

Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	
Team ID	NM2025TMID05673
Project Name	Calculating Family Expenses using Service Now
Maximum Marks	4 Marks

Technology Stack:

A technology stack refers to the combination of software, tools, frameworks, and platforms used to develop and operate a specific application or project. In the “Calculating Family Expenses using ServiceNow” project, the technology stack includes:

- Front-end Layer: User Interface (ServiceNow Portal, HTML, CSS, JavaScript) – for users to input and view expenses.
- Back-end Layer: ServiceNow Platform (Flow Designer, Business Rules, Script Includes) – for processing, automation, and logic execution.
- Database Layer: ServiceNow Database (Table structures for storing expense details).
- Integration Layer: APIs and Integration Hub – to connect with external data sources like bank or finance applications.
- Security Layer: Role-based Access Control (RBAC) and data encryption to ensure privacy and data protection.

Purposes of the Technology Stack:

1. Automation of Expense Management:

Helps automate the process of collecting, categorizing, and calculating family expenses without manual effort.

2. Centralized Data Handling:

Stores all expense-related data (income, bills, groceries, etc.) in a single, secure ServiceNow database for easy tracking.

3. Real-time Monitoring:

Enables users to view real-time updates and reports on family spending trends and budgets.

4. Seamless Integration:

Allows integration with external applications (like banking systems or Excel) for automatic data import and synchronization.

5. User-Friendly Interface:

Provides a simple and interactive ServiceNow dashboard for users to input and analyze expense data.

6. Enhanced Security:

Ensures financial data is encrypted and accessible only to authorized users through role-based access control.

7. Scalability and Flexibility:

The stack can be scaled for more users or new features as family needs grow over time.

8. Data Analytics and Reporting:

Supports generation of charts, graphs, and detailed expense reports to help families make better financial decisions.

Technology Stack

**Calculating Family Expenses
using ServiceNow**

