

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

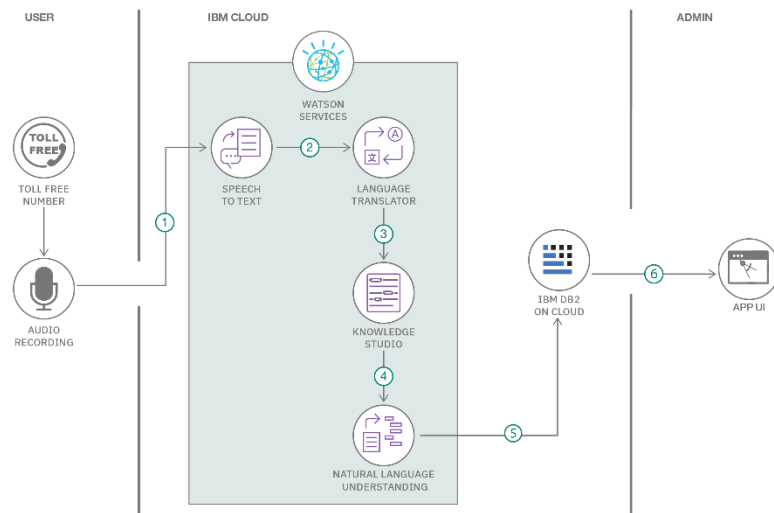
Date	17 February 2026
Team ID	LTVIP2026TMIDS67078
Project Name	Calculating Family Expenses using ServiceNow
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

Example: Order processing during pandemics for offline mode

Reference: <https://developer.ibm.com/patterns/ai-powered-backend-system-for-order-processing-during-pandemics/>



Guidelines:

- Include all the processes (As an application logic / Technology Block)
- Provide infrastructural demarcation (Local / Cloud)
- Indicate external interfaces (third party API's etc.)
- Indicate Data Storage components / services
- Indicate interface to machine learning models (if applicable)

Technology Architecture — Calculating Family Expenses using ServiceNow

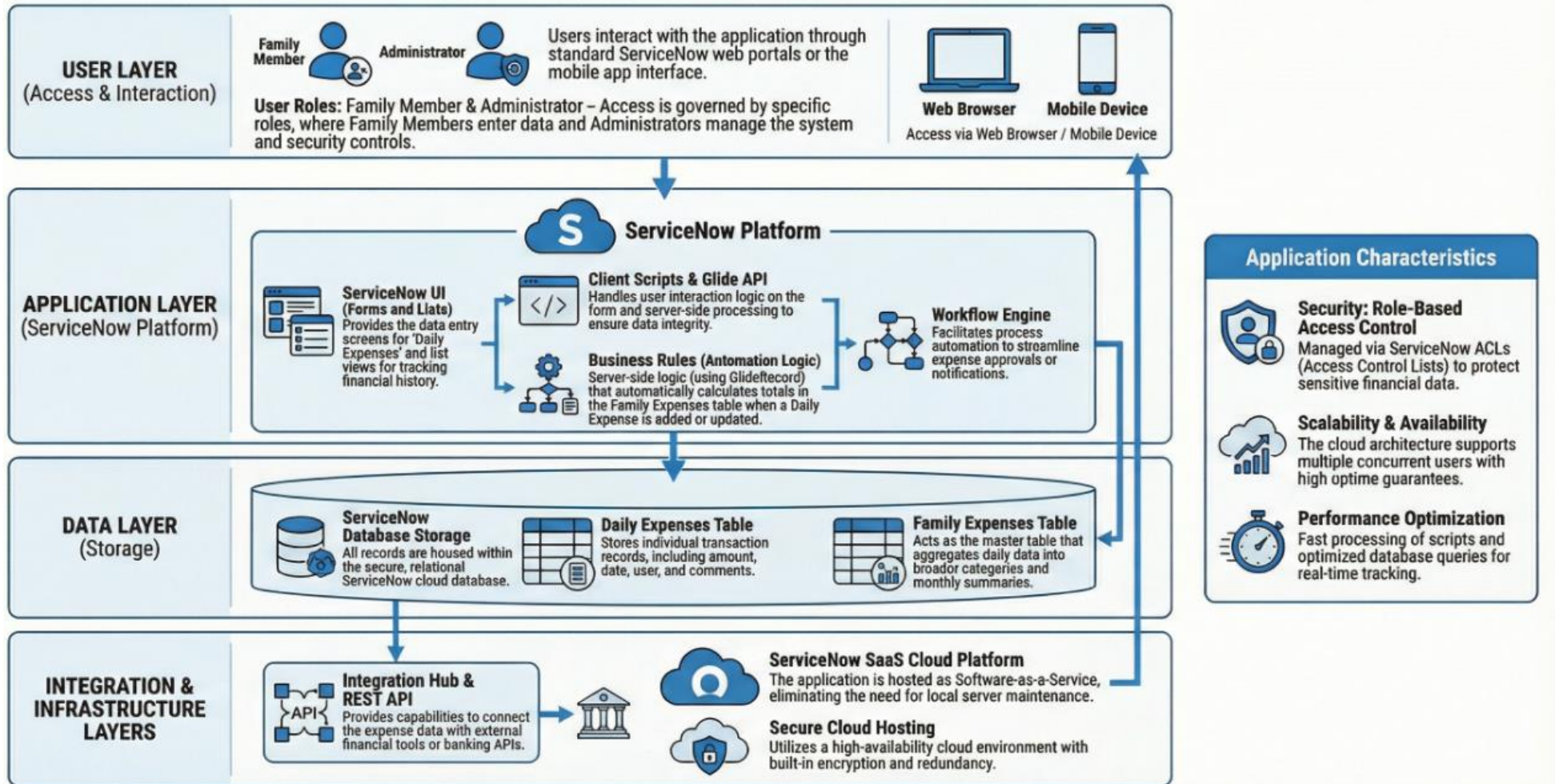


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1	User Interface	How user interacts with application (forms, lists, dashboards)	ServiceNow UI (Forms & Lists)
2	Application Logic-1	Logic for expense entry and processing	ServiceNow Business Rules
3	Application Logic-2	Logic for automatic calculations	ServiceNow Server Scripts (Glide API)
4	Application Logic-3	Logic for workflow and automation	ServiceNow Script Engine
5	Database	Data storage and configurations	ServiceNow Tables (Database)
6	Cloud Database	Database service on cloud platform	ServiceNow Cloud Database
7	File Storage	Storage of application data and records	ServiceNow Data Storage
8	External API-1	Integration capability if required	ServiceNow REST API
9	External API-2	External data communication support	ServiceNow Integration Hub
10	Machine Learning Model	Not applicable in this project (optional automation possible)	Not Applicable
11	Infrastructure (Server / Cloud)	Application deployed on ServiceNow cloud platform	ServiceNow SaaS Cloud Instance

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1	Open-Source Frameworks	Platform uses built-in ServiceNow framework	ServiceNow Platform
2	Security Implementations	Role-based access control and authentication	ServiceNow ACL & Roles
3	Scalable Architecture	Cloud-based scalable architecture supporting multiple users	ServiceNow Cloud Architecture
4	Availability	High availability through cloud hosting	ServiceNow SaaS Platform
5	Performance	Optimized database and fast processing	ServiceNow Optimized Database

References:

<https://c4model.com/>

<https://developer.ibm.com/patterns/online-order-processing-system-during-pandemic/>

<https://www.ibm.com/cloud/architecture>

<https://aws.amazon.com/architecture>

<https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d>