

Metro Ticket Booking System

User Flow (UI / UX Design)

Purpose

This document describes the User Interface (UI), User Experience (UX), and navigation flow of the Automated Metro Ticket Booking System developed using ServiceNow.

The objective is to provide passengers with an intuitive, fast, and digital ticket booking experience, enabling QR ticket generation, smart card recharge, and cashless payments through a single unified platform.

Metro Ticket Booking Catalog Item UI

The “Book A Metro Ticket Item” catalog item is designed with a clean, structured, and passenger-friendly layout. All input fields are logically arranged to reduce booking time and minimize user errors.

Key UI Features

- Clearly labeled input fields
- Mandatory field indicators (*)
- Logical grouping of travel, passenger, and payment details
- Clean layout optimized for quick booking
- Integrated “Order Now” and “Add to Cart” actions

Dynamic UI Behavior

To enhance passenger experience, UI Policies and Catalog Client Scripts are implemented.

Dynamic Behaviors Implemented

- Fields dynamically appear based on user selection (QR Ticket / Metro Card Recharge)
- Smart Card fields are shown only when “Recharge Metro Card” is selected
- Journey-related fields appear only for “Book QR Ticket”
- Fare amount fields change dynamically based on journey type
- Mandatory fields update automatically based on selections

This dynamic behavior:

- Reduces form clutter
- Prevents invalid submissions
- Improves booking speed

The screenshot shows a web-based form titled "Book A Metro Ticket Item". The top navigation bar includes links for Home, Service Catalog, Office, Services, Book A Metro Ticket Item, Search Catalog, Knowledge, Catalog, Requests, System Status, Cart, Tours, and System Administrate. The main content area has a heading "Book A Metro Ticket Item" with a sub-instruction: "A metro e-ticketing system allows passengers to purchase and use tickets digitally, typically via a mobile app or website, eliminating the need for physical tickets." Below this is a "Quantity" input field set to 1. To the right, there are buttons for "Add to Cart", "Save as Draft", and a prominent blue "Order Now" button. On the left side of the form, several fields are visible, each preceded by a red asterisk indicating it is required:

- "* What do you want to do Today?" with radio buttons for "None", "Book QR Ticket", and "Recharge Metro Card". The "Recharge Metro Card" option is selected.
- "* Enter Card Number" with an input field.
- "* Enter Smart Card Name" with an input field.
- "* Recharge Amount" with an input field.
- "* Starting From?" with an input field.
- "* Doing To?" with an input field.
- "* No of Passengers" with an input field.
- "* Type of Journey" with radio buttons for "None", "Return", and "Single". The "Single" option is selected.

Below these fields are two additional input fields: "Amount for Single Journey" and "Amount Including Return". At the bottom, there is a section for "Mode of Payment" with radio buttons for "Others", "Credit Card", "Debit Card", and "UPI", where "UPI" is selected. A horizontal bar at the bottom of the form lists several buttons: "Enter Smart Card Number", "Enter Smart Card Name", "Recharge Amount", "Starting Point", "Ending Point", and "No of Passengers".

Figure 1: Book A Metro Ticket catalog item form

User Interaction Flow

Ticket Booking / Recharge Flow

After form submission:

- User selects journey details or recharge option
- System validates mandatory fields
- Fare is calculated automatically
- Payment mode is captured
- Request is submitted successfully

User Experience Validation

The UI/UX design was validated based on:

- Ease of navigation
- Reduced booking time
- Minimal data entry
- Error prevention through validations
- Smooth mobile-friendly interaction

UX Benefits

- Faster ticket booking
- Reduced waiting time at metro stations
- Paperless and eco-friendly solution
- Improved commuter satisfaction
- Standardized digital ticketing process

Conclusion

The UI, UX, and navigation design of the Automated Metro Ticket Booking System ensures a seamless and efficient experience for commuters.

Dynamic catalog forms, structured layouts, and automated backend workflows significantly enhance usability, speed, and operational efficiency, making metro ticketing fully digital and future-ready.