

Project Design Phase Proposed Solution

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| Date | 02 Nov 2025 |
| Team ID | NM2025TMID01191 |
| Project Name | Calculating Family Expenses using ServiceNow |
| Maximum Marks | 2 Marks |

Proposed Solution Template:

| S.No. | Parameter | Description |
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| 1. | Problem Statement (Problem to be solved) | In most families, daily expenses are tracked manually using notebooks or spreadsheets. This results in human errors, missing data, and difficulty in identifying total daily or monthly expenditure. There is no centralized system to record, monitor, or analyze spending efficiently. |
| 2. | Idea / Solution description | The project proposes an automated <i>Family Expense Tracking System</i> using ServiceNow . Two custom tables are created — <i>Daily Expenses (D1)</i> for individual expense entries and <i>Family Expenses (D2)</i> for total daily aggregation. A Business Rule automatically calculates and updates the total daily expense in D2 whenever a new record is added in D1. This ensures accuracy and real-time financial tracking. |
| 3. | Novelty / Uniqueness | The project uses ServiceNow's native automation capabilities to perform real-time calculations without any external plugins. It transforms a business workflow tool into a smart family finance tracker — showcasing ServiceNow's flexibility beyond ITSM use cases. |
| 4. | Social Impact / Customer Satisfaction | The system helps families manage money more efficiently, increases financial transparency among members, and reduces manual workload. It promotes financial discipline and awareness, leading to better budgeting and spending habits. |
| 5. | Business Model (Revenue Model) | The solution can later be developed as a subscription-based web app for small families or groups. Premium versions could offer advanced analytics, expense forecasting, or AI-based saving suggestions, making it commercially viable. |
| 6. | Scalability of the Solution | The system can be expanded to include monthly and yearly summaries, category-based spending, and predictive analytics. It can also integrate with other ServiceNow modules or external finance APIs for broader automation and insights. |

Solution Description:

The *Calculating Family Expenses using ServiceNow* project introduces an intelligent automation approach to manage daily family expenses.

Each family member can log their daily expenses in the **Daily Expenses (D1)** table, including details like date, amount, category, and remarks. A **Business Rule** automatically updates the total daily spending in the **Family Expenses (D2)** table, maintaining real-time accuracy.

This design minimizes manual errors, saves time, and ensures transparent tracking of household finances. The solution leverages ServiceNow's built-in automation capabilities — *Business Rules, Tables, and Reports* — to create a centralized, efficient, and scalable expense management platform.

By combining simplicity and automation, the project provides a reliable, cost-effective tool for daily financial tracking that can easily evolve into a complete family budgeting system.