image).
		FR-1.3: Automatically stamp the expense record with the submitting User's Name and the Submission Date.
FR-2	Budget Definition	FR-2.1: Allow the designated Admin user to define monthly budgets for each Expense Category (e.g., Groceries: \$500).

		FR-2.2: Allow the Admin to define a total monthly family budget.
FR-3	Expense Calculation & Reporting	FR-3.1: Display an interactive dashboard showing total expenses vs. total budget for the current month.
		FR-3.2: Provide drill-down reports showing spending grouped by Category, sorted by date.
		FR-3.3: Calculate and display the remaining budget for each defined category in real-time.
FR-4	Alerts and Notifications	FR-4.1: Send an email notification to the Admin user when spending in any category reaches 80% of its budget limit.
		FR-4.2: Trigger a high-priority alert on the dashboard when the total monthly budget is exceeded.
FR-5	User Management	FR-5.1: Implement two user roles: Admin (can set budgets, manage categories, view all reports) and Contributor (can only submit expenses).
		FR-5.2: Restrict access so only authenticated family members can use the application.

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution, defining *how well* the system performs.

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability (UX/UI)	The expense submission form and dashboard must be mobile-responsive (using Service Portal) for easy access on smartphones and tablets.
NFR-2	Security	All financial data must be secured using ServiceNow ACLs, ensuring only members of the assigned family can view the records.

NFR-3	Performance	The expense dashboard and reports must load and display data within 3 seconds, even with a history of 5,000+ records.
NFR-4	Reliability	The budget calculation logic must be thoroughly unit-tested to ensure 100% accuracy in all reports and alerts.
NFR-5	Maintainability	All Expense Categories and Budget Limits must be stored in simple, non-hardcoded configuration tables for easy updates by a platform administrator.
NFR-6	Scalability	The solution must support a future expansion to track up to 5 years of historical data and up to 10 family members without significant performance degradation.