

## Project Design Phase-II

### Data Flow Diagram & User Stories

Date	02 NOVEMBER 2025
Team ID	NM2025TMID00653
Project name	Calculating Family Expenses using ServiceNow
Maximum Marks	4 Marks

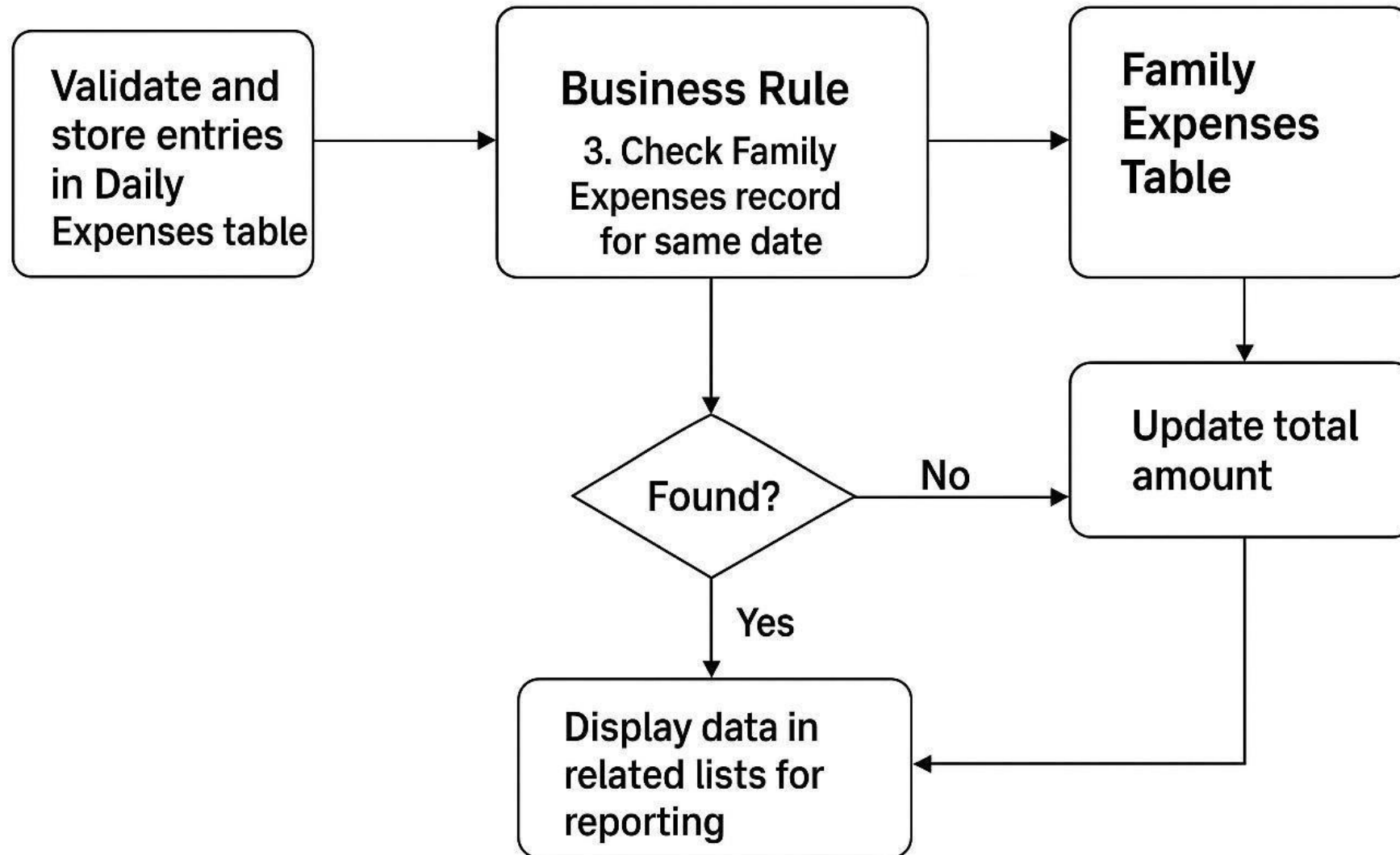
#### Data Flow Diagrams:

A Data Flow Diagram (DFD) visually represents the flow of information within the Family Expenses Calculator system. It shows how data is entered by users, processed through automation, and stored within ServiceNow tables.

In this project, the DFD illustrates how daily expense data is added by family members and how the system automatically updates the corresponding family expense summary. The flow ensures accurate tracking of total spending per day, linking Daily Expenses with Family *Expenses* through relationships and business rules.

#### Example Flow:

1. User inputs daily expenses.
2. System validates and stores entries in the Daily Expenses table
3. Business Rule checks the corresponding Family Expenses record for the same date.
4. If found, total amount is updated; otherwise, a new record is created.
5. Data is displayed in related lists for reporting.



**User Stories:**

<b>User Type</b>	<b>Functional Requirement</b>	<b>User Story No.</b>	<b>User Story / task</b>	<b>Acceptance Criteria</b>	<b>Priority</b>	<b>Release</b>
Family Member	Expense Entry	USN-1	As a family member, I want to record my daily expenses so that they can be tracked.	System should save expense details with date, amount, and comments.	High	Sprint-1
System (AutoUpdate)	Expense Summary	USN-2	As a system, I should automatically update the family expense summary when a new daily expense is added.	Family Expenses table total and details update automatically.	High	Sprint-1

Admin / Parent	Expense Overview	USN-3	As an admin, I want to view total daily expenses and related individual records.	System should show related daily expenses under each Family Expense record.	Medium	Sprint-2
System	Data Validation	USN-4	As a system, I must ensure mandatory fields like Date and Amount are filled.	Form should not save unless required fields are completed.	High	Sprint-1