

Project Design Phase – II

Technology Stack (Architecture & Stack)

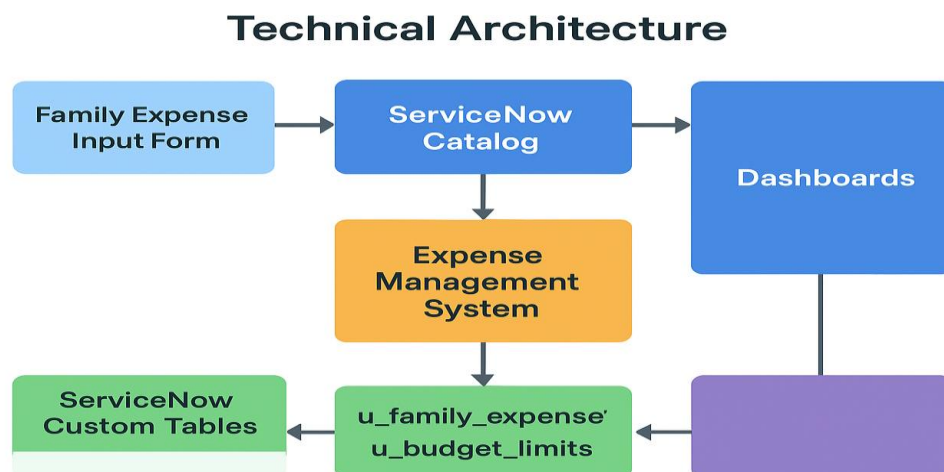
Date	02 November 2025
Team Id	NM2025TMID03181
Project Name	Calculating Family Expenses using Service Now
Maximum Marks	4 Marks

Technical Architecture

The system is built on the **ServiceNow Platform (SaaS)** to automate expense management and budgeting.

Users record expenses through a catalog form; the system calculates totals, compares them against budgets, and sends alerts when limits are exceeded.

Data is stored securely in ServiceNow custom tables, and dashboards provide monthly spending insights.



Guidelines

- Show all main processes and data flow clearly.
- Indicate ServiceNow Cloud as the hosting environment.
- Include key modules: Forms, Flow Designer, Notifications, and Tables.
- Highlight data storage in custom tables (u_family_expense, u_budget_limits).
- Represent automation, security, and reporting visually.
- Keep the diagram simple, labeled, and well-structured.

Table 1: Components & Technologies

S.No	Component	Description	Technology Used
1	User Interface	Forms and dashboards for users and admins.	ServiceNow Web UI, Catalog Item
2	Application Logic	Automates expense calculations and budget checks.	Flow Designer, Business Rules
3	Notifications	Sends alerts when expenses exceed budgets.	ServiceNow Notifications
4	Database	Stores expenses and budgets.	Custom Tables (u_family_expense, u_budget_limits)
5	Reports & Dashboards	Visualizes spending patterns.	ServiceNow Reports, Analytics
6	Infrastructure	Hosted on ServiceNow cloud environment.	ServiceNow SaaS Cloud

Table 2: Application Characteristics

S.No	Characteristic	Description	Technology Used
1	Security	Role-based access and ACLs for data protection.	ServiceNow Scoped App, ACLs
2	Scalability	Supports multiple users and large data sets.	ServiceNow Cloud
3	Availability	Always accessible via ServiceNow platform.	Cloud Hosting
4	Performance	Fast processing using Flow Designer and optimized tables.	GlideRecord, Async Flows
5	Usability	Intuitive UI for easy navigation.	ServiceNow UI Builder