

## PROJECT DESIGN PHASE

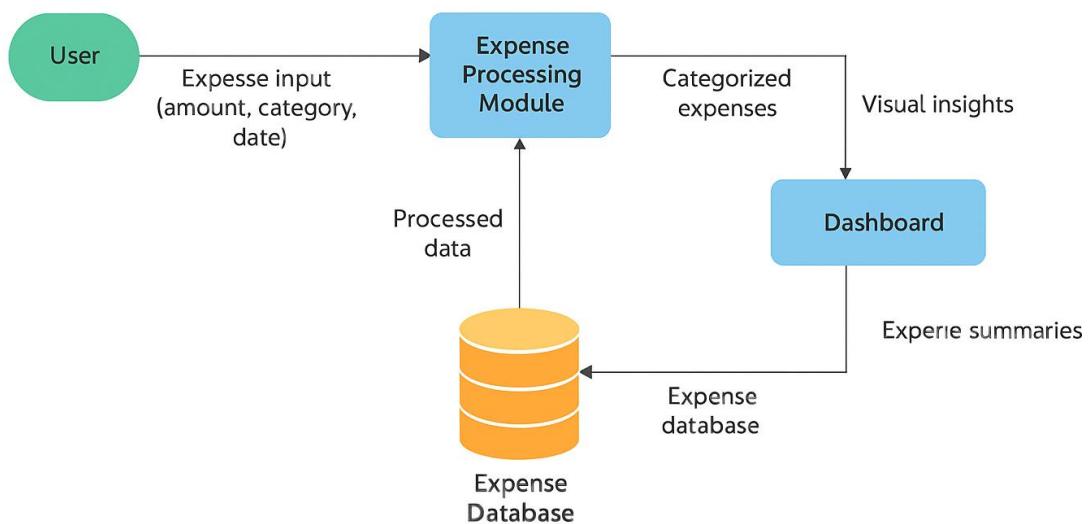
### Data Flow Diagram & User Stories

Date	30/10/2025
Time id	NM2025TMID05890
Project name	Calculating Family Expenses using Service Now
Maximum mark	4 marks

### Data Flow Diagram (DFD) – Calculating Family Expenses

The DFD illustrates how data moves through the *Family Expense Management System* to streamline budget tracking and analysis.

### Data Flow Diagram (DFD) – Calculating Family Expenses



### Level 0 (Context Diagram):

- User inputs income and expenses → Expense Management System → outputs reports and summaries back to the User.

### **Level 1 (Detailed Flow):**

1. User enters expense details (amount, category, date).
2. Data goes to Expense Processing Module for validation and categorization.
3. Processed data is stored in the Expense Database.
4. Report Generator fetches data to create monthly or yearly summaries.
5. Dashboard displays visual insights (charts, comparisons, savings tips).

### **User Stories – Calculating Family Expenses**

User stories are short, simple descriptions of a feature told from the perspective of the end user. They define what the user needs and why, helping guide development toward delivering real value and solving user problems.

S.No	User Story	Description	Priority	Story Points
1	As a user, I want to add my monthly income	So that I can calculate savings after expenses	High	3
2	As a user, I want to categorize expenses (food, rent, transport, etc.)	To understand where most money is spent	High	5
3	As a user, I want to set spending limits per category	So that I can control overspending	Medium	3

S.No	User Story	Description	Priority	Story Points
4	As a user, I want to view a summary chart of my expenses	To visualize and analyze my spending pattern	High	5
5	As a user, I want to edit or delete an expense entry	So that I can correct any mistakes	Medium	2
6	As a user, I want to generate a monthly report	To review my financial performance	Medium	3
7	As a user, I want to receive alerts when nearing spending limits	To maintain financial discipline	Low	2
8	As a user, I want data to be securely stored and backed up	To ensure I don't lose my records	High	4