

1.1 Project Overview

This project is a ServiceNow-based system for tracking and analyzing monthly family expenses. It enables automated logging, categorization, and visualization of household spending to improve financial management.

1.2 Purpose

The purpose is to simplify and automate the budgeting process for families, reduce manual tracking errors, and provide insights into spending patterns.

2. IDEATION PHASE

2.1 Problem Statement

Manual expense tracking is time-consuming, error-prone, and lacks analytical insights. Families need an automated solution integrated with workflow tools like ServiceNow.

2.2 Empathy Map Canvas

User: Family members, budget planners.

Says: "I can't keep track of all our expenses manually."

Thinks: "An automated tool could make this easier."

Does: Saves receipts, uses spreadsheets.

Feels: Overwhelmed, worried about overspending.

2.3 Brainstorming

Use ServiceNow's workflow and form builder

Categorize expenses (Food, Rent, Bills, Education, etc.)

Generate visual dashboards (pie charts, bar graphs)

Enable reminders for bill payments

3. REQUIREMENT ANALYSIS

3.1 Customer Journey Map

1. User enters expense details via a form

2. System categorizes and stores data

3. Dashboard updates with insights

4. Reports generated monthly/quarterly

3.2 Solution Requirement

Input: Expense category, amount, date, description

Output: Categorized logs, analytics reports

Accuracy: Real-time updates

Interface: ServiceNow portal/dashboard

3.3 Data Flow Diagram

Expense Entry → ServiceNow Form → Categorization Workflow →

Database → Analytics Display

3.4 Technology Stack

ServiceNow

JavaScript (for custom scripts)

GlideRecord API

ServiceNow Reporting tools

4. PROJECT DESIGN

4.1 Problem-Solution Fit

Reduces the complexity of manual expense logging and provides actionable insights via automation.

4.2 Proposed Solution

Create a ServiceNow application where users submit expense entries, which are then automatically categorized and visualized through dashboards.

4.3 Solution Architecture

Frontend: ServiceNow Portal

Backend: ServiceNow Workflows + Glide scripting

Database: ServiceNow Tables

Deployment: ServiceNow Cloud

5. PROJECT PLANNING&SCHEDULING

5.1 Planning Schedule

Week 1: Requirement gathering, ServiceNow table setup

Week 2: Form and workflow development

Week 3: Dashboard and report design

Week 4: Testing and bug fixing

Week 5: Final deployment

6. FUNCTIONAL AND PERFORMANCE TESTING

6.1 Testing Results

Tested with: 100+ sample expense entries

Load time: Under 500ms per transaction

Error rate: <1%

User feedback: “Easy to use, useful graphs”

7. RESULTS

Fully functional expense tracker

Real-time graphs and summaries

Export to PDF/Excel enabled

8. ADVANTAGES & DISADVANTAGES

Advantages

Real-time visibility

Accurate and consistent records

Simple UI for all age groups

Disadvantages

Requires ServiceNow access

Limited offline functionalities

9. CONCLUSION

The family expense tracker provides an intuitive and automated way to manage finances, leveraging the capabilities of ServiceNow to simplify daily budgeting.

10. FUTURE SCOPE

Mobile app integration

AI-based expense prediction

SMS/email alert system for overspending