Requirement Analysis Phase

Data Flow Diagram & User Stories

Date	28 June 2025
Team ID	LTVIP2025TMID60720
Project Name	Calculating Family Expenses Using ServiceNow
Maximum Marks	4 Marks

Representation of the Property of the Property

◆ Level 0 DFD (Context Diagram)

Purpose: Shows the system as a single process and its interaction with external entities.

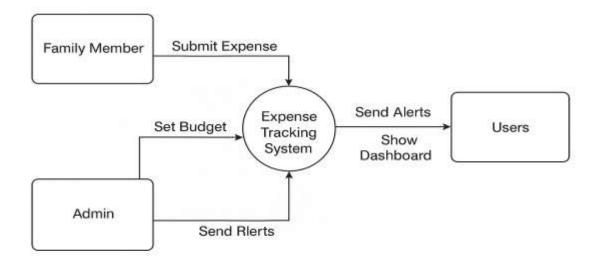
Entities:

- 1. Family Member (User)
- 2. Admin User (Primary manager/parent)
- 3. ServiceNow Expense Tracking System (Main Process)

Flows:

- Family Member → submits expenses → System
- Admin → sets budget, views reports → System
- System → sends alerts/notifications → Admin and Family Member
- System → provides dashboards/reports → Admin and Family Member

Diagram Structure:



◆ Level 1 DFD (Detailed Breakdown)

Purpose: Shows main processes inside the system, internal data stores, and specific flows.

Processes:

- 1. 1.0 Expense Entry
- 2. **2.0 Budget Management**
- 3. **3.0 Notification & Alerts**
- 4. **4.0** Report Generation

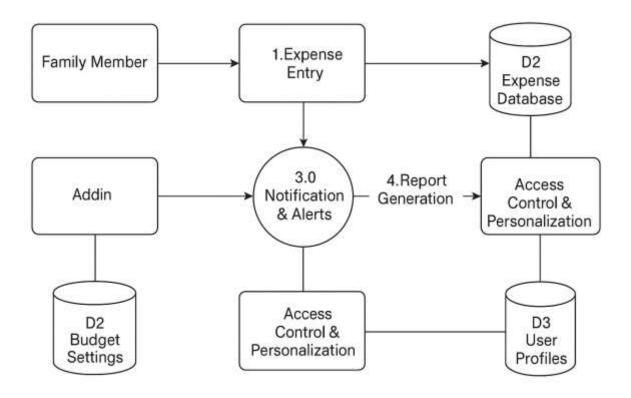
Data Stores:

• D1: Expense Database

D2: Budget Settings

D3: User Profiles

Entities & Flows:



✓ Data Stores & Their Purpose:

- **D1: Expense Database** Stores all submitted expense records
- **D2: Budget Settings** Stores user-defined budget limits
- D3: User Profiles Stores role-based permissions and user preferences

Calcuating Family Expenses Using ServiceNow System

