

REQUIREMENT ANALYSIS

Date	01/11/2025
Team ID	NM2025TMID04001
Project Name	Calculating Family Expenses using Service Now

Introduction

The requirement analysis phase focuses on understanding what the Family Expense Calculation System should achieve. In this phase, all the necessary requirements are collected and analyzed to ensure the system meets user needs. It helps define the functions, features, and performance expectations of the application, forming a strong base for designing an effective and user-friendly system.

Objectives

- To gather all necessary information about the system requirements.
- To document both functional and non-functional requirements clearly.
- To identify system performance, usability, and security expectations.
- To prepare a requirement document that guides further project phases.

Types of Requirements

A.Functional Requirements(What the system will do):

1. Add Daily Expenses:

Users should be able to add new daily expense entries into the system.

2. Edit / Delete Expenses:

Users must be able to update or remove previously added expense records.

3. Expense Categorization:

The system should allow selecting categories such as Food, Travel, Education, Health, Entertainment, etc.

4. Store Expense Data:

All expense details should be saved in the Daily Expense Table and Family Expense Table.

5. Calculate Total Expenses:

The system must automatically calculate daily, monthly, and yearly total expenses.

6. Generate Reports:

The system should provide expense reports and summaries for selected time periods.

7. View Expense Records:

Users should be able to view and search expense records at any time.

B.Non-Functional Requirements(How the system should work):

1. Usability:

The system should have a simple and user-friendly interface that is easy to navigate.

2. Performance:

The application should load quickly and perform calculations without delay.

3. Security:

Expense data must be stored securely and only authorized users should have access.

4. Reliability:

The system should function accurately without failures and ensure data is not lost.

5. Scalability:

The system should support adding more users or more expense records in the future without issues.

6. Compatibility:

The application must work smoothly within the ServiceNow platform and common web browsers.

System Requirements (Hardware & Software Needs)

Hardware Requirements:

A laptop or desktop computer with a stable internet connection

Software Requirements:

Web Browser: Google Chrome / Microsoft Edge

ServiceNow Developer Instance (for accessing and building the application)

PDF Reader or MS Word(for documentation)

Platform & Tools:

Platform: ServiceNow (Personal Developer Instance)

Tools Used: Flow Designer, Forms, Tables, Dashboard, Reports, User Roles

Users of the System:

Admin: Family Head (manages expenses, categories, user access)

Users: Family Members (add, view, and track expenses)

Outcome of Requirement Analysis Phase:

After collecting, reviewing, and finalizing all requirements, the team now has a clear and well-defined understanding of the system's scope and expected functionalities. The user needs, system features, and performance criteria have been clearly documented. Both functional and non-functional requirements are now established, along with the necessary system resources and constraints.

These approved requirements will serve as a strong foundation for the next stage — the Design Phase, where the system architecture, workflow, and user interface will be planned and designed.