

# **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.

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### **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 user interface for booking a metro ticket. At the top, there's a navigation bar with links like Home, Service Catalog, Office, Services, and Book A Metro Ticket Item. A search bar is also present. The main area is titled 'Book A Metro Ticket Item' and contains a brief description: '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, there are several input fields and buttons:

- A dropdown for 'Quantity' set to 1.
- A note 'Delivery Time: 2 Days'.
- Buttons for 'Add to Cart' and 'Save as Draft'.
- A large blue button labeled 'Order Now'.
- A section titled 'Required Information' with tabs: 'Enter Smart Card Number', 'Enter Smart Card Name', 'Recharge Amount', 'Starting From?', 'Going To?', and 'No of Passengers'. The first tab is selected.
- Mandatory fields are marked with a red asterisk (\*).
- Other sections include 'Enter Smart Card Number', 'Enter Smart Card Name', 'Recharge Amount', 'Starting From?', 'Going To?', 'No of Passengers', 'Type of Journey' (radio buttons for None, Return, Single), 'Amount for Single Journey', 'Amount including Return', and 'Mode of Payment' (radio buttons for Others, Credit Card, Debit Card, UPI, where UPI is selected).

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.