Project Design Phase – II
Technology Stack (Architecture & Stack)

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Project Name: Calculating Family Expenses using ServiceNow

Table 1: Components & Technologies

S.No	Component	Description	Technology
1	User Interface	Users interact via ServiceNow dashboards to input and view family expenses.	ServiceNow Web UI
2	Application Logic - 1	Handles income and expense entry with category-based logic.	ServiceNow Script Includes, Busine...
3	Application Logic - 2	Automates monthly summary generation and notifications.	ServiceNow Flow Designer
4	Application Logic - 3	Manages data validation and access control for family members.	ServiceNow ACLs
5	Database	Stores family members, income, expense, and category data.	ServiceNow Tables
6	Cloud Database	Data hosted securely on ServiceNow's cloud platform.	ServiceNow Cloud Backend
7	File Storage	Used for storing reports, receipts, and audit logs.	ServiceNow Attachments / System
8	External API - 1 (Optional)	Integrates with Google Sheets or budgeting tools for analysis.	ServiceNow REST API Integration
9	External API - 2	Not applicable for current project scope.	–
10	Machine Learning Model	Not applicable for this project.	–
11	Infrastructure (Server / Cloud)	Fully hosted and managed on ServiceNow SaaS infrastructure.	ServiceNow Cloud (SaaS)

Table 2: Application Characteristics

S.No	Characteristics	Description	Technology
1	Open-Source Frameworks	Not applicable since ServiceNow is a proprietary platform.	–
2	Security Implementations	Role-based access control ensures secure expense data access.	ACLs, Scoped Applications
3	Scalable Architecture	Supports multiple family members and growing expense records.	ServiceNow Cloud Architecture
4	Availability	Highly available with ServiceNow's global cloud infrastructure.	Load-balanced Cloud Instances
5	Performance	Optimized through background scripts and asynchronous actions.	GlideRecord, Flow Designer