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**Project Title :** Calculating Family Expenses Using Service Now

# **Calculating Family Expenses Using Service Now**

## **Abstract\Summary:**

This project focuses on developing a system for **calculating and managing family expenses using ServiceNow**. ServiceNow, primarily known for IT service management, can also be leveraged as a powerful platform for automating personal and family financial tracking. The proposed system records daily expenses under various categories such as food, transportation, education, and entertainment. It uses ServiceNow's **forms, tables, and workflow automation tools** to store data, process calculations, and generate reports.

## **Problem Statement:**

Currently, there is no structured or automated system for tracking and calculating family expenses on ServiceNow. Each family member's spending on groceries, utilities, transportation, education, and leisure activities needs to be recorded and analyzed manually. This lack of automation results in:

- Difficulty in monitoring total and category-wise expenses.
- Inaccurate or inconsistent financial data.
- No visibility into spending trends or potential savings opportunities.

## **Problem Explanation:**

Managing family expenses is a common challenge faced by households. Each family member may spend money on various categories such as groceries, utilities, transport, education, and entertainment. Tracking these expenses manually—using notebooks or spreadsheets—can be tedious, time-consuming, and prone to human errors. There is often no easy way to see how much is being spent, who is spending it, or whether the family is staying within its budget. To solve this problem, ServiceNow can be used as a digital platform to automate and streamline the process of expense tracking. ServiceNow, primarily known for IT service management, provides a powerful platform for building custom applications with forms, workflows, notifications, and reporting features. In this project, the goal is to design a **Family Expense Management System** on ServiceNow. This system will allow family members to enter their daily or monthly expenses into a centralized database. Each expense entry can include details like the amount spent, the category of the expense, the date, and the person who made the purchase.

## **Objectives:**

To design and implement a ServiceNow application that enables families to:

1. Record daily, weekly, or monthly expenses under predefined categories.
2. Automatically calculate total family expenses and individual contributions.
3. Generate reports and dashboards for data visualization (e.g., monthly summaries, pie charts, or trend lines).
4. Set budget limits and trigger notifications if spending exceeds the set threshold.

## **Methodology\Requirement Analysis:**

The methodology outlines the step-by-step approach used to design, develop, and implement a Family Expense Management System using the ServiceNow platform. The goal is to automate the process of recording, calculating, and analyzing family expenses efficiently.

- Identify the needs of the users (family members).
- Determine key expense categories (e.g., food, utilities, education, entertainment, transport, etc.).
- Define functional requirements such as:
  - Adding new expenses
  - Calculating total and category-wise expenses
  - Setting monthly budgets
  - Generating reports and dashboards
- Define non-functional requirements such as ease of use, data accuracy, and security.

## **System Design**

- **DataModel Design:**
- Create a custom table in ServiceNow (e.g., *Family Expense Table*) with fields such as:
  - Expense ID
  - Date
  - Category
  - Description
  - Amount
  - Member Name
- **UserInterface**  
Design forms for entering and viewing expenses.
  - Use ServiceNow form layouts for easy input.
  - Create related lists for expense categories and budgets.
- **Workflow**  
Define automation processes:
  - When a new expense is submitted, update the total expense amount.
  - If the total exceeds the budget, send an automated notification.

## **Implementation**

- Develop the application in ServiceNow Studio.
- Create and configure the custom table for expenses.

- Build forms and UI pages for data entry.
- Use **Business Rules** or **Flow Designer** to automate calculations and notifications.
- Configure **Reports and Dashboards** to visualize:
  - Total monthly spending
  - Category-wise distribution
  - Budget vs. Actual comparison

## **Testing:**

- Perform **Unit Testing** for each feature (expense entry, calculations, reports).
- Conduct **Integration Testing** to ensure workflows and notifications work correctly.
- Validate calculations by comparing ServiceNow results with manual calculations.

## **Deployment and Evaluation:**

- Deploy the application for real family use.
- Collect feedback on usability and accuracy.
- Evaluate the system's performance based on:
  - Time saved in expense tracking ,Reduction in calculation errors,User satisfaction,Periodically update categories or workflows as needed.

## **Result and Discussion:**

The project successfully demonstrates how **ServiceNow** can be adapted beyond IT service management to solve real-life household problems such as expense tracking. By leveraging the platform's capabilities—custom tables, forms, workflows, notifications, and reports—an efficient and user-friendly system was developed.automation features of ServiceNow reduced the need for manual calculations, improving accuracy and saving time. The dashboard and visualization tools helped family members gain insights into their spending patterns, promoting better budgeting decisions

## **Conclusion:**

The project “**Calculating Family Expenses Using ServiceNow**” successfully demonstrates how the ServiceNow platform can be utilized to automate and simplify the process of managing household finances. By creating a customized application, family members can efficiently record, calculate, and analyze their daily or monthly expenses in one centralized system..

## **Future Enhancement**

- Periodically update categories or workflows as needed.
- Add advanced features such as:
  - Mobile accessibility, Predictive expense analytics ,Integration with digital payment data.