Project Design Phase

Solution Architecture

Date	02 November 2025
Team ID	NM2025TMID03357
Project Name	Streamlining Ticket Assignment for Efficient Support Operations
Maximum Marks	4 Marks

Goals of the Architecture:

Automate ticket assignment to improve operational efficiency. Ensure even distribution of workload among support agents. Minimize response time and enhance customer satisfaction. Enable tracking and monitoring of ticket resolution progress.

Key Components:

Ticket Table (containing ticket details and status) Agent Table (containing agent skills, workload, and availability) Assignment Rule Engine (logic for auto-assignment) Monitoring Dashboard (for admins to track ticket flow and SLA)

Development Phases:

Collect ticket assignment requirements and identify inefficiencies. Design database schema and rule-based assignment logic. Develop and integrate the auto-assignment algorithm. Test ticket creation and assignment for accuracy and fairness. Deploy monitoring dashboard and gather feedback from agents.

Solution Architecture Description:

The solution architecture for "Streamlining Ticket Assignment for Efficient Support Operations" focuses on automating the process of routing support tickets to the most appropriate agent based on skillset, workload, and priority. The system leverages a rule-based or AI-driven assignment engine that interacts with the ticket and agent databases to ensure balanced distribution. The development process involves

integrating ticket management modules, defining assignment criteria, testing with simulated workloads, and validating system accuracy. The architecture reduces manual effort, improves SLA compliance, and enables better tracking through monitoring dashboards. It enhances efficiency, accountability, and transparency within IT support operations.

Example - Solution Architecture Diagram: