

# REQUIREMENT ANALYSIS

Date : 22.10.2025  
Team ID : NM2025TMID04135  
Project Name : Calculating the family expenses using service now  
Max mark : 4 Marks

## 1. Functional Requirements (FR)

These define what the system **must do**:

### 1. Expense Submission

Family members can submit expenses through a **ServiceNow Expense Form**.

- Fields: Date, Amount, Category, Description, Paid By, etc.

### 2. Approval Flow

- Optional: Certain expenses need **approval** by a head of family.
- Automatic notifications for pending approvals.

### 3. Expense Storage

- All submitted expenses stored in **ServiceNow Tables** (`Family_Expense`, `Expense_Category`).

### 4. Calculation

- Total expenses per member, category, or month.
- Automatic summation and balance calculation.

### 5. Reporting & Dashboard

- Visual reports for **spending trends, category-wise breakdown, and family budget summary**.
- Export options (Excel, PDF).

## **? Requirement Analysis: Family Expense Calculation using ServiceNow**

### **1. Functional Requirements (FR)**

These define what the system **must do**:

#### **1. Expense Submission**

- Family members can submit expenses through a **ServiceNow Expense Form**.
- Fields: Date, Amount, Category, Description, Paid By, etc.

#### **2. Approval Flow**

- Optional: Certain expenses need **approval** by a head of family.
- Automatic notifications for pending approvals.

#### **3. Expense Storage**

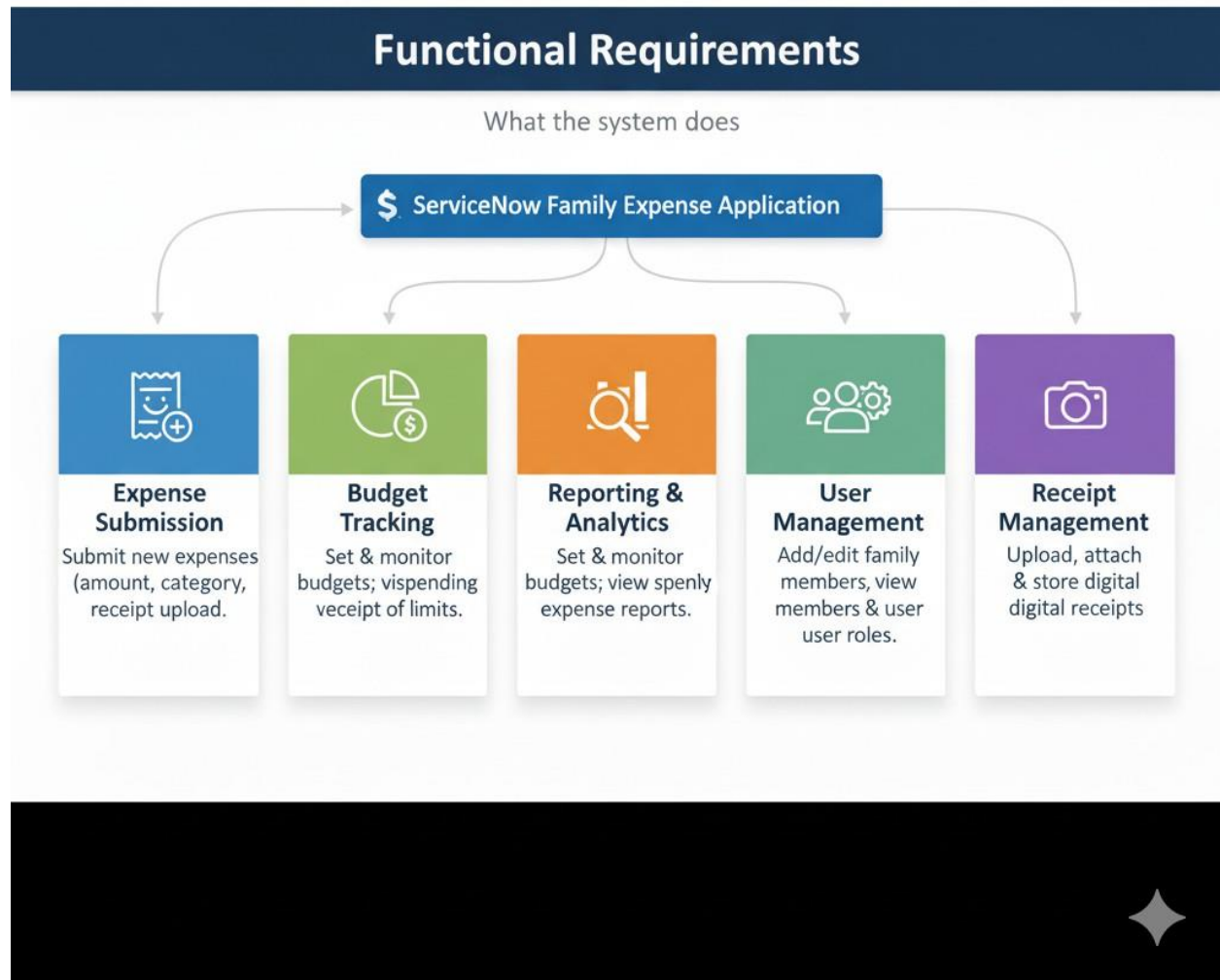
- All submitted expenses stored in **ServiceNow Tables** (`Family_Expense`, `Expense_Category`).

#### **4. Calculation**

- Total expenses per member, category, or month.
- Automatic summation and balance calculation.

#### **5. Reporting & Dashboard**

- Visual reports for **spending trends, category-wise breakdown, and family budget summary.**
- Export options (Excel, PDF).



## 2. Non-Functional Requirements (NFR)

These define **how the system performs**:

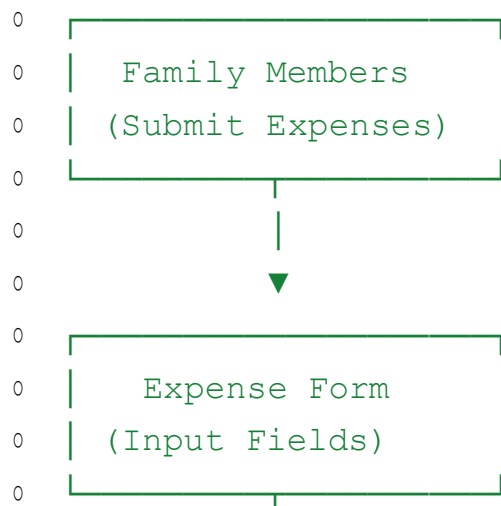
- **Usability:** Simple, easy-to-use forms for family members.
  - **Reliability:** Accurate calculation and storage.
  - **Security:** Only authorized family members can submit/view expenses.
  - **Performance:** Fast data entry and report generation.
  - **Scalability:** Should handle growing number of expenses and members.
- 

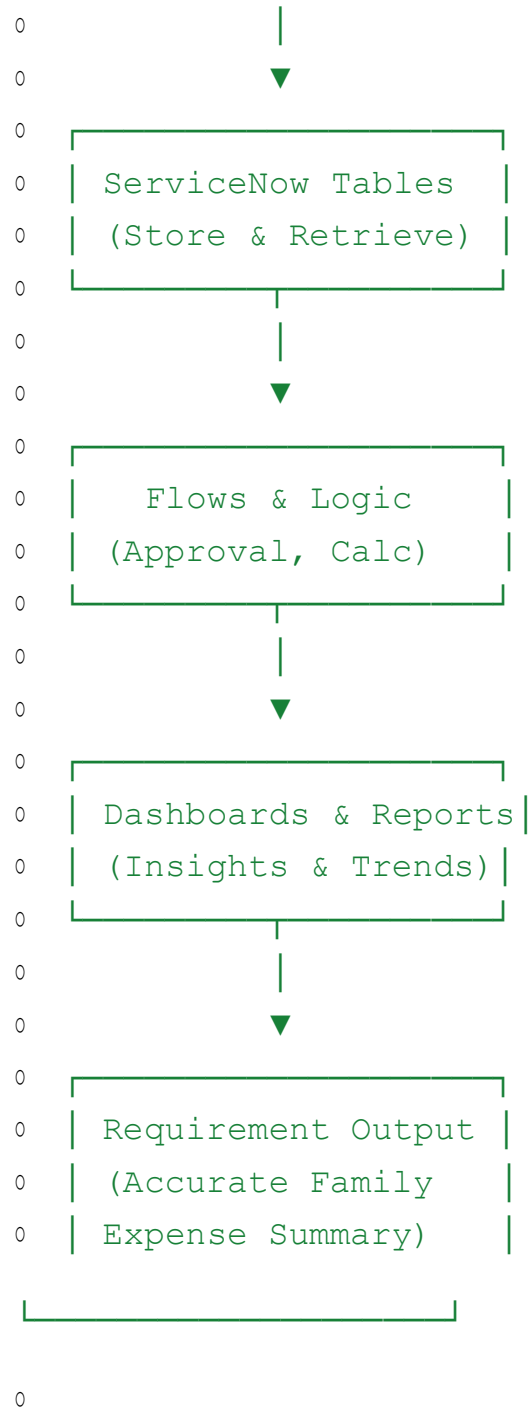
### 3. Actors

- **Family Members:** Submit expenses, view their own data.
  - **Family Head / Admin:** Approve expenses, monitor reports.
  - **ServiceNow System:** Stores data, executes flows, generates dashboards.
- 

### 4. Requirement Analysis Diagram (Simple Flow)

Here's the **textual layout** of the diagram I'll generate:





## Non-Functional Requirements (NFRs)

How the system performs



### 3. Actors

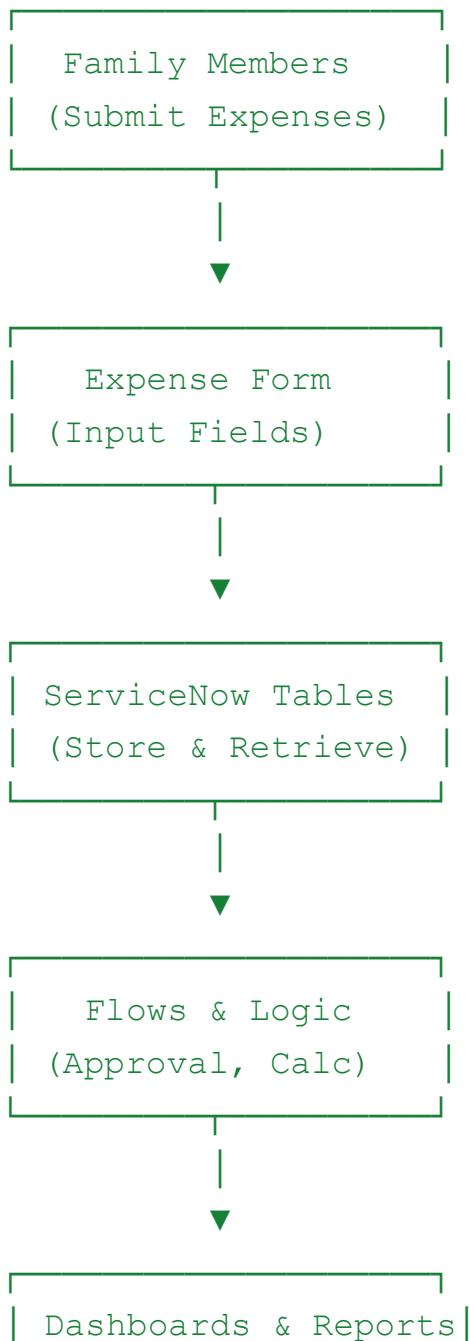
- **Family Members:** Submit expenses, view their own data.
- **Family Head / Admin:** Approve expenses, monitor reports.

- **ServiceNow System:** Stores data, executes flows, generates dashboards.

---

#### 4. Requirement Analysis Diagram (Simple Flow)

Here's the **textual layout** of the diagram I'll generate:



| (Insights & Trends) |



| Requirement Output |  
| (Accurate Family |  
| Expense Summary) |