

PROJECT DESIGN PHASE

Solution Architecture

Date	02 Nov 2025
Team id	NM2025TMID00421
Project name	Streamlining Ticket Assignment for efficient support operations
Maximum Marks	4

Solution Architecture:

Goals of the Architecture:

- ❑ Automate ticket assignment using rule-based and skill-based logic..
- ❑ Ensure scalability and flexibility for future enhancements.
- ❑ Improve system performance and reduce response time.
- ❑ Maintain data integrity, transparency, and security.
- ❑ Provide seamless integration with existing support platforms like ServiceNow or Jira.

Key Components:

User Interface (UI): For agents and administrators to view, manage, and track tickets.

Automation Engine: Core logic that processes rules and assigns tickets automatically.

Database: Stores ticket details, agent profiles, and historical data.

Analytics Dashboard: Provides real-time insights on performance, workload, and ticket status.

Integration Layer (API): Connects the system with external helpdesk tools and platforms.

Development Phases:

- ❑ Phase 1: Requirement gathering and system design.
- ❑ Phase 2: UI/UX development for ticket management.
- ❑ Phase 3: Implementation of automation logic and rule-based assignment.
- ❑ Phase 4: Database integration and analytics dashboard setup.
- ❑ Phase 5: Testing, deployment, and performance optimization.

Solution Architecture Description

The proposed solution architecture for "Streamlining Ticket Assignment for Efficient Support Operations" is designed to automate and optimize the entire ticket handling workflow. It consists of a user-friendly interface where tickets are logged and monitored, an automation engine that assigns tickets based on priority, skill, and workload, and a centralized database to store all related data securely. The analytics dashboard provides real-time insights for administrators to monitor efficiency, while the integration layer ensures seamless connectivity with existing systems. This architecture ensures a scalable, efficient, and transparent support process that enhances response speed, accuracy, and overall service quality.

Example of solution of architecture:

IT service desk ticket management process flow

This slide illustrates information technology (IT) service desk ticket management process flow. It provides information about customer, service admin, service agent, open ticket, void ticket, issue fix, service desk system, etc.

