

## Project design phase II

### Technology Stack (Architecture & Stack)

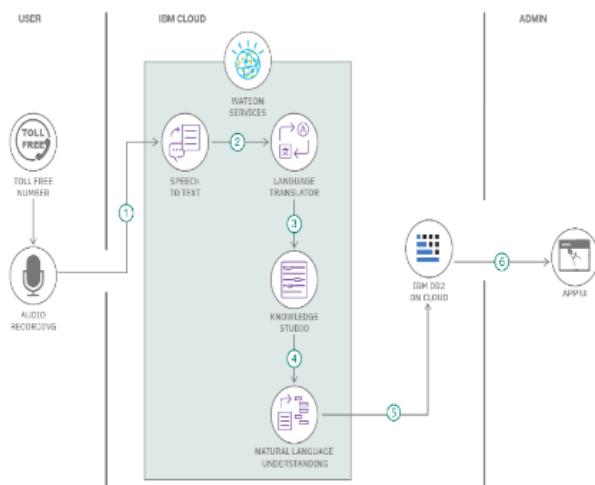
Field	Value
Date	13 November 2025
Team ID	<b>NM2025TMID00798</b>
Project Name	Streamlining Ticket Assignment for Efficient Support Operations
Maximum Marks	4 Marks

### Technical Architecture

The project, "**Streamlining Ticket Assignment for Efficient Support Operations**," involves an AI-powered ticket management system that automates support ticket assignment for faster issue resolution. The design is built primarily on the **ServiceNow Platform**.

Example: AI-powered ticket management system that automates support ticket assignment using intelligent backend architecture for faster issue resolution

Reference: IBM Developer – AI-powered backend system for order processing during pandemics



### Components & Technologies (Table 1 Summary)

Component	Technology	Description Highlights
<b>User Interface</b>	ServiceNow Web UI	Web dashboard for end users and support agents to interact.
<b>Application Logic (1, 2, 3)</b>	Flow Designer, Business Rules, Script Includes, Notifications	Automates ticket assignment, prioritizes/categorizes tickets, and sends notifications.
<b>Database/Storage</b>	ServiceNow Incident and Task Tables, Attachments Table	Stores tickets, user/agent details, assignment history, and attachments <sup>10</sup> .
<b>External APIs</b>	REST API, Integration Hub	Integrated with email/chat for automatic ticket creation and third-party monitoring tools for incident generation.
<b>Machine Learning Model</b>	ServiceNow Predictive Intelligence	Suggests the best-fit agent or resolution category based on historical data.
<b>Infrastructure</b>	ServiceNow Cloud (SaaS)	Fully hosted and managed on the ServiceNow SaaS platform.

### Application Characteristics (Table 2 Summary)

Characteristic	Technology	Description Highlights
<b>Open-Source</b>	Not applicable	Built within the ServiceNow platform.
<b>Security</b>	ACLs, Scoped Applications	Ensures secure ticket access through role-based permissions and ACL controls.

<b>Scalability</b>	ServiceNow Cloud Architecture	Automatically scales to handle increased ticket volume and user load.
<b>Availability</b>	Load-balanced ServiceNow Instances	Provides uninterrupted ticket management with high availability and failover support.
<b>Performance</b>	Flow Designer, Glide Record, Background Scripts	Improves ticket routing speed using background processes and optimized queries.