

Project Design Phase - II

Data Flow Diagram & User Stories

Date	01 November 2025
Team ID	NM2025TMID07096
Project Name	Streamlining Ticket Assignment for Efficient Support Operations
Maximum Marks	4 Marks

Data Flow Diagram (DFD):

A **Data Flow Diagram (DFD)** is a graphical representation that illustrates how data moves through a system. It highlights the interaction between users, processes, and data stores — showing how input information is processed and converted into meaningful outputs.

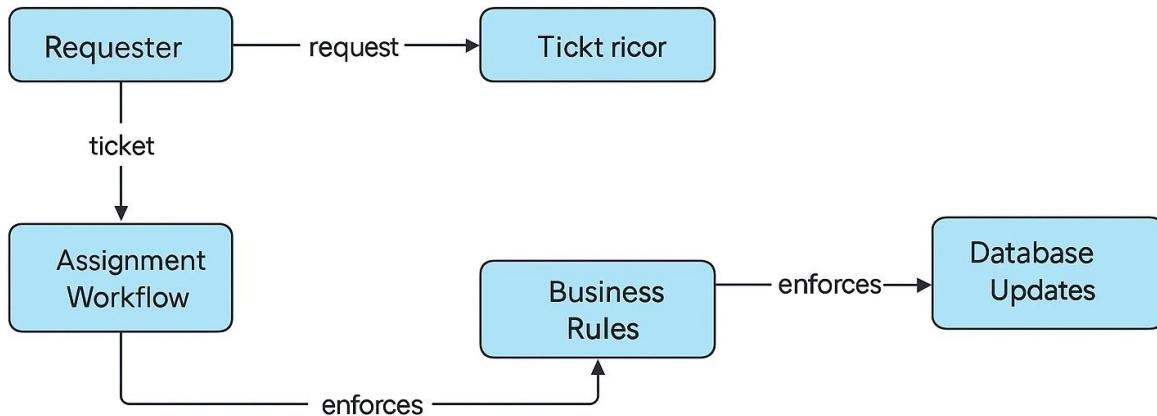
In the project “**Streamlining Ticket Assignment for Efficient Support Operations**,” the Data Flow Diagram depicts how a user submits a support ticket, how the automated system processes and categorizes it, and how it is routed to the appropriate support team. The DFD also shows how notifications, updates, and resolutions are communicated back to the user.

The process begins when a **customer or employee** raises a support ticket through the service portal or email. The **ticket management system** automatically captures and analyzes the issue using predefined rules and AI-based logic. Based on the category and priority, the system assigns the ticket to the **appropriate support agent or department**. The assigned agent works on the issue, updates the status, and marks it as resolved once completed.

All interactions, updates, and escalations are stored in the **centralized database**, ensuring transparency, audit tracking, and faster resolution times. The automated flow minimizes manual intervention, reduces response time, and ensures efficient utilization of support resources.

Example:

Flow



User Story:

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 (Sprint)
Employee (Requester)	Ticket Creation Form	USN-1	As an employee, I want to raise a support ticket easily through an online request form so that my issue can be quickly assigned to the	The system should allow employees to submit complete ticket details (issue type, urgency, description) and generate a unique ticket ID.	High	Sprint-1

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release (Sprint)
			right department.			
User (Employee)	Dynamic Ticket Categorization	USN-2	As a user, I want the form to dynamically show or hide fields based on the selected issue type so that I only fill in relevant information.	The form should automatically adjust visible fields according to the issue type or priority using dynamic rules.	High	Sprint-1
User (Employee)	Reset Functionality	USN-3	As a user, I want a reset button on the ticket form so that I can clear all entered details if I make a mistake.	The reset button should clear all fields and restore the form to its default state instantly.	Medium	Sprint-2
Administrator	Automated Ticket Routing	USN-4	As an administrator, I want all tickets to be automatically routed to the correct department or support agent based on category and priority.	The system should trigger intelligent routing rules and assign tickets automatically without manual intervention.	High	Sprint-2
Manager (Approver)	Approval and Escalation Workflow	USN-5	As a manager, I want to review and approve critical or escalated tickets quickly so that urgent issues are	The system should notify the manager instantly for high-priority tickets and allow approval or escalation actions directly	High	Sprint-3

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release (Sprint)
			resolved efficiently.	from notifications.		
Tester	Functional Testing	USN-6	As a tester, I want to verify that the automated ticket routing and approval processes work correctly across various scenarios.	The system must function correctly across multiple test cases with accurate ticket assignment and timely notifications.	Medium	Sprint-3
System Administrator	Documentation & Governance	USN-7	As a system administrator, I want all workflows, routing rules, and configuration changes to be documented for audit and governance purposes.	All configurations and updates must be version-controlled, documented, and traceable for compliance and future reference.	Medium	Sprint-4