

Metro Ticket Booking System

User Flow (UI / UX Design)

Purpose

This document explains the User Interface (UI), User Experience (UX), and navigation flow of the Automated Metro Ticket Booking System developed in ServiceNow. The goal is to provide commuters with a simple, fast, and digital ticket booking solution that supports QR ticket booking, metro card recharge, and cashless payment options through a single platform.

Metro Ticket Booking Catalog Item UI

The **Book A Metro Ticket** catalog item is designed with a clean, organized, and user-friendly layout. All input fields are arranged logically to minimize booking time and reduce the possibility of user errors.

Key UI Features

- Clearly labeled and easy-to-understand input fields
- Mandatory field indicators (*) for required information
- Proper grouping of journey, passenger, and payment details
- Simple and clean layout optimized for quick booking
- Easy access to **Order Now** and **Add to Cart** options

Dynamic UI Behavior

To improve usability, UI Policies and Catalog Client Scripts are implemented to control the visibility and behavior of form fields dynamically.

Dynamic Behaviors Implemented

- Form fields change based on the selected option (QR Ticket Booking or Metro Card Recharge)
- Metro card-related fields appear only when the recharge option is selected
- Journey-related fields are displayed only for QR ticket booking
- Fare amount fields update automatically based on journey type
- Mandatory field conditions adjust dynamically according to user selections

These features help in reducing form clutter, avoiding invalid submissions, and improving overall booking efficiency.

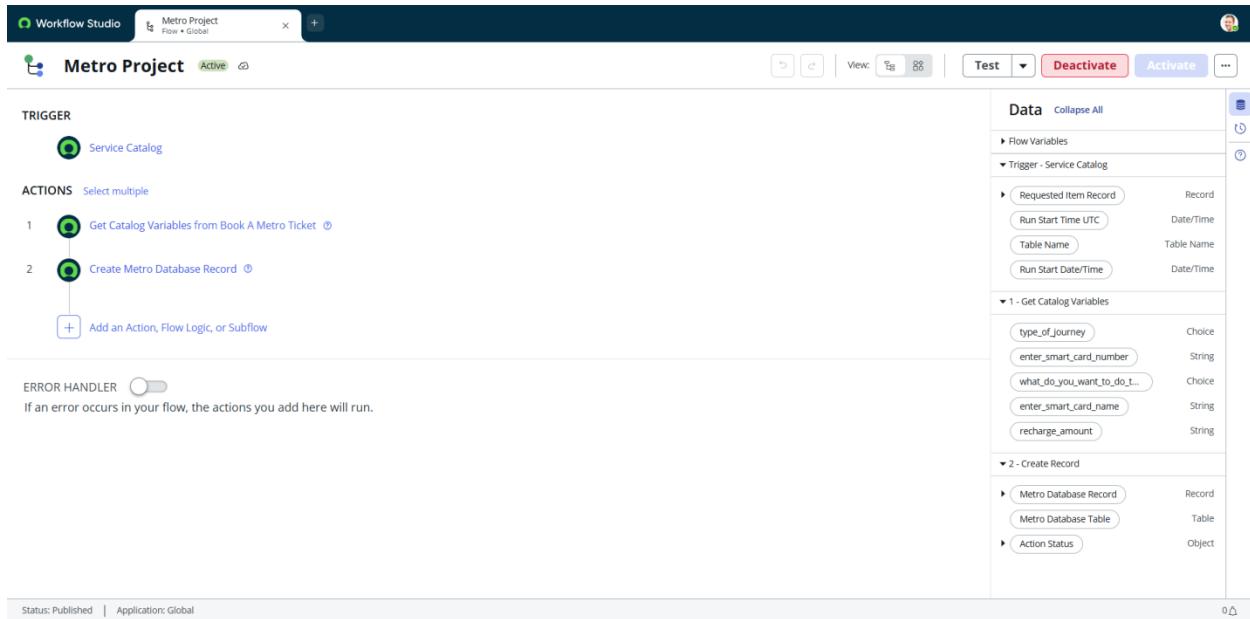
The screenshot shows a user interface for booking a metro ticket. At the top, there's a navigation bar with links for All, Favorites, History, Workspaces, Admin, and a search bar labeled 'Search' with a dropdown menu. Below the navigation is a breadcrumb trail: Service Catalog > Office > Services > Book A Metro Ticket. The main content area has a heading 'Book A Metro Ticket' with a star icon. A descriptive text below the heading states: '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.' On the left, there's a logo for 'MY CITY MY METRO MY PRIDE' featuring a stylized map of a city. To the right, there's a sidebar with an 'Order this Item' section containing 'Quantity' (set to 1), 'Delivery time' (set to 2 Days), and buttons for 'Order Now' and 'Add to Cart'. Below that is a 'Shopping Cart' section showing it's 'Empty'. The main form area contains several input fields and dropdown menus:

- 'What do you want to do Today?' with options: None (selected), Recharge Metro Card, Book QR Ticket.
- Mandatory fields:
 - 'Enter Smart Card Number'
 - 'Enter Smart Card Name'
 - 'Recharge Amount'
 - 'Starting from?'
 - 'Going To?'
 - 'No of Passangers'
 - 'No of Passangers'
- 'Type of Journey' with options: None (selected), Single, Return.
- 'Amount for Single Journey'
- 'Amount including Return'
- 'Mode of Payment'
 - Others
 - UPI (selected)
 - Net Banking
 - Debit Card
 - Credit Card
- 'Enter Payment Mode'

Figure 1: Book A Metro Ticket catalog item form

User Interaction Flow

Once the user submits the form, the system validates all mandatory fields, calculates the fare automatically, captures the selected payment mode, and processes the request successfully with minimal manual intervention.



User Experience Validation

The UI/UX design was validated based on ease of navigation, reduced booking time, minimal data entry, effective error handling through validations, and smooth interaction across different devices.

Conclusion

The Automated Metro Ticket Booking System delivers a seamless, paperless, and efficient ticketing experience for commuters. By combining structured catalog forms, dynamic UI behavior, and automated backend workflows, the system enhances usability, speeds up ticket processing, and supports a fully digital metro ticketing solution.