Date	1-11-2025
Team id	NM2025TMID05401
Project name	Calculating Family Expenses using service now
Maximum mark	4marks

Problem Statement: Family Expense Management System (Service Now Project)

1. Context / Background

In most families, **managing shared expenses** — such as groceries, utilities, school fees, rent, entertainment, and household maintenance — can quickly become complex and disorganized. Families often rely on **manual methods** like notebooks, spreadsheets, or messaging apps to record spending. These methods lack automation, transparency, and analytical capabilities, making it difficult to control budgets and plan savings effectively.

As a result, families frequently face:

- Overspending without real-time awareness
- Difficulty in tracking who paid for what
- Confusion over shared financial responsibilities
- Lack of insights into long-term spending trends

To address these challenges, a **centralized digital system** is needed to record, categorize, approve, and analyse family expenses — ensuring better financial control, transparency, and collaboration among family members.

2. Current Challenges / Pain Points

Area	Challenge	Description
Data Entry	Manual logging	Expenses are often tracked inconsistently in spreadsheets or paper, leading to data loss and errors.
Visibility	Lack of real-time view	Family members cannot easily see how much has been spent or what remains in each category.
Approval / Control	No approval mechanism	High or non-essential expenses aren't reviewed or approved by decision-makers (e.g., parents).
Budget Tracking	Poor budget monitoring	Budgets are set but not actively tracked, so overspending is discovered only after it happens.
Analysis & Reporting	Limited insights	No easy way to generate monthly summaries, identify trends, or predict future spending.

Area	Challenge	Description
Communication	Fragmented updates	Expense discussions occur across different apps (WhatsApp, email, etc.), making coordination difficult.

3. Impact of the Problem

Without a structured and automated expense management process:

- **Financial stress increases** due to unmonitored spending.
- **Transparency decreases**, leading to misunderstandings within families.
- **Decision-making suffers** as families lack data-driven insights for saving and budgeting.
- **Time is wasted** manually updating spreadsheets or reconciling expenses.

Ultimately, the lack of an integrated expense management system limits a family's ability to **plan effectively**, **control finances**, and **achieve savings goals**.

. Proposed Solution (High-Level Overview)

To resolve these issues, the project proposes building a Family Expense Management Application on the ServiceNow platform, leveraging its robust workflow automation, data management, and reporting capabilities.

The solution will:

- Provide a centralized database for recording all expenses.
- Allow family members to submit expenses through a self-service portal or mobile app.
- Enable automated approvals for large or specific expenses.
- Offer budget monitoring and real-time dashboards to visualize spending.
- Send automated notifications for overspending or monthly summaries.
- Generate reports and insights to support financial decision-making.

5. Objectives of the Project

1. **Centralization:** Create a single platform for all family expense records.
2. **Automation:** Use ServiceNow Flow Designer to handle approvals, alerts, and reporting.
3. **Transparency:** Give each family member appropriate access to view and manage their expenses.
4. **Budget Control:** Set and monitor category-based monthly budgets.
5. **Analytics:** Visualize spending trends and generate reports for better financial planning.

6. Scope of the Project

In Scope:

- Custom ServiceNow tables (Family Members, Expenses, Budgets)
- Expense submission and approval workflows
- Dashboards and reports for spending visualization
- Email and mobile notifications
- Role-based access (Parents, Members, Admin)

Out of Scope (for future enhancement):

- Integration with external banking APIs
- AI-based predictive analytics
- Gamification of savings goals

7. Expected Outcomes

- **Improved financial transparency** within families.
- **Reduced manual work** and data errors.
- **Real-time visibility** into spending patterns and budget usage.
- **Enhanced accountability** for each member's expenses.
- **Data-driven decision-making** for savings and financial planning.