

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

Date	02 November 2025
Team ID	NM2025TMID05269
Project Name	Calculating Family Expenses
Maximum Marks	4 Marks

Technical Architecture:

The deliverable includes the architectural diagram and supporting details in Table 1 and Table 2. This architecture represents how the **Family Expenses Tracking System** in ServiceNow automates the process of recording, managing, and summarizing family and daily expenses effectively using relationships, business rules, and update sets.

Example: Family Expenses Tracking System

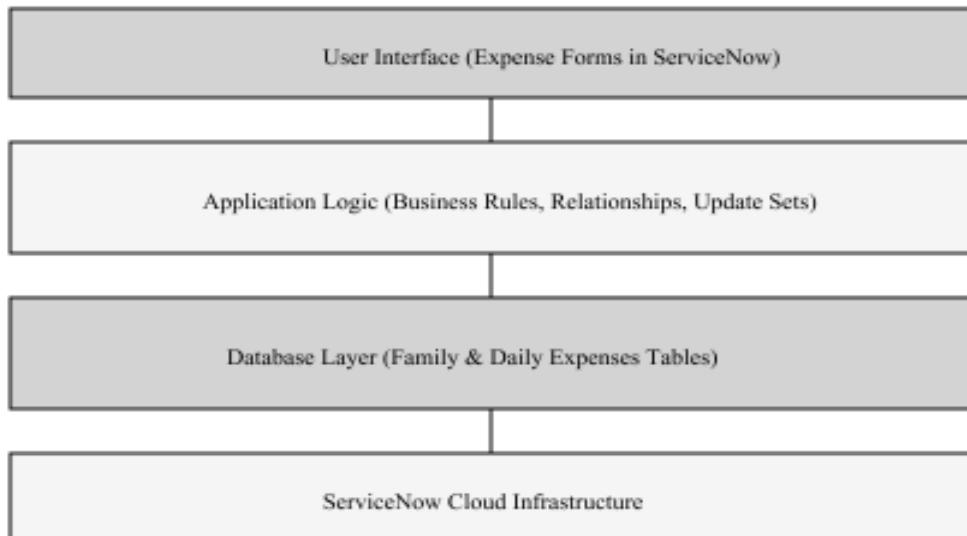


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1	User Interface	Users record expenses via ServiceNow forms (Family & Daily Expenses).	ServiceNow Forms
2	Application Logic-1	Handles creation of tables and update sets for expense tracking.	ServiceNow. Table Configuration
3	Application Logic-2	Implements relationships and business rules to automate processes.	Business Rules, GlideRecord
4	Application Logic-3	Supports dynamic linking of Daily to Family Expenses.	Reference Fields & Relationship Scripts
5	Database	Stores Family and Daily expense data securely.	ServiceNow Tables (u_family_expenses)
6	Cloud Database	Data maintained in ServiceNow Cloud.	ServiceNow Cloud DB
7	File Storage	Stores update set XMLs for migration.	Internal ServiceNow File Storage

S.No	Component	Description	Technology
8	External API	Optional integrations for data export or analytics.	ServiceNow REST API
9	Infrastructure	Fully hosted on ServiceNow SaaS.	ServiceNow Cloud (SaaS)

Table-2 : Application Characteristics:

S.No	Characteristics	Description	Technology
1	Open-Source Frameworks	Not applicable, ServiceNow is a proprietary low-code platform.	
2	Security Implementations	Access restricted to authorized users only; data protection based on Role-Based Access Control (RBAC).	Role-Based Access Control (RBAC)
3	Scalable Architecture	Built on scalable ServiceNow SaaS cloud infrastructure.	ServiceNow Cloud Architecture
4	Availability	Always available through ServiceNow cloud with redundant, balanced ServiceNow Instances.	Load Balancing
5	Performance	Optimized using GlideRecord scripts and indexed tables.	GlideRecord, Update Set Optimization