

Project Design Phase-II

Data Flow Diagram & User Stories

Date	2 NOVEMBER 2025
Team ID	NM2025TMID00405
Project Name	Streamlining Ticket Assignment for Efficient Support Operations
Maximum Marks	4 Marks

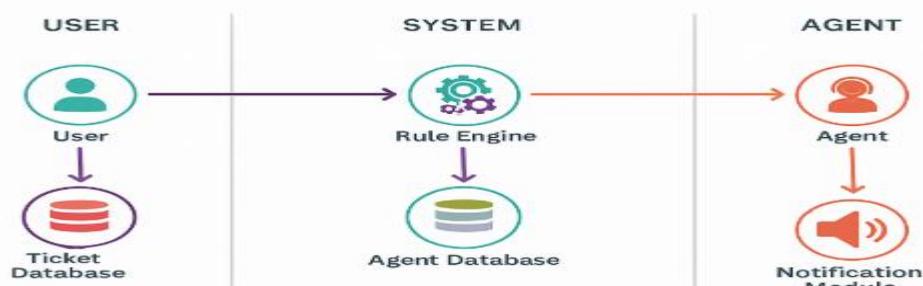
Data Flow Diagrams:

A Data Flow Diagram (DFD) is a graphical representation of how data moves through a system — showing the interaction between processes, data stores, and external entities. It helps visualize how information is captured, processed, and distributed within the support ticketing system.

In the project “Streamlining Ticket Assignment for Efficient Support Operations,” the DFD illustrates the automation of ticket assignment in an IT support environment. The system receives tickets from users, categorizes them, checks agent availability, applies rule-based logic, assigns tickets automatically to the best-suited agent, and notifies them instantly. This ensures faster resolution, efficient workload distribution, and improved operational transparency.

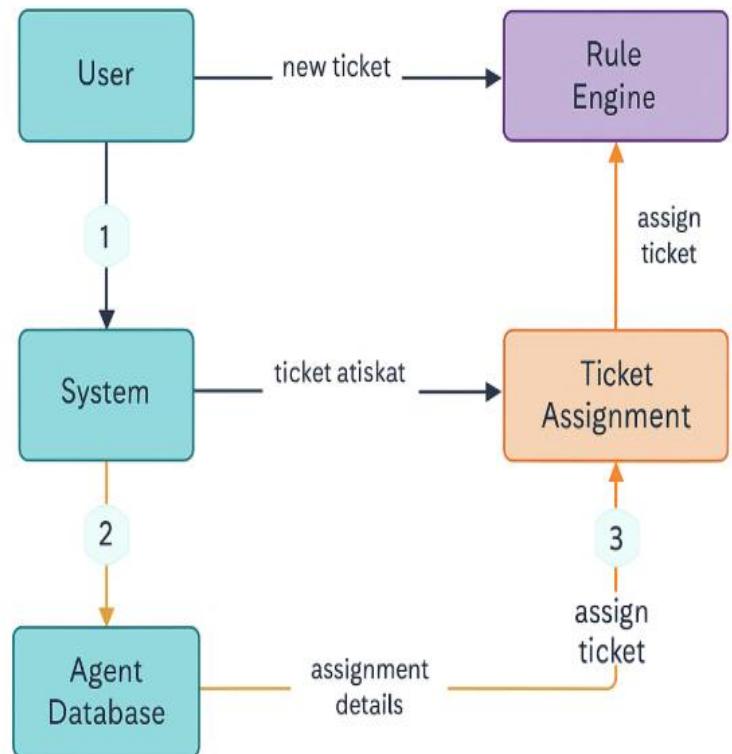
Example:

Flow | Ticket Assignment for Efficient Support Operations



1. User raises a new support ticket
2. System prioritizes and categorize ticket
3. Rule engine assigns ticket based on workload and skill-matching
4. System notifies the selected agent
5. Agent resolve and closes the ticket

Data Flow Diagram for Efficient Support Operations



User Stories:

User stories describe how various stakeholders interact with the automated ticket assignment system, defining expectations and measurable outcomes.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
User / End Customer	Ticket Creation	USN-1	As a user, I want to create a new support ticket easily so that I can report issues quickly.	The system should allow users to submit tickets with category, description, and priority fields.	High	Sprint-1
System (Automation Engine)	Intelligent Assignment	USN-2	As a system, I must automatically assign tickets to agents based on workload, skill set, and ticket priority.	The system should auto-assign tickets according to predefined rules and agent availability.	High	Sprint-1
Support Agent	Ticket Notification	USN-3	As a support agent, I want to receive instant notifications when a ticket is assigned to me so I can act promptly.	The agent should receive system alerts (email or in-platform) when a new ticket is assigned.	Medium	Sprint-2
Support Manager	Workload Monitoring	USN-4	As a manager, I want to view agent workloads and ticket distribution to ensure fair workload balance.	The dashboard should show active tickets per agent and allow manual reassignment if needed.	Medium	Sprint-2
System (Analytic Module)	Performance Tracking	USN-5	As a system, I must record and analyze ticket resolution times to identify performance improvements.	Reports should display ticket resolution trends and SLA compliance data.	Low	Sprint-3