Project Design Phase

Proposed Solution

Date: 03 November 2025

Team ID: NM2025TMID07316

Project Name: Calculating Family Expenses using ServiceNow

Maximum Marks: 2 Marks

Parameter Description

Title: Calculating Family Expenses using ServiceNow

The project aims to design and implement an automated and efficient expense management system using ServiceNow. It helps families track, categorize, and manage their financial activities with the support of automation and workflow mechanisms. The system enables transparency, reduces manual calculations, and provides real-time financial insights through dashboards and reports.

Objective

• To develop a centralized platform for recording and analyzing family expenses.
• To automate expense tracking and categorization to minimize manual effort.
• To set monthly and yearly budgets for each expense category.
• To send automated notifications when expenses exceed the defined limit.
• To provide real-time financial insights and summaries for better planning and decision-making.

Problem Statement

Many families face difficulties in tracking and analyzing their financial transactions due to manual processes such as spreadsheets or notebooks. This often leads to data loss, inaccurate budgeting, and lack of awareness of spending habits. Without automation, families struggle to identify overspending areas or optimize savings effectively. Therefore, there is a need for an automated, user-friendly, and intelligent system that can record, monitor, and analyze expenses in real time using ServiceNow.

Proposed Solution

The proposed solution utilizes ServiceNow's capabilities to automate family expense management. It enables users to input daily transactions, categorize expenses, and compare them against pre-set budgets. Through Flow Designer, automated workflows send alerts when spending exceeds limits. Dashboards and reports summarize overall expenditure

patterns, promoting better financial management and savings. This system ensures data accuracy, consistency, and complete visibility into all financial activities.

Key Features

• Expense Entry and Tracking: Add, edit, and delete expense records easily.
• Budget Setup: Define monthly and yearly spending limits by category.
• Automated Notifications: Alerts triggered when expenses exceed the limit.
• Dashboard and Reports: Real-time visual insights into expense patterns.
• Category Management: Predefined categories like Food, Rent, Utilities, and Entertainment.
• Data Security: Ensures privacy of user financial information through ServiceNow's access control.

Solution Description

• Scalability: The architecture is designed to support multiple users and families while maintaining performance.
• Workflow Overview: Expense Input → Categorization → Budget Check → Notification Trigger → Dashboard Reporting.
• Layers of the System:
  - User Interface Layer: ServiceNow dashboard for data entry and visualization.
  - Application Logic Layer: Flow Designer automates alerts and calculations.
  - Database Layer: Stores all expense records, budgets, and categories securely.
  - Security Layer: Uses ServiceNow ACLs to restrict data access.
  - Cloud Layer: Hosted on ServiceNow SaaS for scalability, performance, and reliability.

The system simplifies family expense tracking through ServiceNow automation. It centralizes all financial data, provides instant analysis, and ensures budget compliance through alerts and workflows. By integrating dashboards and reports, the system promotes smarter spending decisions and encourages savings.

Conclusion

Implementing the 'Calculating Family Expenses using ServiceNow' project significantly improves how families monitor and manage their finances. The system provides automated tracking, accurate reporting, and efficient budget control. It eliminates manual inefficiencies, enhances transparency, and offers insights into financial habits. Using ServiceNow's automation and reporting features, the project delivers a secure, scalable, and intelligent platform for modern financial management.