

Project Design Phase-II

Data Flow Diagram & User Stories

Date	05 Jan 2026
Team ID	
Project Name	Metro Ticket Generating System in ServiceNow
Maximum Marks	4 Marks

Data Flow Diagrams:

A **Data Flow Diagram (DFD)** is a graphical representation of how data flows within a system. It shows how data enters the system, how it is processed, where it is stored, and how it exits the system. A clear and well-structured DFD helps in understanding system requirements and overall functionality.

For the **Metro Ticket Generating System using ServiceNow**, the Data Flow Diagram represents the flow of information from passengers booking tickets through the ServiceNow Service Portal to automated fare calculation, ticket generation, and request completion.

Description of Data Flow

1. **Passenger (End User)** initiates a metro ticket booking request through the ServiceNow Service Portal.
2. The **Service Catalog Form** captures journey details such as source station, destination station, journey type, and number of passengers.
3. The request data is sent to the **Fare Calculation Logic** where the fare is calculated automatically.
4. The processed request is stored as a **Requested Item (RITM)** in the ServiceNow database.
5. **Flow Designer** automates the request processing and updates the ticket status.
6. The **Passenger** receives confirmation and can track ticket details through the Service Portal.

User Stories

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Passenger (End User)	Metro Ticket Booking	USM-1	As a passenger, I can book a metro ticket through the ServiceNow Service Portal so that I don't need to stand in a queue.	I can fill and submit the ticket booking form successfully and receive a request number.	High	Sprint-1
Passenger (End User)	Ticket Tracking	USM-2	As a passenger, I can track the status of my metro ticket request in real time.	I can view ticket details, fare, and request status in the Service Portal.	High	Sprint-1
Passenger (End User)	Fare Calculation	USM-3	As a passenger, I want the system to calculate the ticket fare automatically based on my journey details.	Fare is calculated accurately without manual input.	High	Sprint-1
Admin (Metro Staff)	Ticket Management	USM-4	As an admin, I can view and manage all metro ticket requests in the system.	Ticket requests are visible with complete journey details and status.	High	Sprint-1
System (ServiceNow)	Workflow Automation	USM-5	As a system, I can process metro ticket requests automatically using Flow Designer.	Request status updates automatically and ticket is generated successfully.	High	Sprint-1

Assumptions & Dependencies

- ServiceNow instance (Vancouver version or later) is available and configured.
- ServiceNow Service Catalog and Flow Designer modules are enabled.
- Users have basic knowledge of using the ServiceNow Service Portal.
- Station and fare details are preconfigured in the system.
- Internet connectivity is available for accessing the ServiceNow portal.