

## Project Design Phase

### Solution Architecture

Date	15 February 2025
Team ID	LTVIP2026TMIDS65594
Project Name	Educational Organization 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.

### Example - Solution Architecture Diagram:

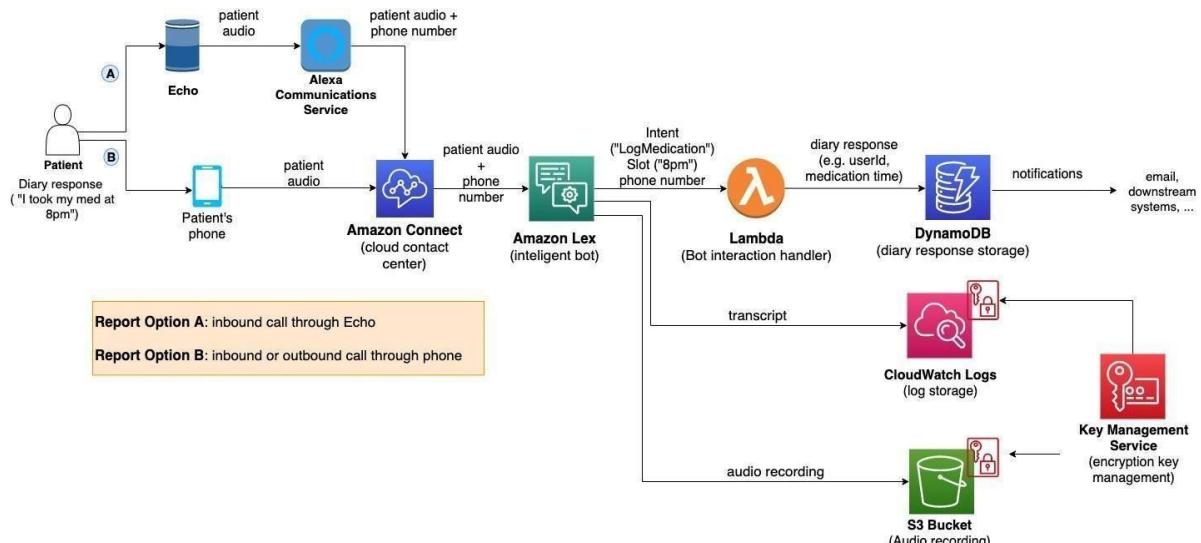


Figure 1: Architecture and data flow of the voice patient diary sample application

### 1. Presentation Layer (User Interface)

- Web interface for students, teachers, and administrators.
- Provides login, registration, dashboard, and service request forms.
- Technologies: ServiceNow Portal, HTML, CSS, JavaScript.

## **2. Application Layer (Business Logic)**

- Handles workflow automation and data processing.
  - Manages student records, course details, service requests, and notifications.
  - Provides role-based access for students, teachers, and administrators.
  - Technologies: ServiceNow Platform, Workflow Engine, Server-side scripting.
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## **3. Data Layer (Database)**

- Stores student information, course data, results, and service requests.
  - Ensures secure and reliable data storage.
  - Technology: ServiceNow Cloud Database.
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## **Data Flow**

1. User submits request through web interface.
  2. Application processes request using workflow logic.
  3. Data is stored or retrieved from database.
  4. System sends response or notification to user.
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## **Key Features of Architecture**

- Cloud-based deployment
- Secure data management
- Scalable system design
- Workflow automation
- Real-time notification support

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