

## Project Design Phase-II

### Data Flow Diagram & User Stories

Date	02 November 2025
Team ID	NM2025TMID07661
Project Name	Streamlining Ticket Assignment for Efficient Support Operations
Maximum Marks	4 Marks

#### **Data Flow Diagrams:**

A Data Flow Diagram (DFD) visually represents how support tickets move through the system and how assignment decisions are processed. It shows the interaction between the **customer**, **support agent**, **team lead**, and the **ticket assignment automation system**.

In this project, the DFD illustrates the complete ticket lifecycle:

- Ticket is raised by a **customer**

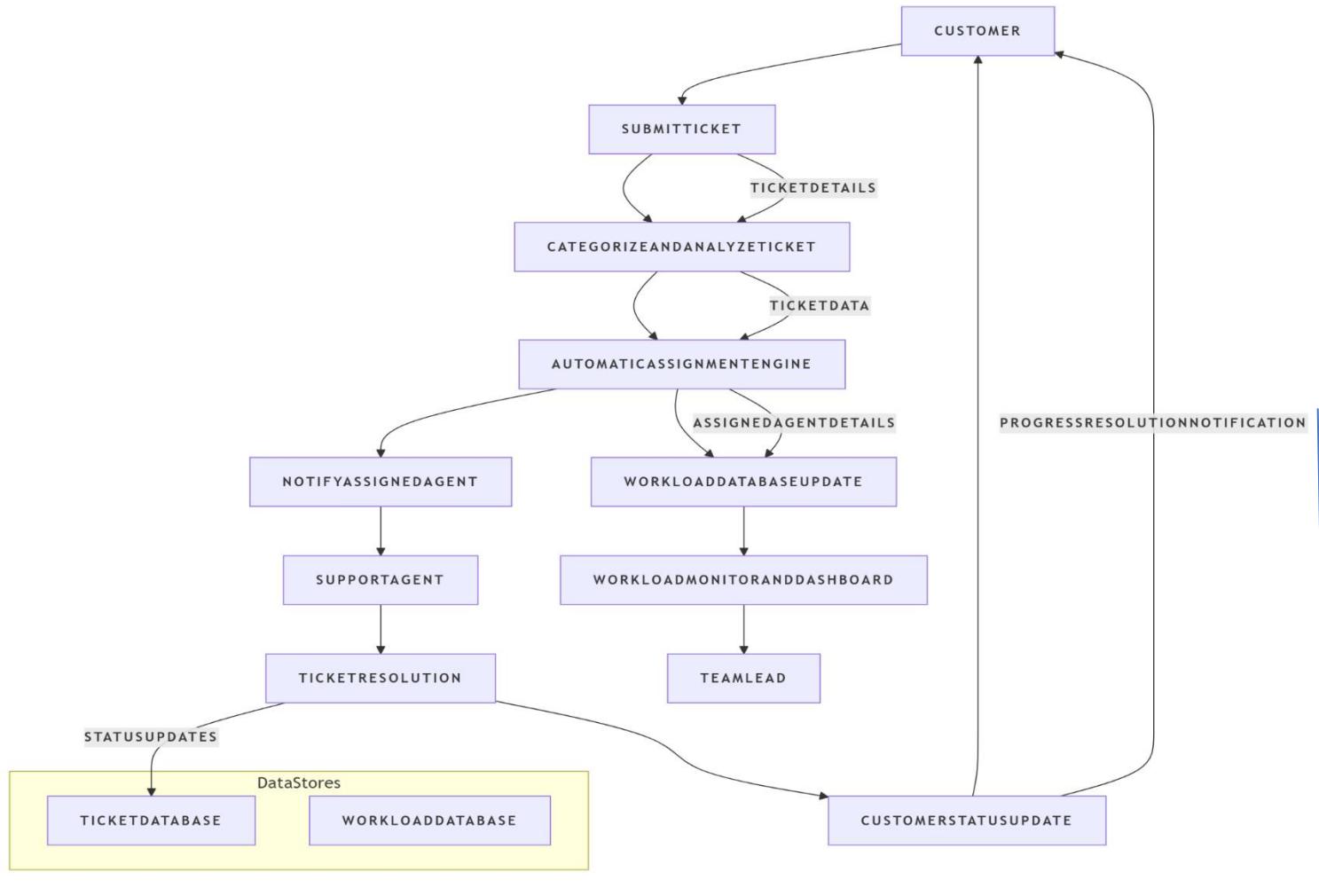
The **system categorizes and analyzes** the ticket

- The **intelligent assignment engine** selects an agent based on skills and workload
- The assigned **agent updates status**
- **Team leads** monitor workload and SLA performance
- **Customers** receive real-time updates

**Example:**

**Flowchart Explanation:**

- **Ticket Creation by Customer**  
The process begins when a customer submits a support ticket. The ticket details enter the system for categorization and analysis.
- **System-Driven Ticket Categorization & Assignment**  
The system categorizes the ticket based on priority and type, then the automatic assignment engine selects the most suitable support agent using skill and workload data.
- **Workload Monitoring & Updates**  
Once assigned, workload data is updated in the database. A dashboard provides real-time ticket distribution and SLA monitoring for team leads.



## User Stories:

User stories define what different users need from the system in simple, goal-focused language. In this project, they help ensure the system blocks user deletion only when necessary, protecting incident data.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer	Ticket Creation & Tracking	USN-1	As a customer, I want to raise a support ticket easily so that my issues can be resolved quickly	Ticket is successfully created and visible with current status updates.	High	Sprint-1
System (Auto-Assignment)	Intelligent Ticket Assignment	USN-2	As the system, I must assign tickets automatically to the most suitable agent based on skills and workload.	Ticket must be assigned immediately to an available and	High	Sprint-1

				skilled agent.		
System (Notification)	Alerts & Escalation	USN-3	As the system, I must notify the team lead when an SLA is at risk or ticket is delayed.	Escalation alerts must be triggered based on SLA breach rules.	High	Sprint-2
Support Agent	Ticket Handling	USN-4	As an agent, I want to receive relevant tickets instantly so that I can solve issues efficiently.	Assigned tickets must display correctly in Agent Workspace.	High	Sprint-2