Project Design Phase

Solution Architecture

Date: 01 November 2025
Team ID: *NM2025TMID03313*
Project Name: *Streamlining Ticket Assignment for Efficient Support Operations*
Maximum Marks: 4 Marks

Solution Architecture

Goals of the Architecture:

- Automate ticket assignment based on agent availability, skill set, and workload.
- Improve ticket response time and reduce manual intervention.
- Ensure balanced workload distribution across support agents.
- Maintain transparency and efficiency in ticket routing and tracking.

Key Components:

- Ticket Table – stores details of support requests (priority, status, assigned agent).
- Agent Table – maintains information about agents, their skill sets, and workload capacity.
- Assignment Engine – intelligent logic that automatically routes tickets using defined rules.
- Priority Manager – ensures critical tickets are escalated or routed to senior agents.
- Notification System – alerts team members when a ticket is assigned, reassigned, or escalated.
- Dashboard Interface – provides real-time tracking of open, closed, and pending tickets.

Development Phases:

1. Create ticket and agent modules (define entities and relationships).
2. Design and implement the automated assignment logic using workload and skill-based parameters.
3. Integrate priority-based routing and SLA escalation logic.
4. Develop and test the dashboard for monitoring active and resolved tickets.
5. Conduct validation testing to ensure even distribution and timely responses.

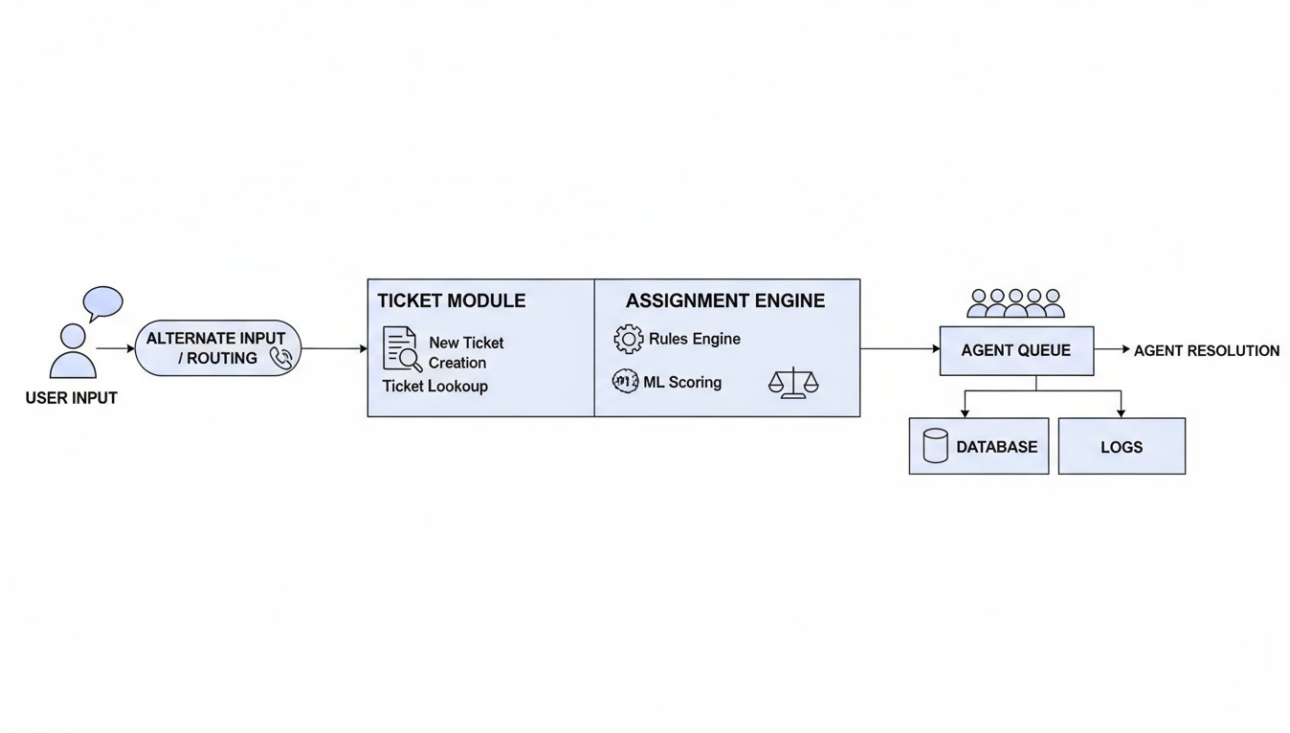
Solution Architecture Description:

The solution architecture for *Streamlining Ticket Assignment for Efficient Support Operations* is designed to automate and optimize the process of distributing support tickets among agents.

At its core, the system includes an intelligent assignment engine that evaluates agent workload, availability, and skill level to ensure tickets are assigned to the most suitable person.

The architecture integrates multiple components — ticket management, agent profiles, and a priority manager — to deliver fair workload distribution and faster issue resolution. The notification system ensures that agents and team leads are promptly informed of new or escalated tickets.The dashboard interface provides real-time visualization of ticket flow and performance metrics, helping leads monitor efficiency and identify bottlenecks.By reducing

manual workload and delays, this architecture enhances customer satisfaction, ensures transparency, and promotes operational excellence within support environments.



Reference:https://www.atlassian.com/itsm/ticketing/best-practices