Project Design Phase

Proposed solutions

Date	02 November 2025
Team ID	NM2025TMID08531
Project Name	Calculating Family Expenses using ServiceNow
Maximum Marks	2 Marks

Proposed Solution Template

S.No.	Parameter	Description
1	Problem Statement (Problem to be solved	In most households, tracking and managing family expenses is a time-consuming process. Manual methods (like notebooks or spreadsheets) lead to errors, lack of real-time insights, and poor financial planning. There is no centralized system to monitor daily expenses, categorize spending, or analyze budgets effectively.
2	Idea / Solution Description	The project proposes an automated **Family Expense Management System** built using **ServiceNow**. It allows users to record, categorize, and analyze daily family expenses. Two main tables — *Family Expenses* and *Daily Expenses* — are created to store aggregated and detailed records respectively. Business Rules automate total calculation and maintain synchronization between tables. Users can view related expenses, track daily spending, and get clear visibility into their budget usage.
	Novelty / Uniqueness	The system utilizes **native ServiceNow capabilities** like Business Rules, Relationships, and Form Design to automate expense management without external integrations. This makes it lightweight, scalable, and fully cloud-based. Unlike static expense trackers, it dynamically calculates totals and updates them automatically when new expenses are added or modified.

3	Social Impact / Customer Satisfaction	The project promotes better financial management and transparency within families. It helps members track who spends how much, improves budgeting discipline, and supports long-term savings goals.
4	Business Model (Revenue Model)	Although designed for personal use, the system can be extended for small business or community group expense management. It can be offered as a **subscription-based ServiceNow app** or a **custom ITSM extension**, creating opportunities for consultants and developers in enterprise workflow automation.
5	Scalability of the Solution	The system can be scaled to include additional modules such as **Monthly Reports**, **Category-wise Expense Charts**, **Budget Alerts**, or **Family Member Roles and Permissions**. It can also be extended to support integrations with **mobile apps** or **Google Sheets APIs** for advanced analytics.

Conclusion

The project **"Calculating Family Expenses using ServiceNow"** offers a smart, automated approach to managing and analyzing household spending. By leveraging ServiceNow's workflow automation and database structure, it simplifies data entry, ensures data consistency, and eliminates manual errors.Through the implementation of **Business Rules**, **Relationships**, and **Form Customization**, the system automatically updates total expenses and related details, reducing human effort and improving accuracy.

This project not only empowers users to track their financial activities in real time but also lays the foundation for building **efficient, transparent, and data-driven expense management systems**. It highlights how **ServiceNow**, typically used for ITSM, can be creatively repurposed for personal finance management, demonstrating both innovation and versatility.

Solution Description (Technical Overview):

A ServiceNow-based system is developed to simplify and automate family expense management. A local update set named *"Family Expenses"* is created, containing two linked tables — *Family Expenses* (for total daily expenses) and *Daily Expenses* (for individual member records). Key fields like Date and Amount are mandatory, with auto-numbering enabled. A one-to-many relationship connects both tables using the Date field. A Business Rule automatically updates total expenses in the Family Expenses table whenever new entries are added or modified in Daily Expenses.