

## Project Design Phase-II

### Data Flow Diagram & User Stories

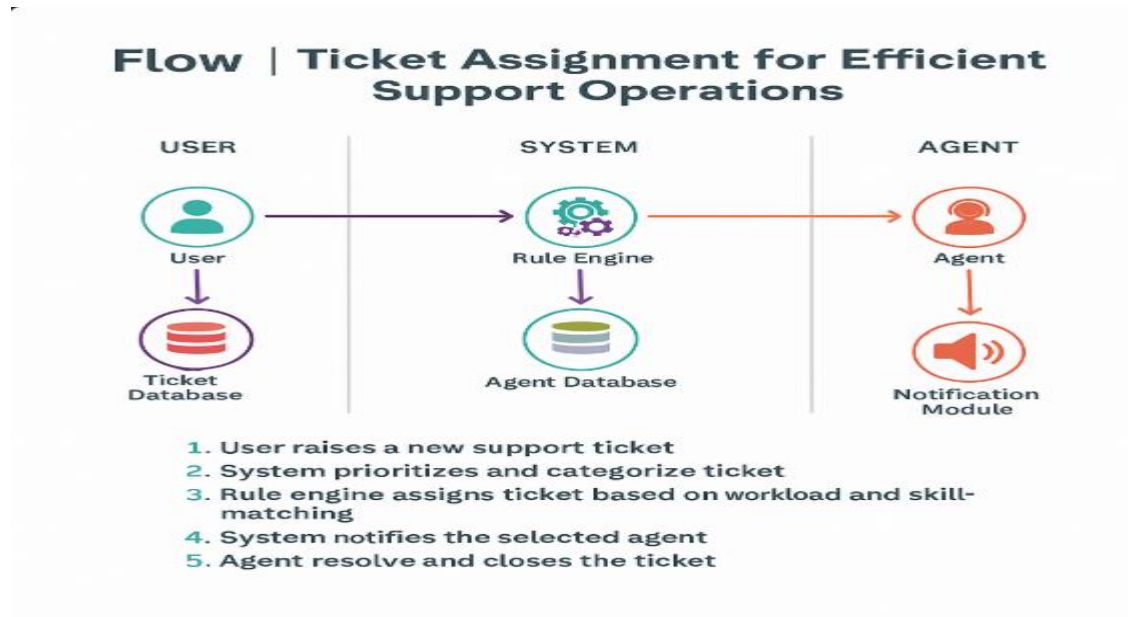
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|---------------|---|
| Date          | 2 NOVEMBER 2025   |
| Team ID       | NM2025TMID00405   |
| Project Name  | Streamlining Ticket Assignment for Efficient Support Operations |
| Maximum Marks | 4 Marks   |

#### Data Flow Diagrams:

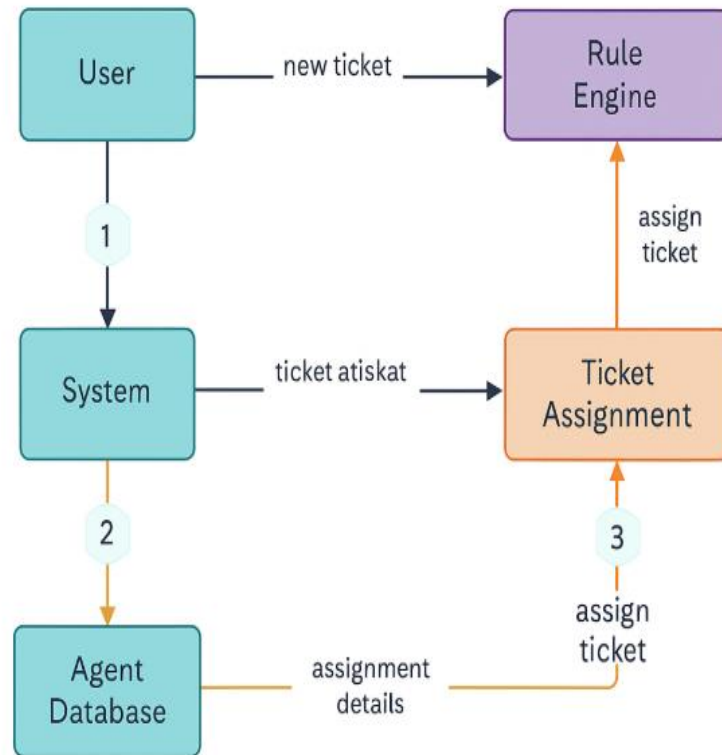
A Data Flow Diagram (DFD) is a graphical representation of how data moves through a system — showing the interaction between processes, data stores, and external entities. It helps visualize how information is captured, processed, and distributed within the support ticketing system.

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:



## 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 |