

## Project Design Phase-II

### Solution Requirements (Functional & Non-functional)

Date	
Team ID	NM2025TMID08531
Project Name	Prevent User Deletion if Assigned to an Incident
Maximum Marks	4 Marks

#### Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Management	Users can register/login to the system using ServiceNow credentials.
		Admin can manage user roles (e.g., Family Head, Member).
FR-2	Family Expense Table Management	System allows creation of a <i>Family Expenses</i> table to record total daily expenses.
		Fields include <i>Number</i> , <i>Date</i> , <i>Amount</i> , and <i>Expense Details</i> .
FR-3	Daily Expense Entry	Users can record individual daily expenses under the <i>Daily Expenses</i> table.
		Each record includes <i>Date</i> , <i>Expense</i> , <i>Family Member Name</i> , and <i>Comments</i> .
FR-4	Auto Calculation of Family Expenses	On inserting or updating a <i>Daily Expense</i> , system automatically updates the total <i>Family Expenses</i> for that date.
		If no record exists for the date, system creates a new <i>Family Expense</i> entry.
FR-5	Relationship Linking	The system establishes a one-to-many relationship between <i>Family Expenses</i> and <i>Daily Expenses</i> . <i>Daily Expenses</i> related to a specific date are displayed as a related list under <i>Family Expenses</i>
FR-6	Form Customization	Admin can configure forms for better UI (mandatory fields, read-only fields, and layout design).
FR-7	Auto Number Generation	The <i>Number</i> field in both tables auto-generates a unique ID (e.g., MFE001).
FR-8	Data Validation and Safety	System ensures <i>Date</i> and <i>Amount</i> fields are mandatory before saving.
		Prevents invalid entries and ensures accurate expense tracking.
FR-9	Reporting and Summary	Users can view daily, weekly, or monthly expense summaries. ( <i>Optional future enhancement</i> )

## Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	The interface should be user-friendly and easy to navigate for all family members and admins.
NFR-2	Security	Only authorized users should be able to view, add, or modify expense data. Sensitive financial information must remain protected.
NFR-3	Reliability	The system must ensure that calculations and updates (through business rules) occur accurately and consistently without data loss.
NFR-4	Performance	The automation (via business rules) should execute quickly to update family expenses in real time after each daily entry.
NFR-5	Availability	The system should be available 24/7 to allow users to record or review expenses anytime.
NFR-6	Scalability	The system should support an increasing number of users, family members, and daily expense records without affecting performance.
NFR-7	Maintainability	The ServiceNow configurations and scripts should be easy to modify and update as new features are added
NFR-8	Data Integrity	The system must prevent duplicate or incomplete data entries and maintain accurate totals for each date.
NFR-9	Auditability	All changes to expense data should be traceable for transparency and future verification.