Data Architecture

Purpose of Data Architecture

The purpose of this document is to describe the data model and table structure used in the **Metro Ticket Booking** and Smart Card Management application developed in ServiceNow.

The data architecture ensures that all metro ticket booking and recharge transactions are stored in a structured, secure, and auditable format to support automation, reporting, and user tracking.

Overview of Custom Tables

To store and manage metro ticket and smart card information, a custom table named Metro Database has been created.

This table acts as the central data repository for all metro ticket bookings, smart card details, and recharge transactions submitted through the ServiceNow Service Catalog.

Table Details

Attribute	**Value**
Table Label	Metro Database
Table Name	u_metro_database
Application Scope	Global
Purpose	Store structured data captured from metro ticket booking and recharge requests

Custom Table: u_metro_database

The u_metro_database table stores all essential details related to metro services, including smart card information, user details, recharge amount, and payment mode.

The table is populated automatically through Flow Designer automation when a metro ticket booking or recharge catalog item is submitted.

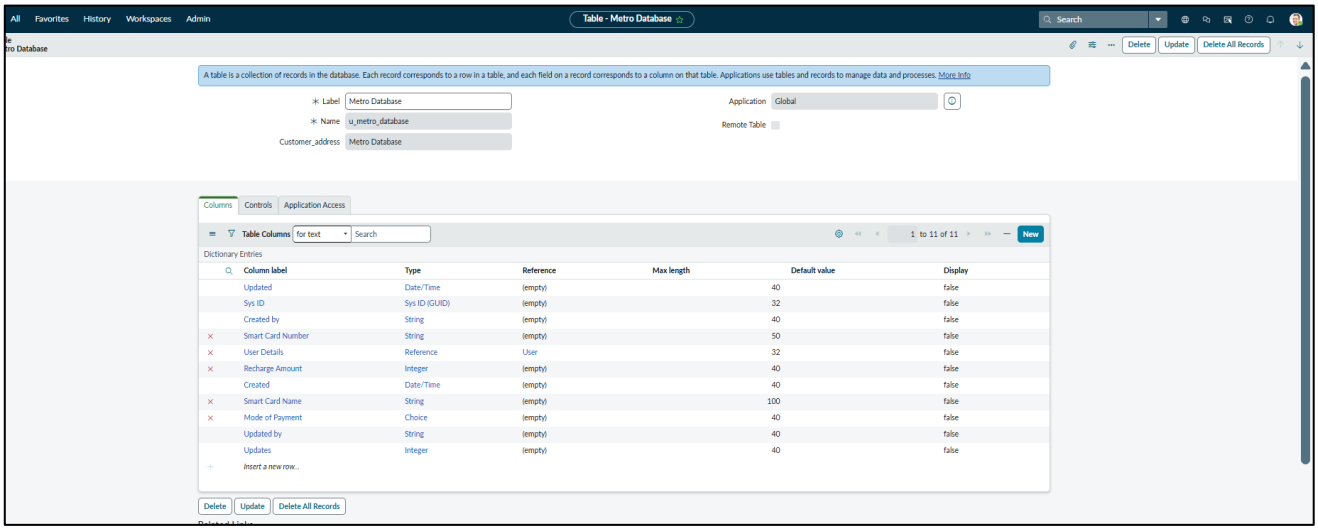

Figure 1: Metro Database (u_metro_database) table structure in ServiceNow

Field Properties

Reference Fields:

- **User Details** → References **User (sys_user)** table

Choice Fields:

- **Mode of Payment** → Choice field to maintain standardized payment options (e.g., UPI, Debit Card, Credit Card, Net Banking)

System Fields:

- **Sys ID**
- **Created**
- **Created By**
- **Updated**
  These fields are system-generated and read-only for audit purposes.

Mandatory Fields:

- Smart Card Number
- Smart Card Name
- Recharge Amount
- Mode of Payment
- User Details

Table Relationships

The **u_metro_database** table maintains relationships with existing ServiceNow tables:

- **User Table (sys_user)**
  Used to store and reference metro users and smart card holders.

These relationships ensure:

- Secure user identification
- Role-based access control
- Accurate tracking of recharge and booking history

Data Flow Overview

1. User submits a **Metro Ticket Booking or Smart Card Recharge** request via Service Catalog
2. Catalog variables such as Smart Card Number, Recharge Amount, and Payment Mode are captured
3. Flow Designer maps and stores the data into **u_metro_database**
4. Record is updated automatically upon successful submission
5. Final transaction details are stored for reporting and tracking

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Conclusion

The data architecture of the Metro Ticket Booking System ensures a clean, scalable, and auditable data structure.

By using a custom table integrated with ServiceNow's native User table, the system supports efficient automation, accurate transaction tracking, and compliance with service management best practices.