

Project Design Phase

Solution Architecture

Date	29 October 2025
Team ID	NM2025TMID01216
Project Name	Streamlining Ticket Assignment for Efficient Support Operations
Maximum Marks	4 Marks

Goals of the Architecture:

- Automate ticket assignment to agents based on skill, workload, and priority.
- Improve support efficiency and reduce manual intervention.
- Ensure balanced workload distribution and faster response times.
- Maintain transparency and accuracy in ticket handling.

Key Components:

Development Phases:

- Create ticket and agent data models.
- Design rule-based logic for ticket assignment.
- Integrate automated assignment with dashboard and notification module.
- Test system behavior for various ticket priorities and workloads.

Solution Architecture Description:

The solution architecture of the project focuses on automating and optimizing ticket distribution in customer support systems. It replaces the manual ticket assignment process with a rule-based system that matches tickets to the most suitable agent based on skill and workload.

The architecture integrates a Ticket Database, Agent Table, and a Rule-based Assignment Engine that ensures every ticket is handled efficiently and fairly. When a new ticket is created, the system automatically assigns it to the appropriate agent and sends instant notifications.

This structure enhances operational transparency, minimizes human error, and improves response times. With its modular design, the architecture supports scalability for integrating analytics, AI-based recommendations, or CRM systems in the future.

Example - Solution Architecture Diagram:

SIMPLE IVR CALL FLOW

