

## Project Design Phase

### Solution Architecture

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

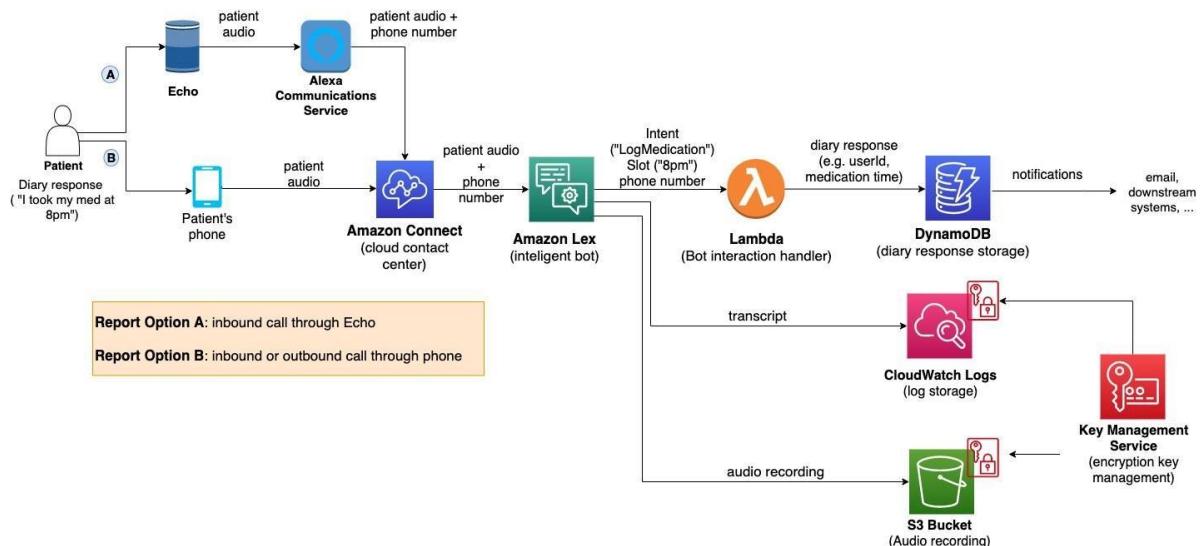
### Solution Architecture:

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

- Find the best tech solution to solve existing business problems.
- Describe the structure, characteristics, behavior, and other aspects of the software to project stakeholders.
- Define features, development phases, and solution requirements.
- Provide specifications according to which the solution is defined, managed, and delivered.

The proposed solution architecture for the “Calculating Family Expenses using ServiceNow” system is based on the ServiceNow cloud platform. The architecture includes a user interface layer where family members interact with forms and dashboards, an application logic layer that handles workflows, business rules, and automation, and a data layer where expense records are stored securely in ServiceNow tables. The system ensures centralized data management, automatic calculations, and secure role-based access control. The architecture also supports scalability and integration capabilities for future enhancements.

### Example - Solution Architecture Diagram:



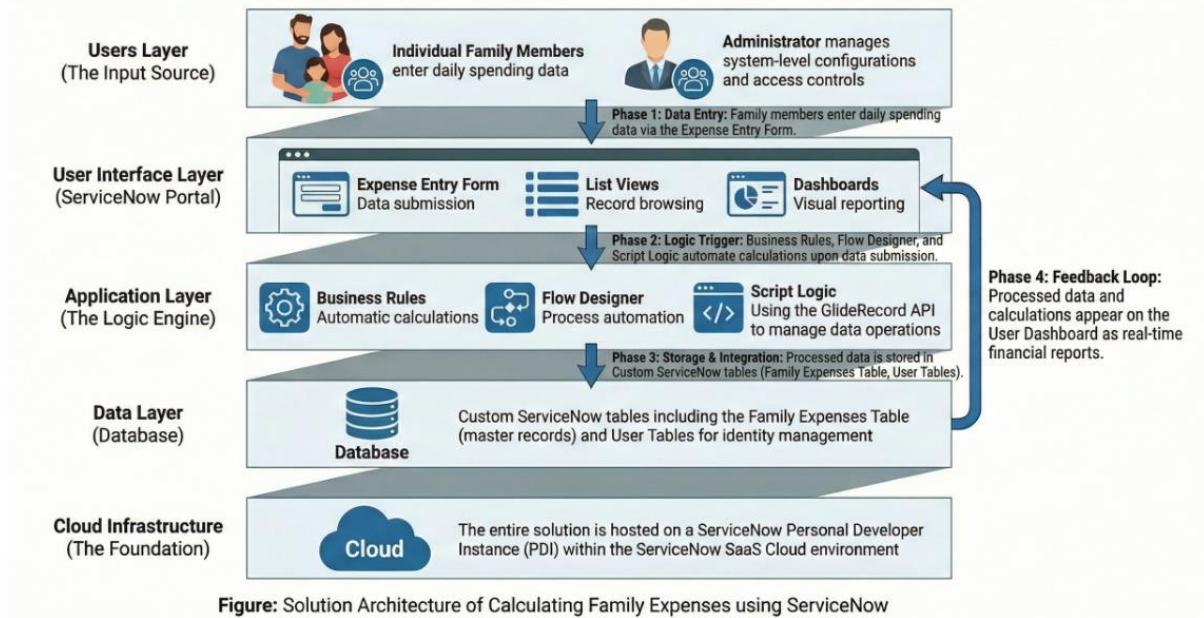


Figure: Solution Architecture of Calculating Family Expenses using ServiceNow

Figure 1: Architecture and data flow of the voice patient diary sample application

Reference: <https://aws.amazon.com/blogs/industries/voice-applications-in-clinical-research-powered-by-ai-on-aws-part-1-architecture-and-design-considerations/>