

# Project Design Phase-II

## Solution Requirements (Functional & Non-functional)

<b>Label</b>	<b>Detail</b>
<b>Date</b>	01 NOVEMBER 2025
<b>Team ID</b>	NM2025TMID00060
<b>Project Name</b>	Family Expense Tracker on ServiceNow
<b>Design Document Version</b>	1.0

### Functional Requirements:

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

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

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

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

<b>NFR-3</b>	<b>Performance</b>	The expense dashboard and reports must load and display data within 3 seconds, even with a history of 5,000+ records.
<b>NFR-4</b>	<b>Reliability</b>	The budget calculation logic must be thoroughly unit-tested to ensure 100% accuracy in all reports and alerts.
<b>NFR-5</b>	<b>Maintainability</b>	All Expense Categories and Budget Limits must be stored in simple, non-hardcoded configuration tables for easy updates by a platform administrator.
<b>NFR-6</b>	<b>Scalability</b>	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.