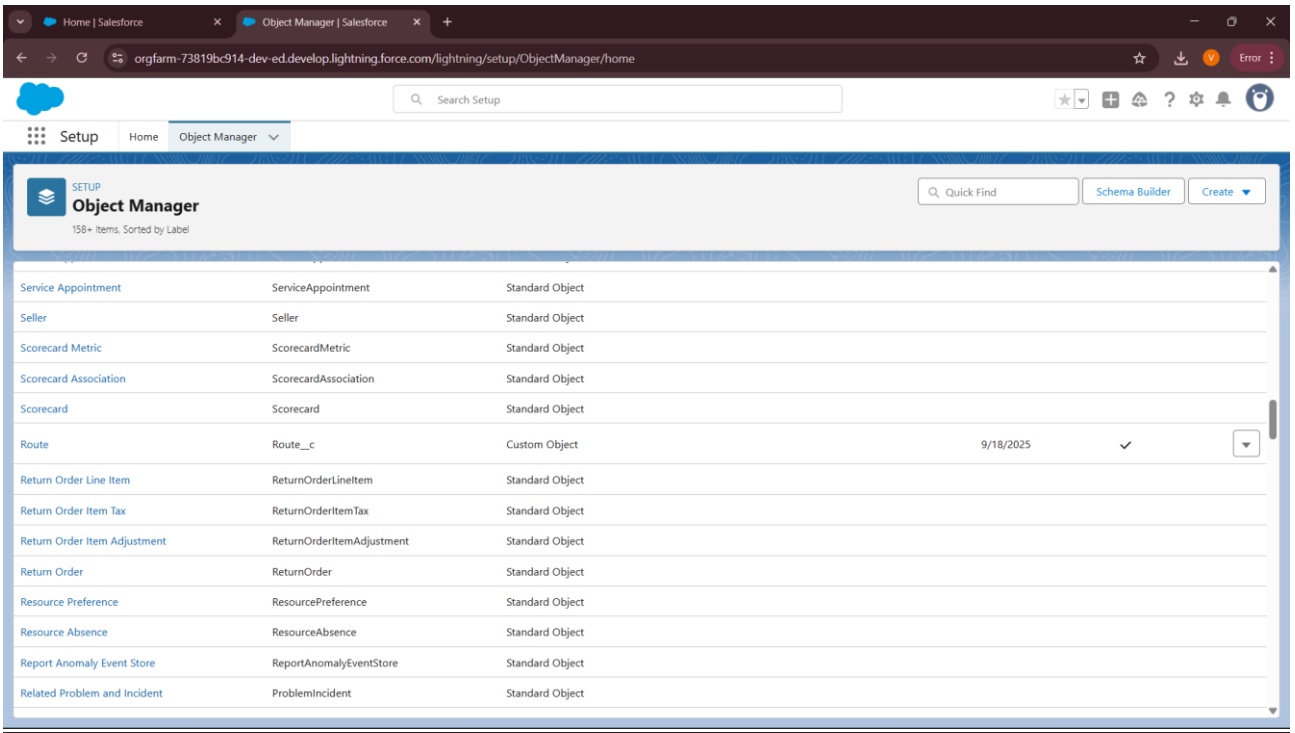
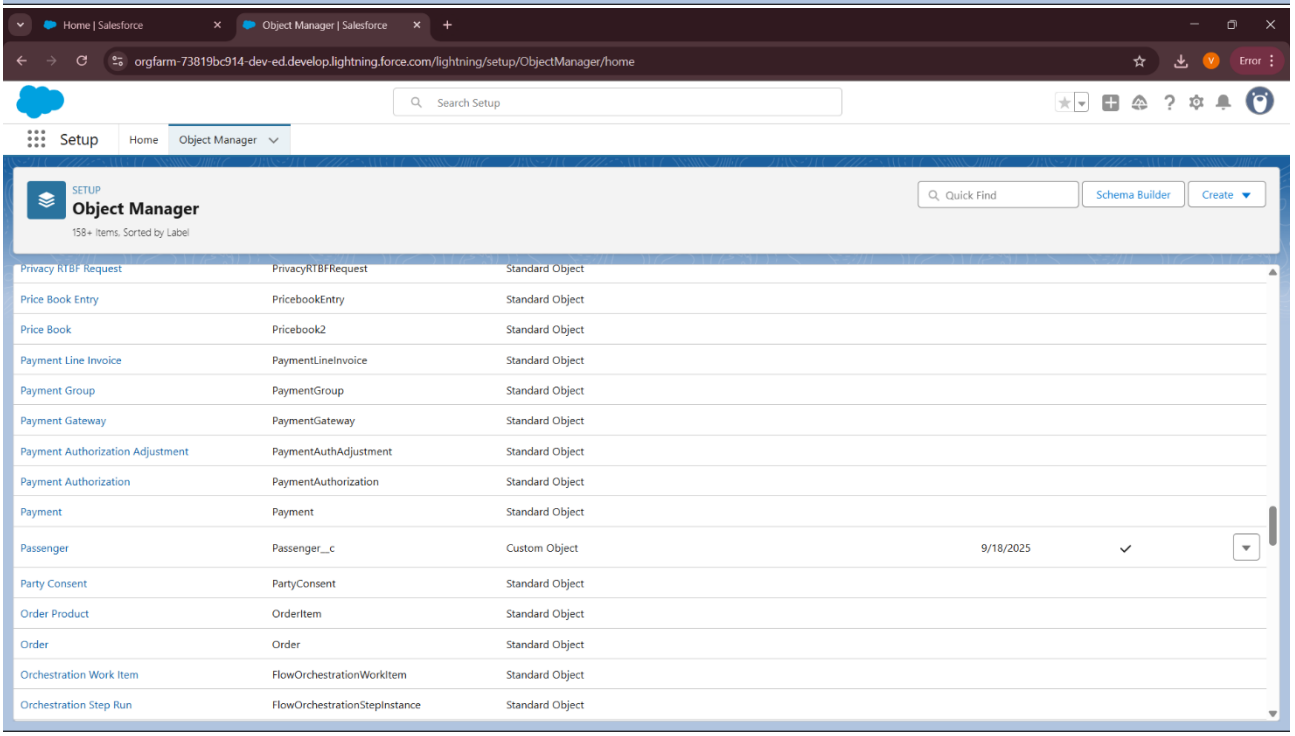
Train Ticket Booking Management System

In this phase, we design and configure the data model for the **Train Ticket Booking System**. This involves creating custom objects, fields, relationships, record types, layouts, and schema visualization.

🔷 1. Standard & Custom Objects

- **Standard Objects Used**: User (for Agent assignment), Contact (optional alternative to Passenger).
- **Custom Objects Created**:
    - **Train__c** → Stores train details.
    - **Passenger__c** → Stores passenger/customer details.
    - **Ticket__c** → Stores ticket information (PNR, journey, status).
    - **Booking__c** (optional junction) → Groups passenger & ticket if many-to-many is required.
    - **Route__c** → Stores source, destination, and station details.

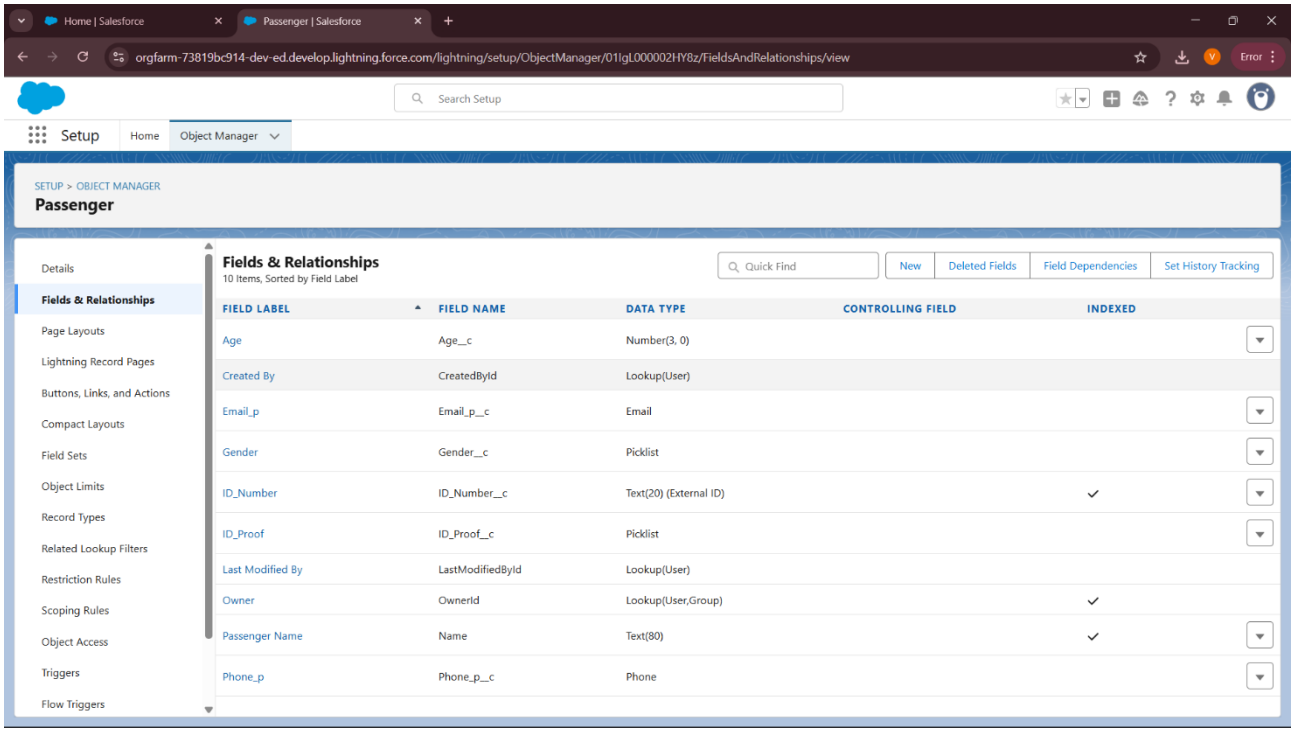




🔷 2. Fields

Example Fields Created:

- **Train__c** → Train_No, Train_Name, Source, Destination, Class_Type, Total_Seats, Available_Seats.
- **Passenger__c** → Name, Age, Gender, Email, Phone, Wallet_Balance, ID_Proof, ID_Number.
- **Ticket__c** → PNR (Auto Number), Journey_Date, Status, Seat_No, Price, Booking_Date, Passenger (Lookup), Train (Lookup), Assigned Agent (Lookup to User), Payment_Status, Refund_Status.
- **Route__c** → Route_Name, Source_Station, Destination_Station, Station_List, Departure_Time, Arrival_Time.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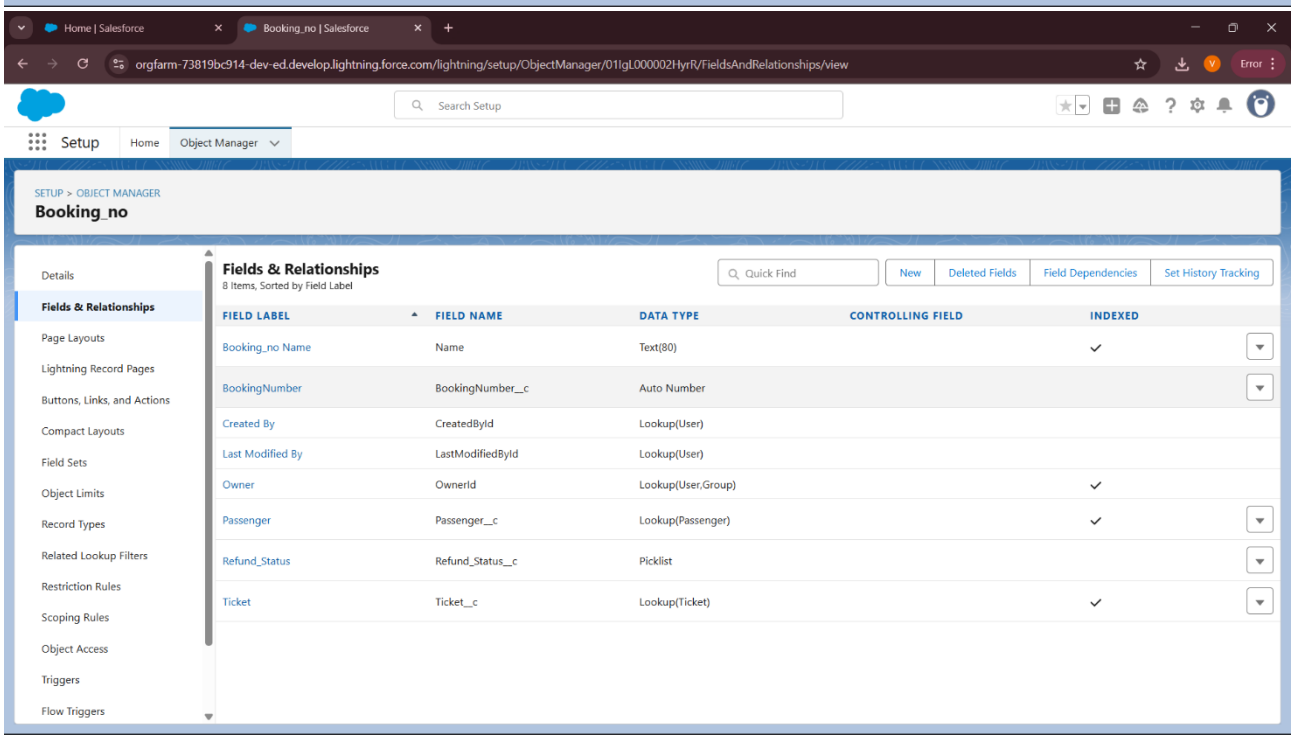
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Scoping Rules
Object Access
Triggers
Flow Triggers
Fields & Relationships
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New
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Field Dependencies
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FIELD LABEL
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CONTROLLING FIELD
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Text(80)
BookingNumber
BookingNumber__c
Auto Number
Created By
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Lookup(User)
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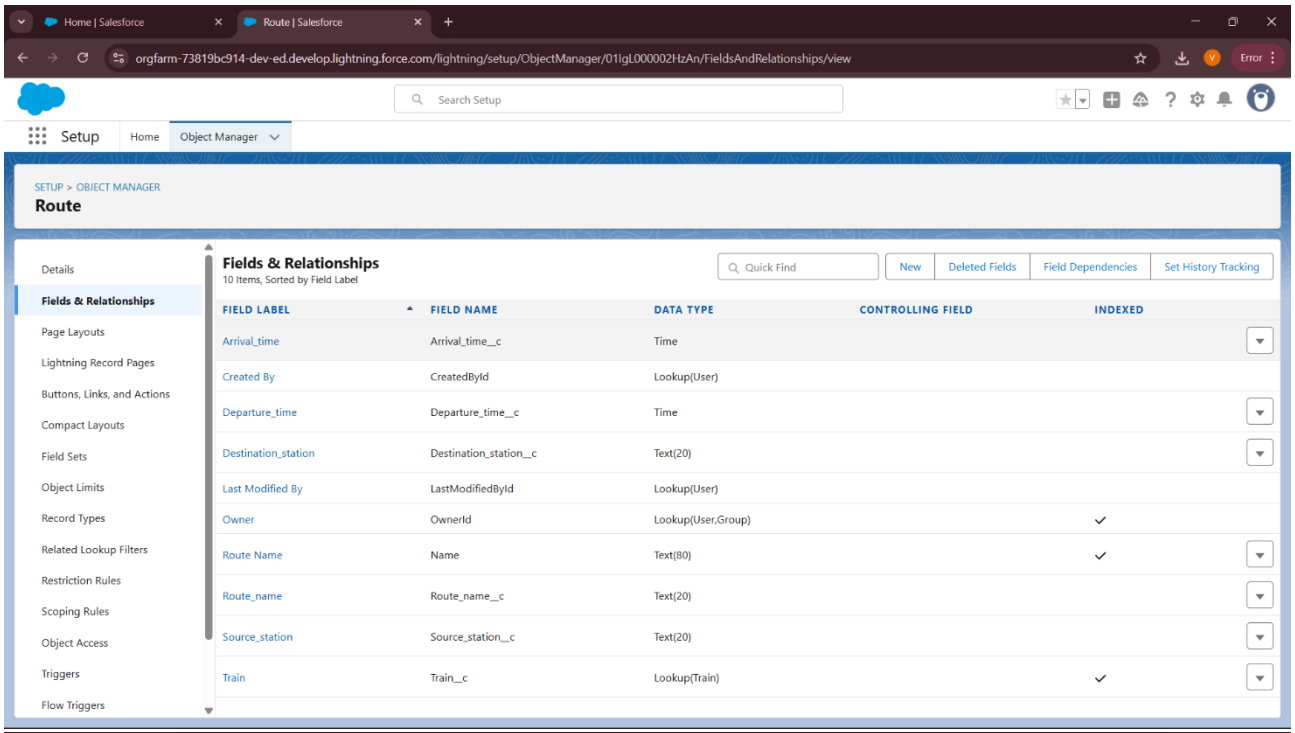
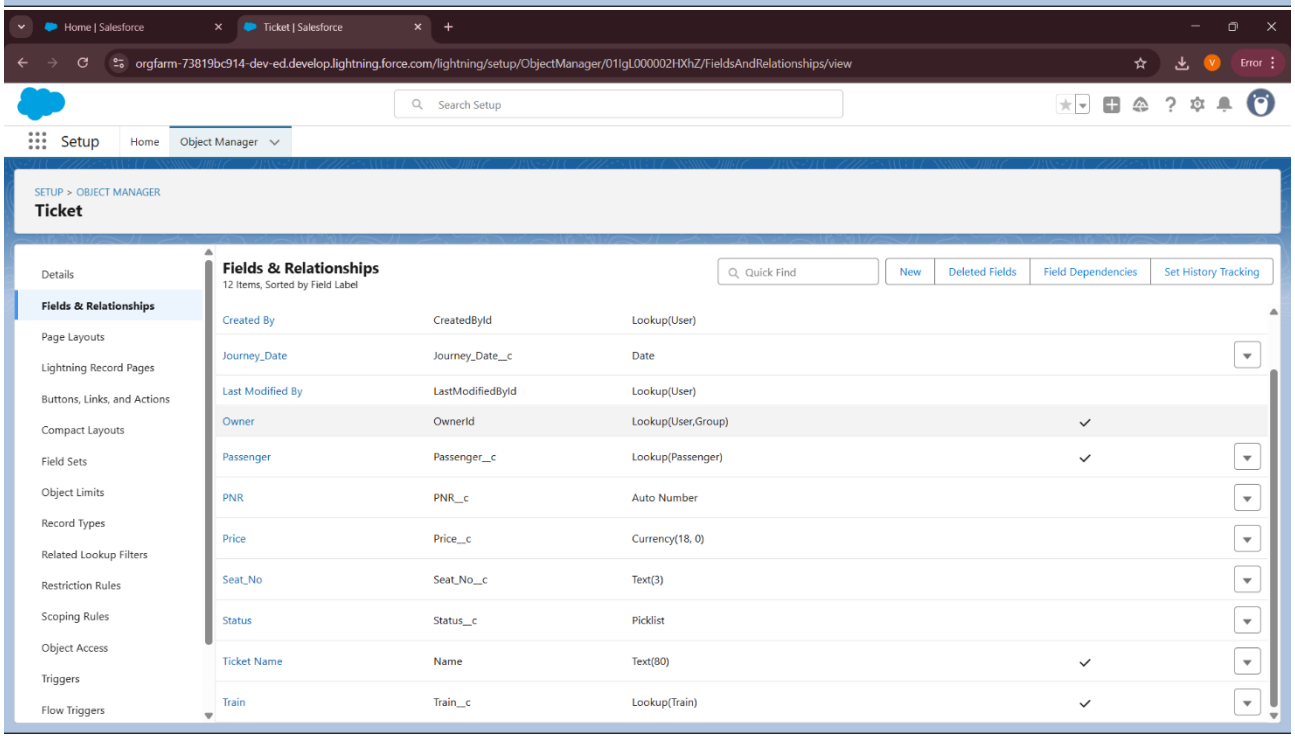
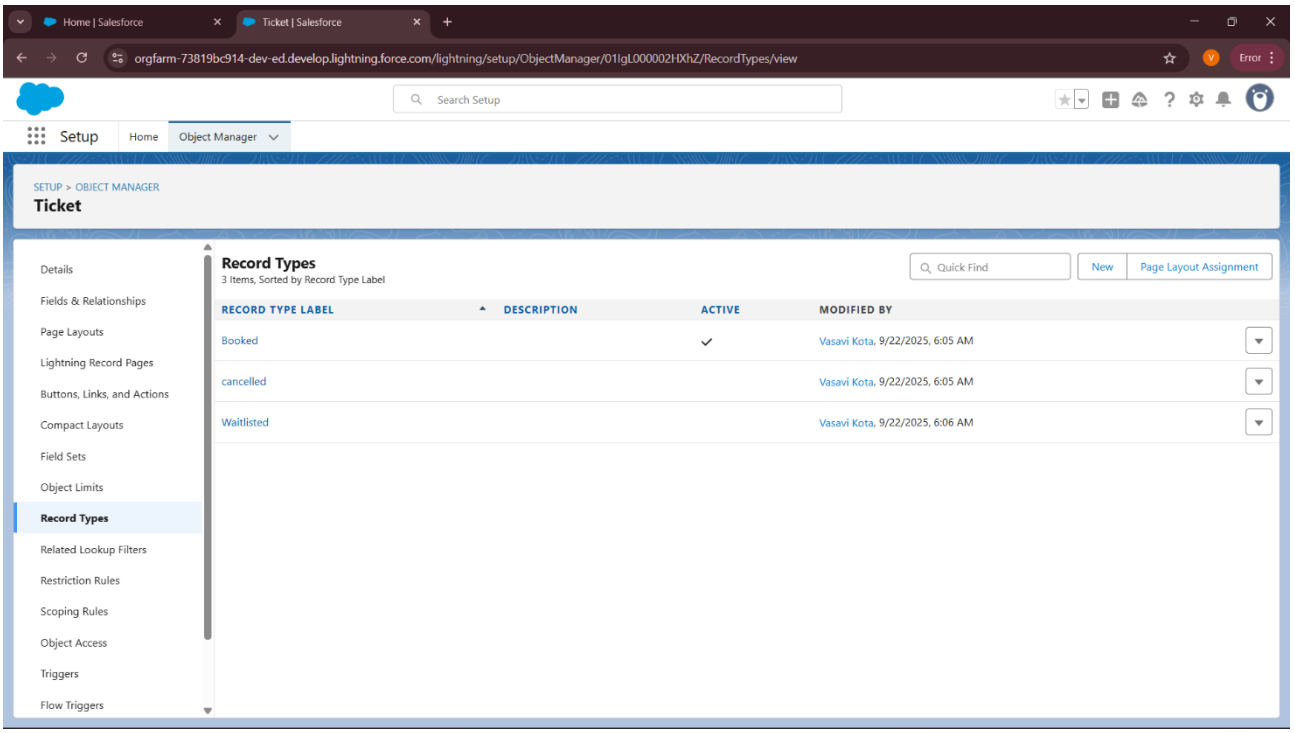




🔷 3. Record Types

Created record types on **Ticket__c** to manage business processes:

- Booked
- Cancelled
- Waitlisted
- Pending Payment



🔷 4. Page Layouts

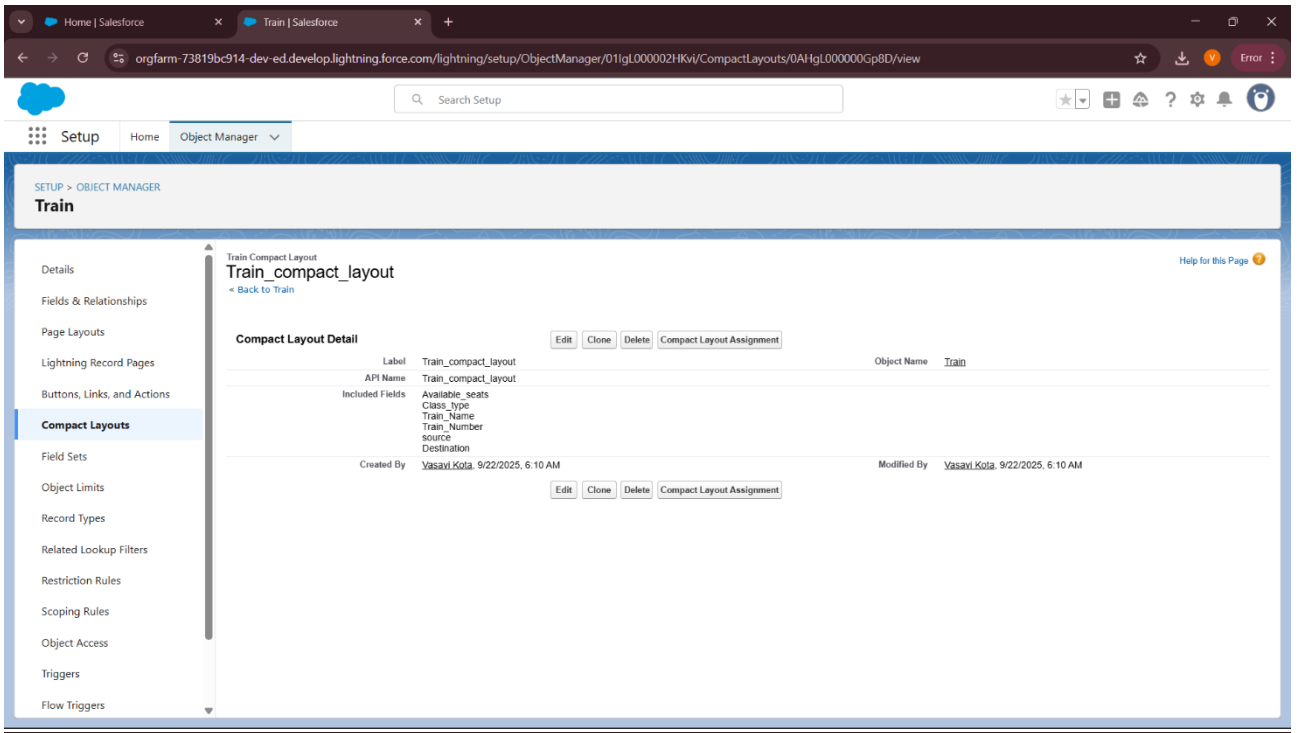
- **Ticket — Passenger Layout**: Only booking details, no refund or agent fields.
- **Ticket — Agent Layout**: Includes Assigned Agent, Refund Status, Payment Status.
- **Ticket — Admin Layout**: Full access to all fields.

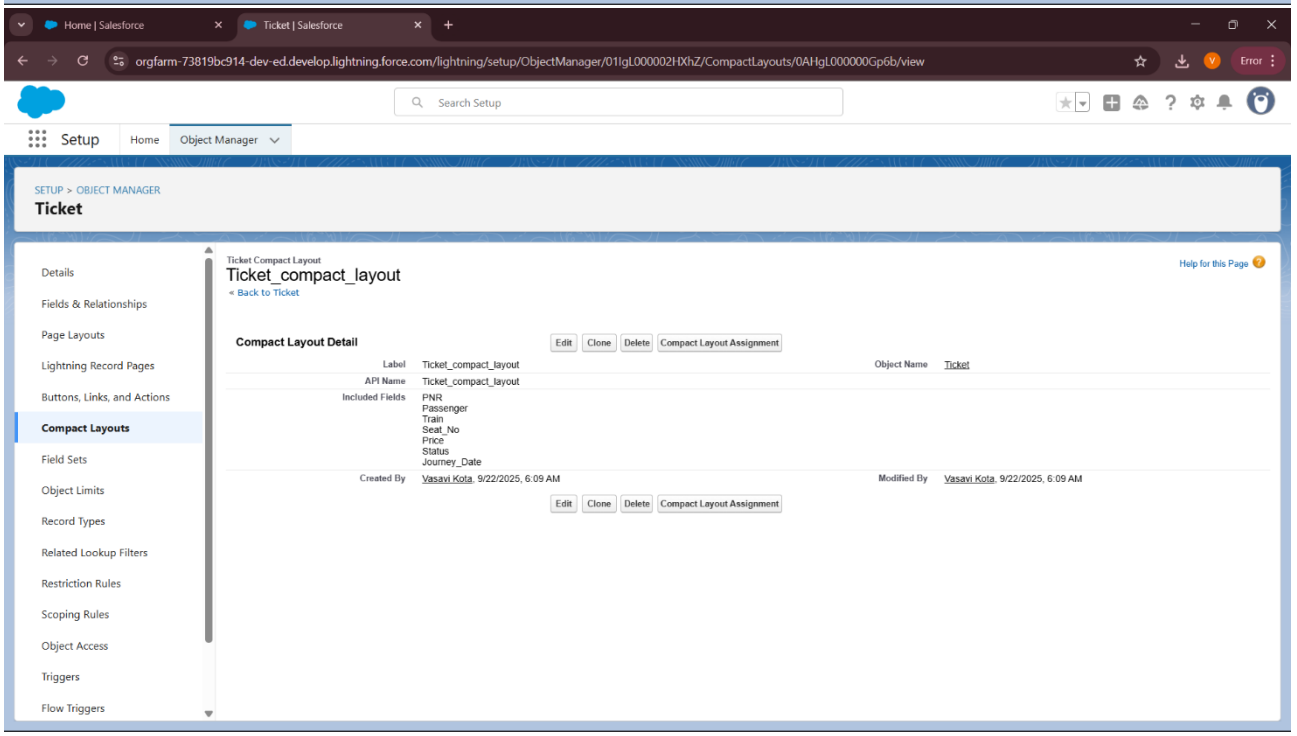
Layouts are assigned to profiles based on record type.

🔷 5. Compact Layouts

Compact layouts were configured for quick view in Lightning header & mobile:

- **Train__c** → Train Name, Train No, Available Seats.
- **Ticket__c** → PNR, Status, Journey Date, Train.

- 

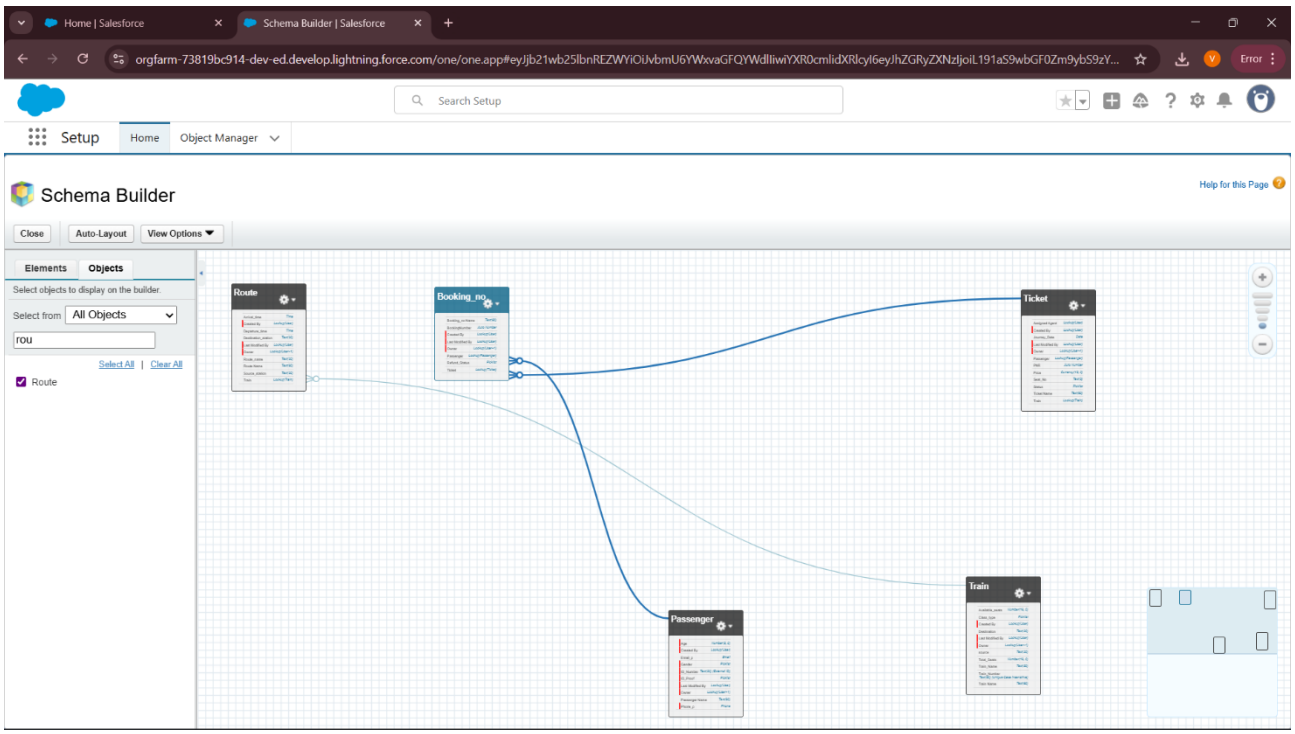
- 

🔷 6. Schema Builder

- Verified relationships using **Schema Builder**.
- Relationships configured:
  - **Ticket → Train** = Lookup (1 Train : Many Tickets).
  - **Ticket → Passenger** = Lookup (1 Passenger : Many Tickets).
  - **Ticket → Assigned Agent** = Lookup(User).
  - **Booking → Ticket & Passenger** = optional Master-Detail (junction).

- **Route → Train** = Lookup.

- Schema Builder used to visualize and confirm links between objects.



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7. Relationship Choices

- **Lookup** used where we want flexibility (Train ↔ Ticket, Passenger ↔ Ticket).
- **Master-Detail** used in junction (Booking ↔ Ticket, Booking ↔ Passenger) if grouping is required.
- **Hierarchical Relationship** is only for User object (not applied here).
- This design ensures data safety (Tickets not auto-deleted if Train is deleted)