

Project Design Phase-II

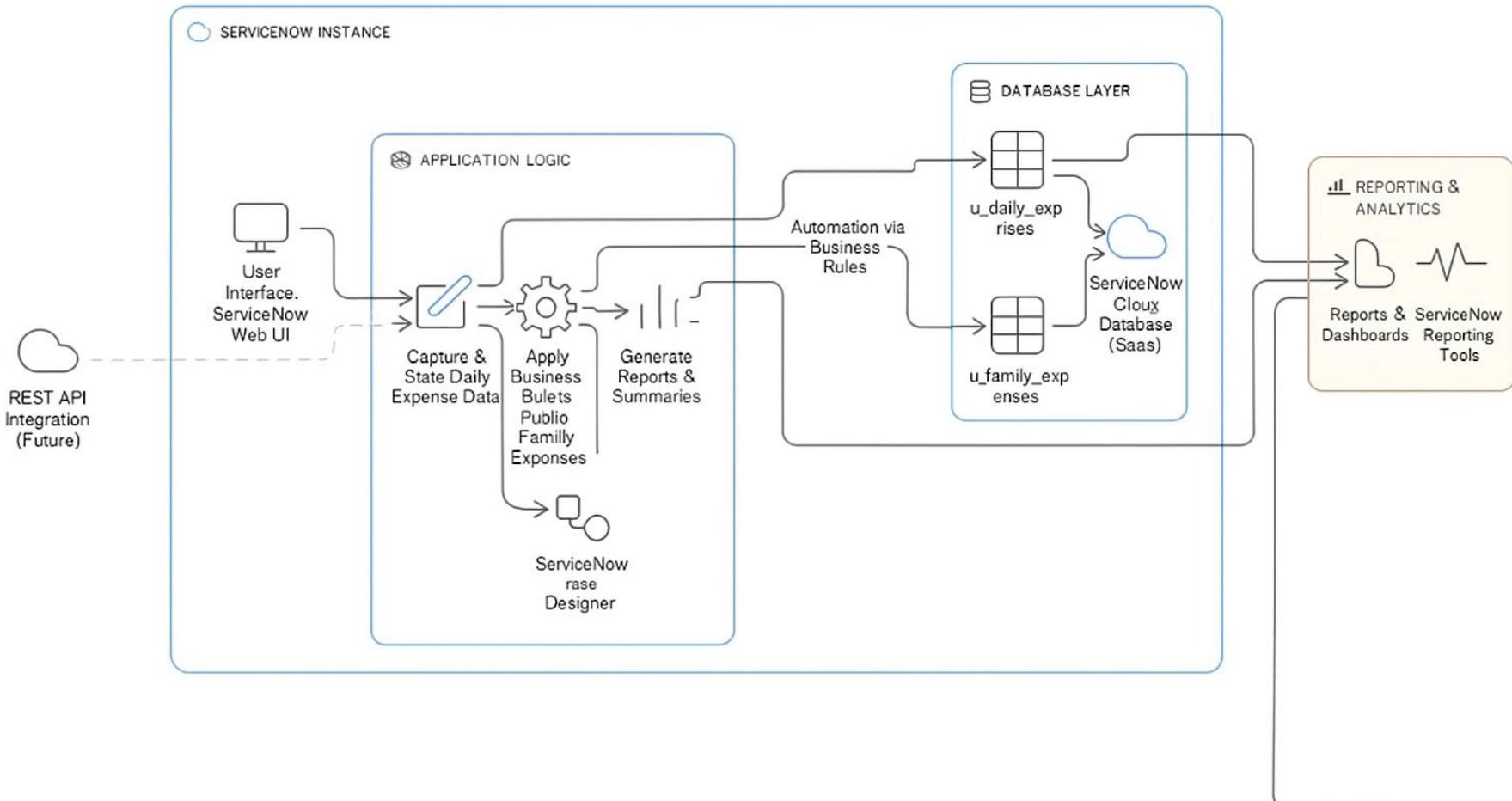
Technology Stack(Architecture & Stack)

Date	02 NOVEMBER 2025
Team ID	NM2025TMID05398
Project Name	Calculating Family Expenses Using ServiceNow
Maximum Marks	4 Marks

Technical Architecture

This project uses ServiceNow's cloud-based low-code platform to automate expense management.

It includes two primary data tables — Family Expenses and Daily Expenses — linked through a relationship and maintained by a Business Rule for automated updates.



Architecture Diagram

Flow Summary:

1. User submits daily expense → stored in Daily Expenses table.
2. Business Rule runs → updates Family Expenses total.
3. Related list displays all daily records linked by date.
4. Data is stored securely in ServiceNow's cloud database.

Table-1:Components & Technologies

S.No	Component	Description	Technology
1	User Interface	Interface for adding and viewing expenses	ServiceNow Web UI
2	Application Logic-1	Creates and updates Family Expenses automatically	ServiceNow Business Rule
3	Application Logic-2	Validates mandatory fields and form layout	ServiceNow Form Design
4	Application Logic-3	Handles auto-numbering for expense records	Number Maintenance
5	Database	Stores Family and Daily Expense data	ServiceNow Tables
6	Cloud Hosting	Hosted and managed in the ServiceNow cloud	ServiceNow SaaS Platform

7	Notifications (Optional)	Can notify users on new entries	ServiceNow Notification Service
8	External APIs	Optional integration with financial tracking APIs	REST API in ServiceNow

Table-2: Application Characteristics

S.No	Characteristic	Description	technology
1	Security	Role-based access to manage data	ACLs, Scoped App
2	Scalability	Can handle growing data easily	ServiceNow Cloud Architecture
3	Availability	24×7 uptime with ServiceNow hosting	Load-balanced instances
4	Usability	Simple UI for non-technical users	Form-based Design
5	Performance	Optimized using GlideRecord and background scripts	Server-side Scripting