

Project Design Phase – II

Data Flow Diagram & User Stories

A Data Flow Diagram (DFD) represents how data flows within the Metro Ticket Generating System using ServiceNow. It explains how users book tickets, how fare calculation and QR code generation are automated, and how ticket data is stored and communicated.

Data Flow Diagram – Level 0

External Entities	Processes	Data Stores
Metro Passenger Metro Gate Scanner Notification Service	1. Validate Ticket Request 2. Calculate Fare 3. Generate Digital Ticket & QR Code 4. Store Ticket & Transaction Data	User Profiles Fare Rules Ticket Records Transaction Logs

User Stories

User Type	Epic	User Story ID	User Story Description	Acceptance Criteria	Priority	Release
Passenger	Ticket Booking	UST-1	As a user, I can book a metro ticket by selecting source and destination through the Service Portal.	System generates ticket with correct fare and QR code.	High	Sprint-1
Passenger	Notification	UST-2	As a user, I want to receive my metro ticket via email or SMS.	User receives confirmation message with QR code.	High	Sprint-1
Admin	Fare Automation	UST-3	As an admin, I want the fare to be calculated automatically based on stations selected.	Fare calculation is accurate and automated.	Medium	Sprint-1
Admin	Monitoring	UST-4	As an admin, I can view all ticket	Dashboard displays real-time	High	Sprint-1

			bookings in a dashboard.	booking details.		
Support	Customer Support	UST-5	As a support agent, I can view ticket and transaction history to assist users.	Support agent can access ticket and payment details.	Medium	Sprint-2