

Requirement Analysis

Project Design Phase-II

Data Flow Diagram & User Stories

Date	02 November 2025
Team ID	NM2025TMID05455
Project Name	Calculating Family Expenses using ServiceNow
Maximum Marks	4 Marks

Data Flow Diagrams:

A Data Flow Diagram (DFD) is a visual representation of how data moves within a system. It helps describe the flow of information and the relationships between processes, data stores, and external entities. A DFD shows how data enters and leaves the system, where it is stored, and how it is processed.

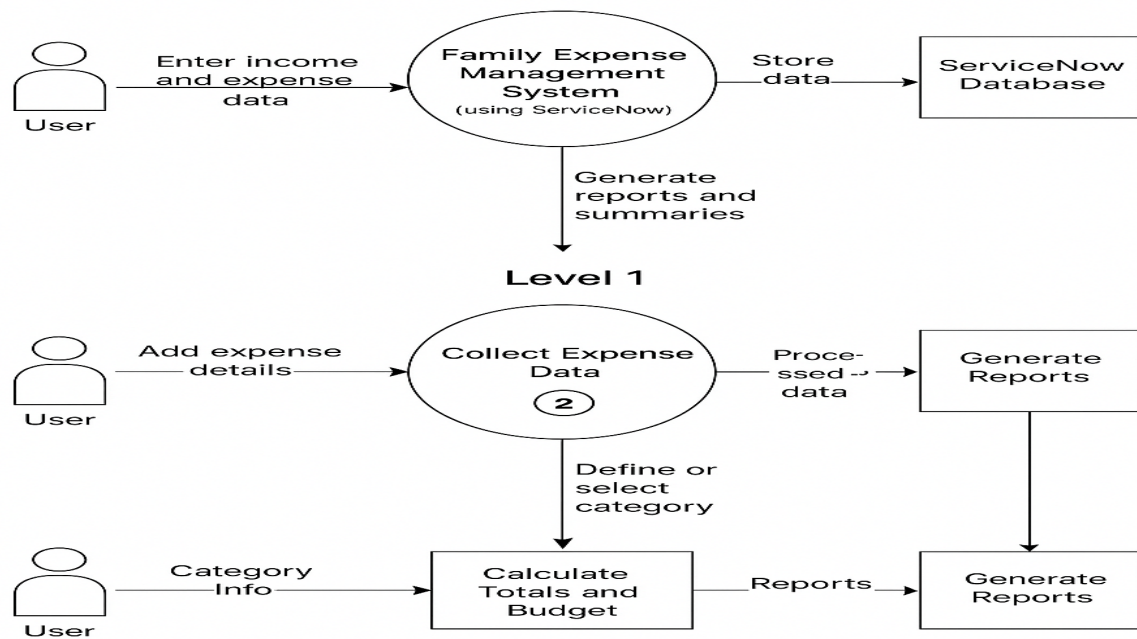
In the project “**Calculating Family Expenses using ServiceNow**”, the Data Flow Diagram (DFD) illustrates how users input their income and expenses, how the system processes and stores this information, and how reports are generated for effective financial tracking. The DFD highlights data interaction between the **user**, **ServiceNow system**, and **expense database** to ensure accurate calculations and record maintenance.

Example Flow:

1. User logs in to the ServiceNow-based Family Expense Management System.
2. The user inputs income and expense details (category, date, and amount).
3. The system validates and stores these details in the ServiceNow database.
4. The stored data is processed to calculate totals and budgets.
5. The system generates a report that shows expense summaries and spending trends.

Below is the Data Flow Diagram for the system:

Calculating Family Expenses using ServiceNow



Data Flow Diagram Icrnes lean By NI2025TMID05455

User Stories:

User stories describe what different users expect from the system in a simple, goal-focused format. For this project, they define how users can record, manage, and analyze family expenses using ServiceNow efficiently.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
User	Expense Management	USN-1	As a user, I want to add and update my income and expense records in ServiceNow so that I can track my monthly spending.	The system should allow the user to input, edit, and save expense and income details successfully.	High	Sprint-1
System (Service Now)	Automated Calculation	USN-2	As a system, I must automatically calculate total expenses and generate summaries to help users analyze spending patterns.	Totals and summaries must be automatically computed whenever new data is added or updated.	Medium	Sprint-1
Admin / Family Head	Report Generation	USN-3	As an admin or family head, I want to view detailed expense reports and category-wise charts so that I can understand overall family spending.	System should display category-wise, monthly, and yearly expense summaries in visual format.	Medium	Sprint-2