Project Design Phase
Solution Architecture

Date	02 November 2025
Team ID	NM2025TMID04195
Project Name	Streamlining Ticket Assignment for Efficient Support Operations
Maximum Marks	4 Marks

Solution Architecture:

Goals of the Architecture:

•Automate the assignment of incoming support tickets to suitable agents based on skill, availability, and workload

•Enhance operational efficiency by minimizing manual ticket routing and assignment delays

•Ensure consistent, data-driven ticket allocation that improves SLA compliance and customer satisfaction

Key Components:

•Ticket Table– Stores ticket details such as category, priority, and assigned agent

•Agent Table – Maintains agent information, including skill set, capacity, and availability status

•Assignment Engine (Business Rule / Flow Logic) – Automates ticket assignment based on predefined logic or conditions

•Notification Mechanism – Alerts agents when a new ticket is assigned

•Audit/Log Table – Records assignment decisions for tracking and analytics

Development Phases:

1. Design ticket and agent data models with relevant relationship fields

2. Define assignment criteria (e.g., skill match, workload, priority)

3. Develop the automated assignment logic using a Business Rule or Flow Designer

4. Test with different ticket scenarios to verify correct agent assignment and SLA adherence

5. Implement notifications and audit tracking for transparency and performance monitoring

Solution Architecture Description:

The solution architecture is designed to optimize support operations by automating the ticket assignment process within the ITSM environment. It establishes a rule-driven assignment engine that evaluates each incoming ticket based on key parameters such as ticket category, agent skill level, and workload balance. The architecture ensures that tickets are efficiently routed to the most suitable and available agents, reducing manual intervention and response time. A Business Rule or Flow logic triggers upon ticket creation or update, checking agent capacity and skill compatibility before assigning. Notifications are then sent to the selected agent, and assignment details are recorded for audit purposes. This architecture streamlines the end-to-end ticket management process, ensures equitable workload distribution, improves SLA compliance, and enhances the overall efficiency of support operations.

Example - Solution Architecture Diagram:

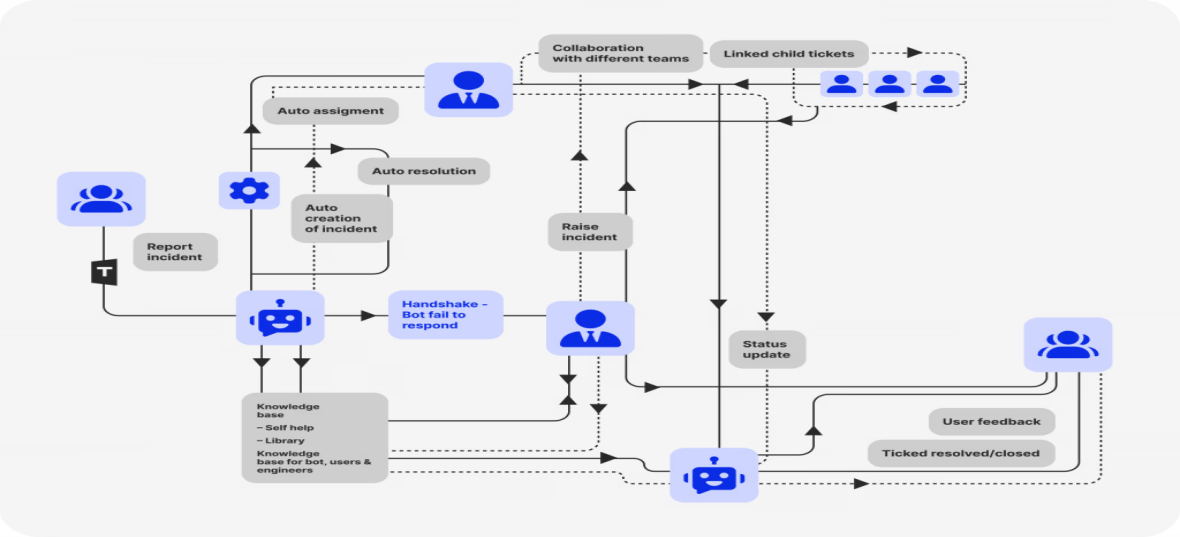

Figure 1: Architecture and data flow of the voice patient diary sample application