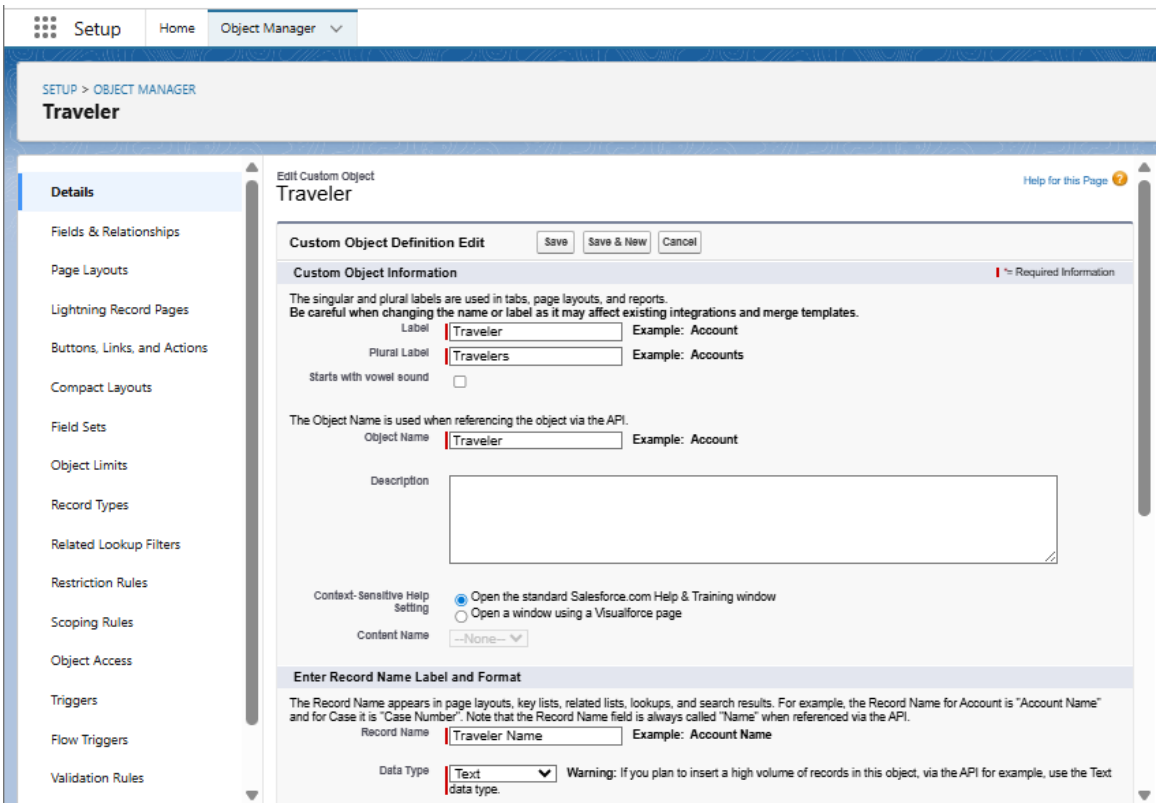
Phase 3: Data Modeling & Relationships

1. Standard & Custom Objects:

Path: Setup → Object Manager → Create → Custom Object

A. Traveler:

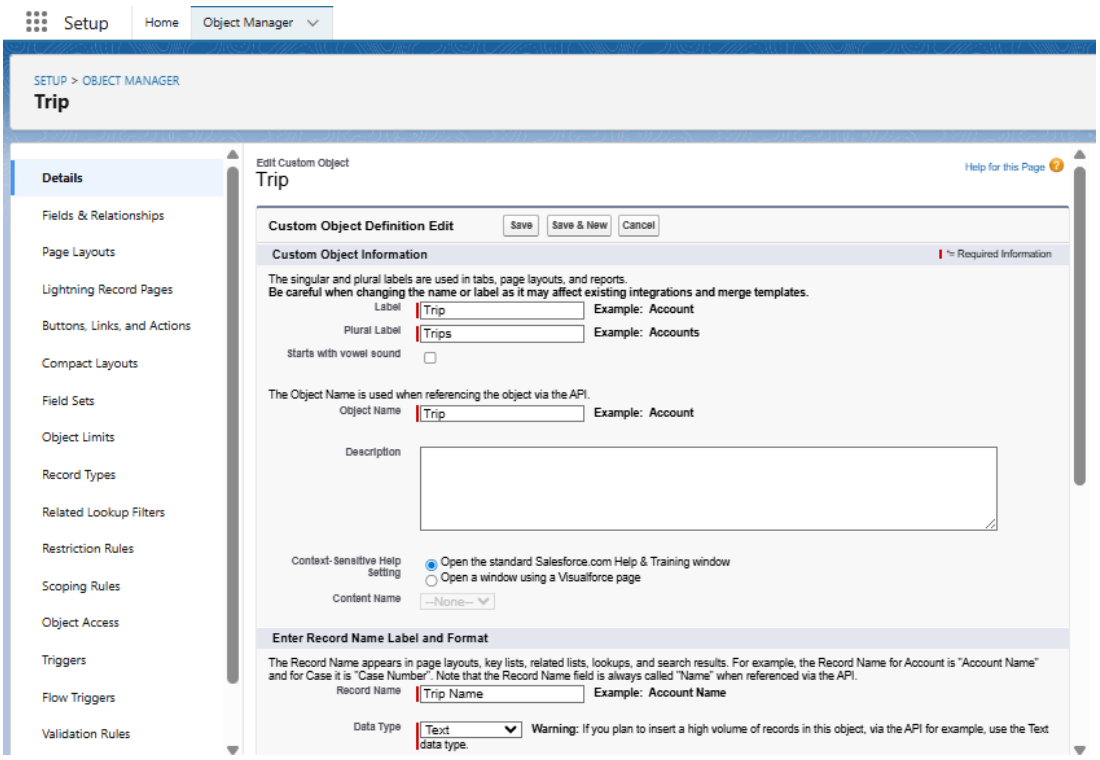
1. Click Create → Custom Object.
    - Label: Traveler
    - Plural Label: Travelers
    - Record Name: Traveler Name (Data Type: Text)
    - Check Launch New Custom Tab Wizard after saving → Save.



B. Trip:

Setup → Object Manager → Create → Custom Object:

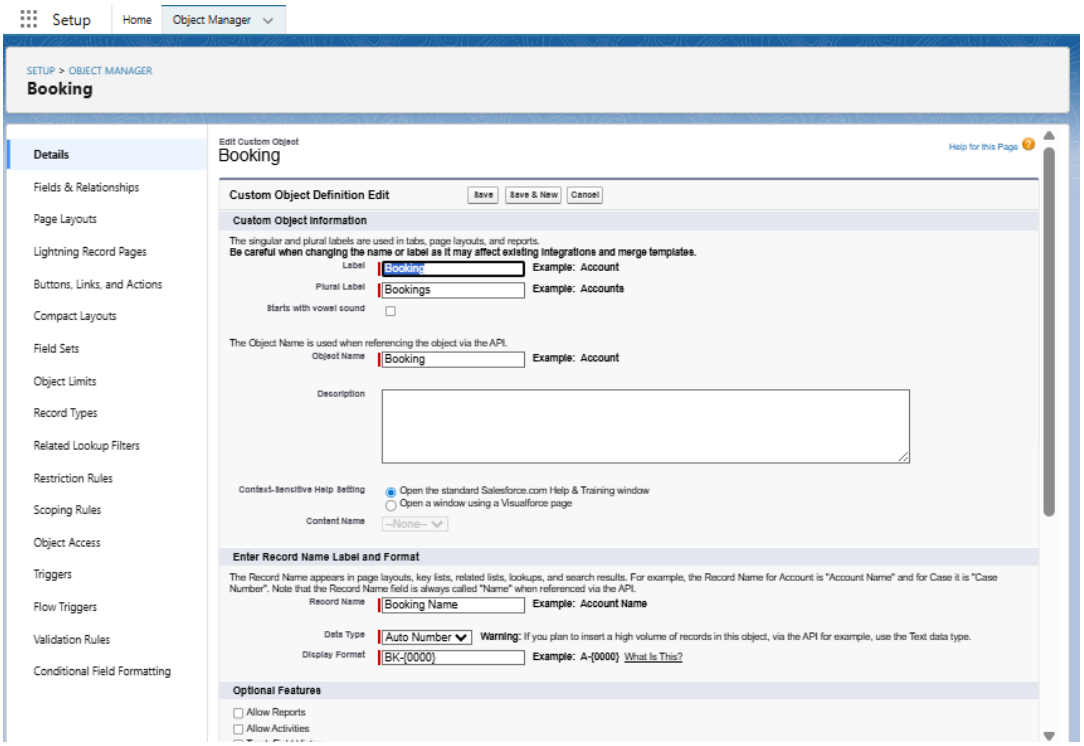
- Label: Trip, Record Name: Trip Name (Text) → Launch tab wizard → Save.



C. Booking:

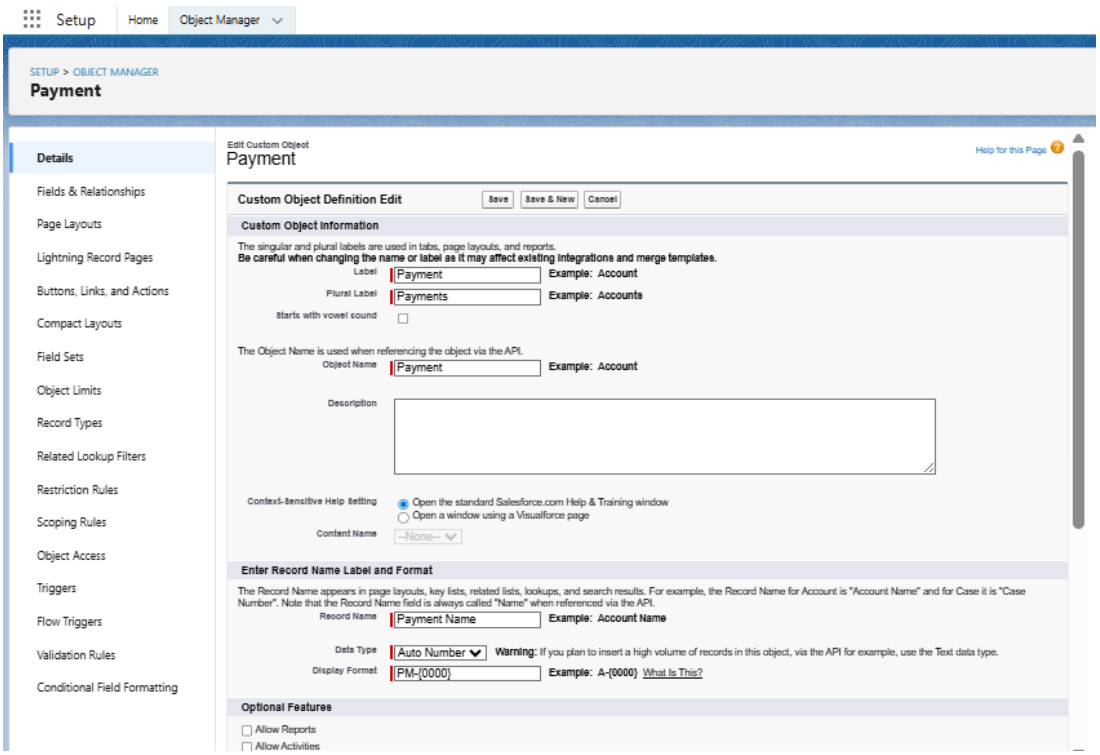
Setup → Object Manager → Create → Custom Object:

- Label: Booking, Record Name: Booking Number (Auto Number) → Format BK- {0000} → Launch tab wizard → Save.



D. Payment:

1. Setup → Object Manager → Create → Custom Object:
    - Label: Payment, Record Name: Payment Number (Auto Number) Format PM- {0000} → Launch tab wizard → Save.

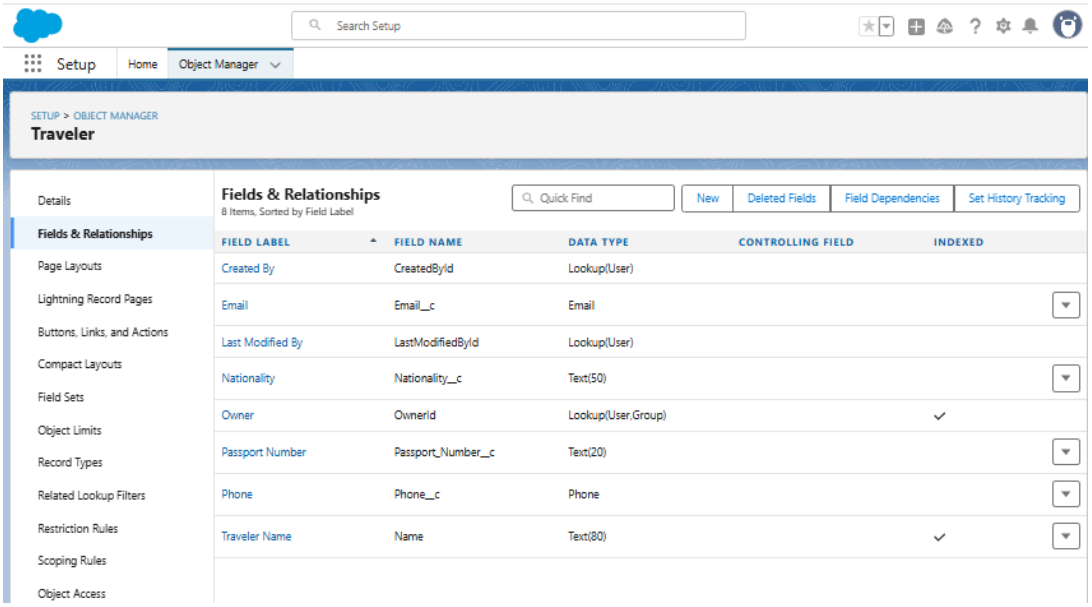


2. Fields and Relationships:

A. Traveler:

In Traveler object → Fields & Relationships → New → add fields:

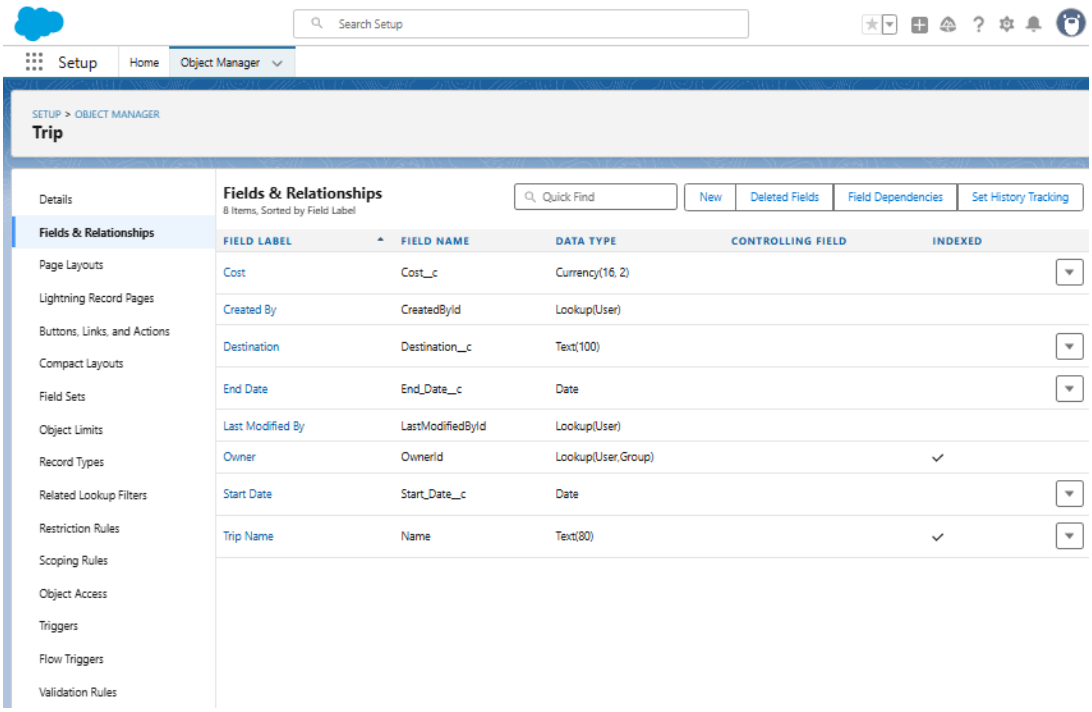
- Email → Data Type: Email
- Phone → Data Type: Phone
- Passport Number → Data Type: Text (Length 20)
- Nationality → Data Type: Text (Length 50)
- Save each.



B. Trip:

In Trip → Fields & Relationships → New:

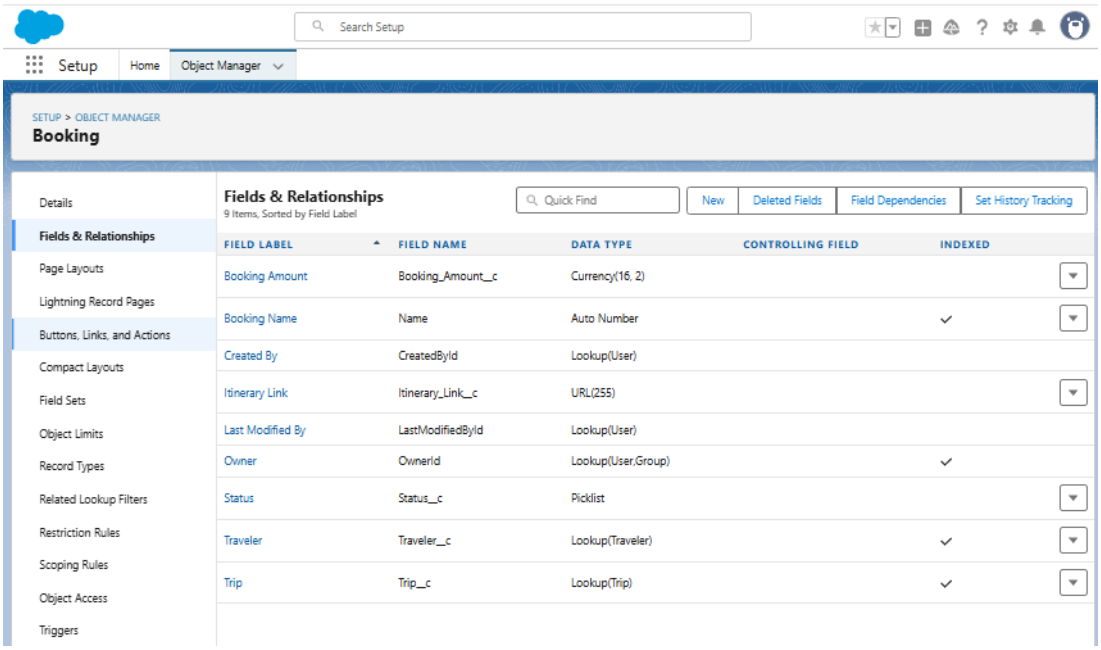
- Destination → Text (100)
- Start Date → Date
- End Date → Date
- Cost → Currency (16,2)
- Save each.



C. Booking:

In Booking → Fields & Relationships → New:

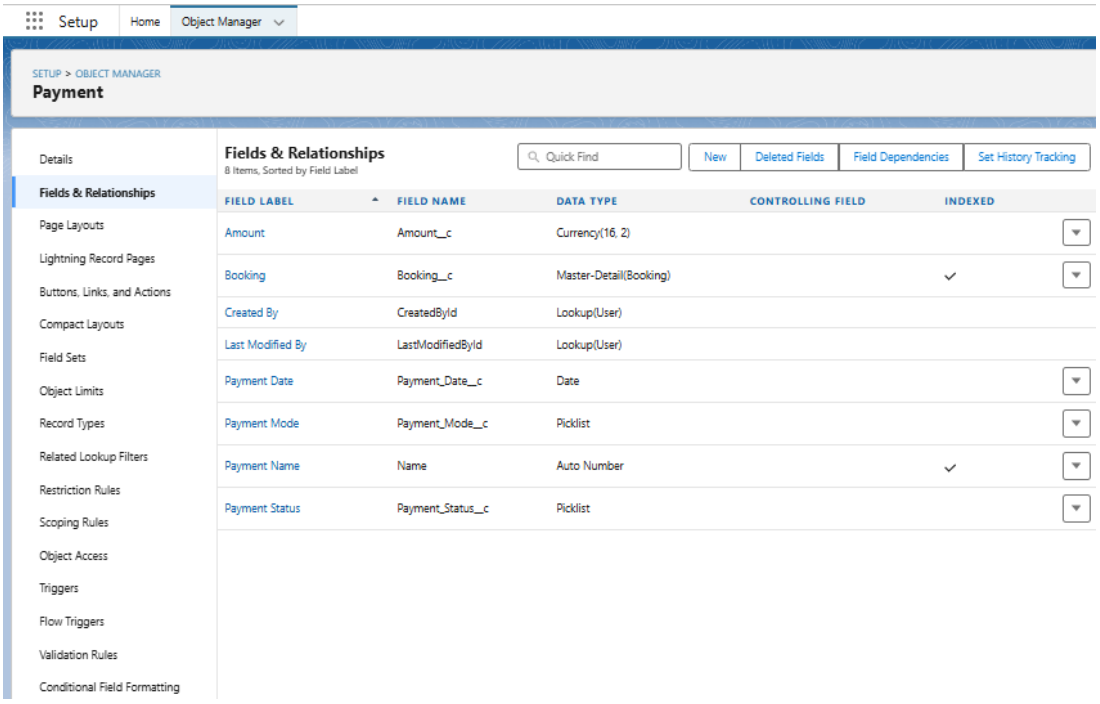
- Traveler → Lookup Relationship → Related To: Traveler → Next/Save.
- Trip → Lookup Relationship → Related To: Trip → Save.
- Status → Picklist → Values: Enquiry, Confirmed, Completed, cancelled → Save.
- Itinerary Link → URL → Save.



D. Payment:

In Payment → Fields & Relationships → New:

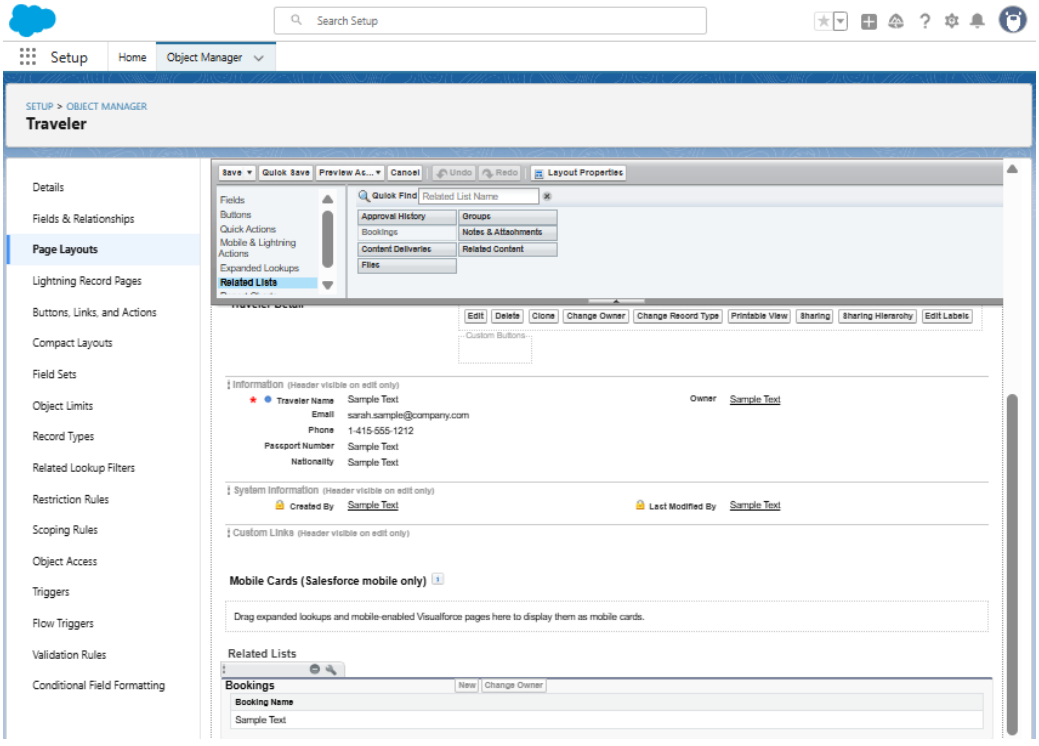
- Booking → Master-Detail Relationship → Related To: Booking → Save.
- Amount → Currency (16,2) → Save.
- Payment Date → Date → Save.
- Payment Mode → Picklist → Values: Cash, Card, UPI, Net Banking → Save.
- Payment Status → Picklist → Values: Pending, Paid,
- Overdue → Save



3. Page Layouts:

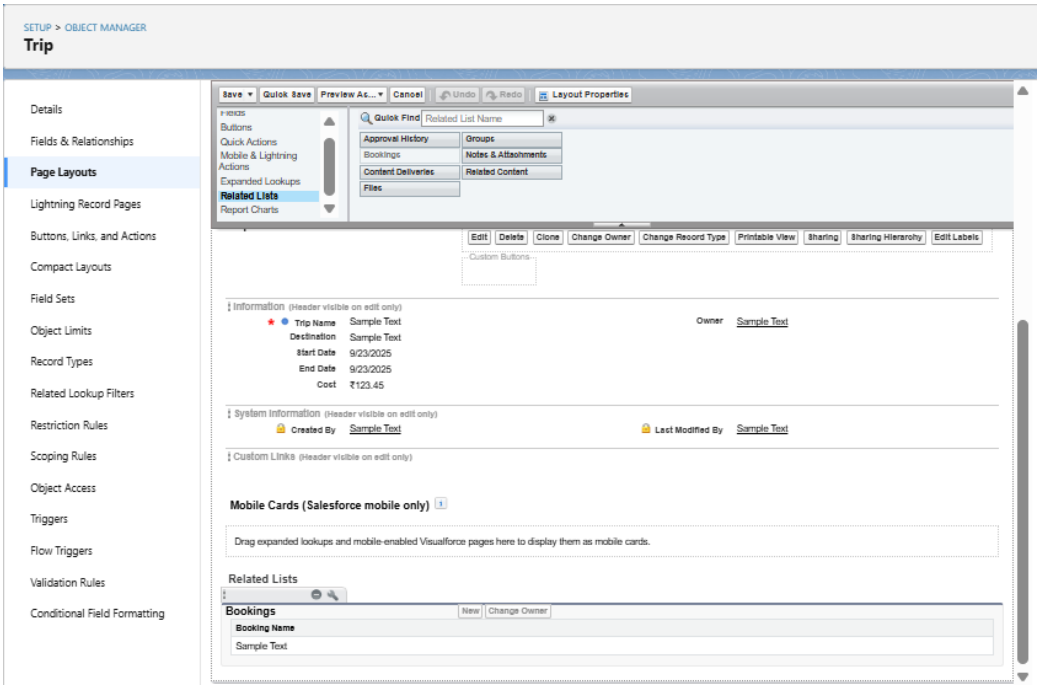
A. Traveler:

Traveler → Page Layouts → open default layout → from Related Lists drag Bookings into the related lists area → Save.



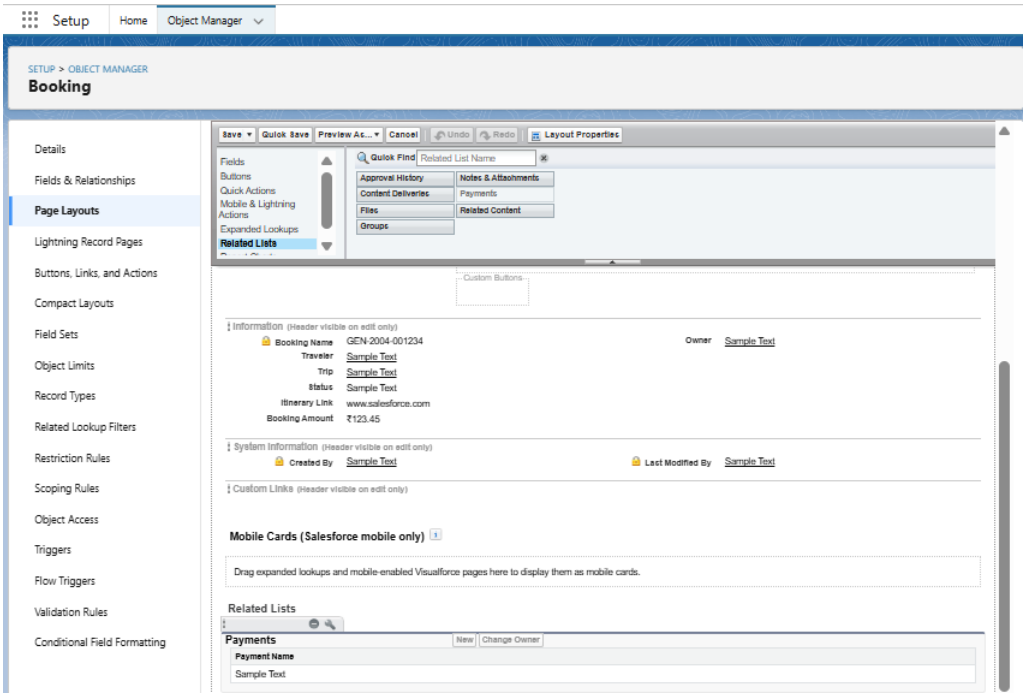
B. Trip:

Trip → Page Layouts → edit layout → add Bookings related list → Save.



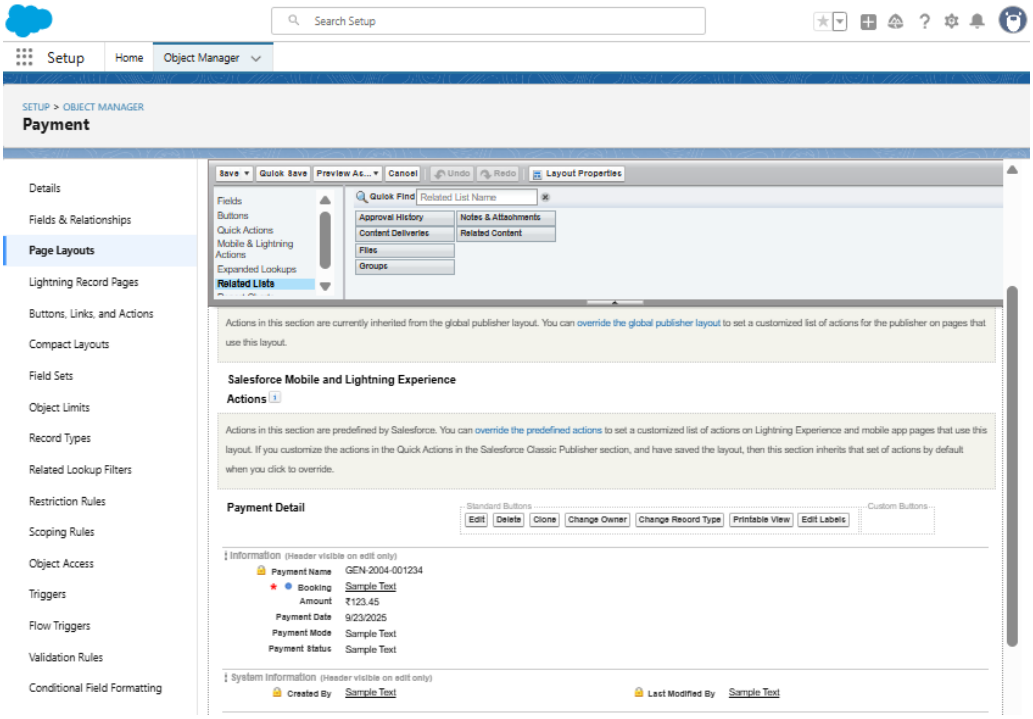
C. Booking:

Booking → Page Layouts → edit layout → ensure fields Traveler, Trip, Status, Itinerary Link, Booking Amount visible → drag Payments related list in → Save.



D. Payment:

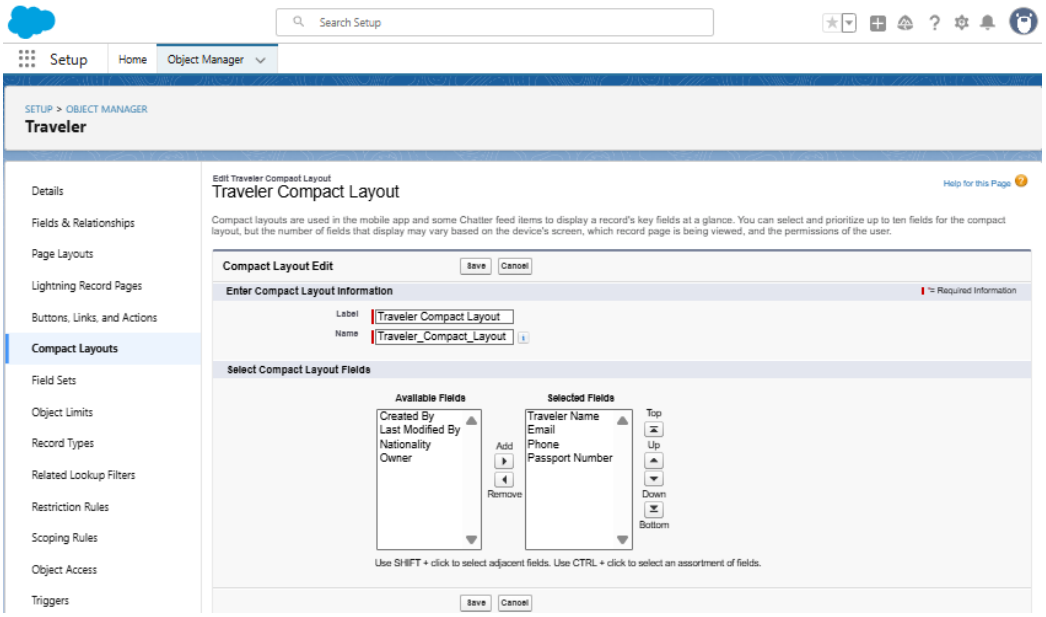
Payment → Page Layouts → ensure Booking field is on page → Save.



4. Compact Layouts:

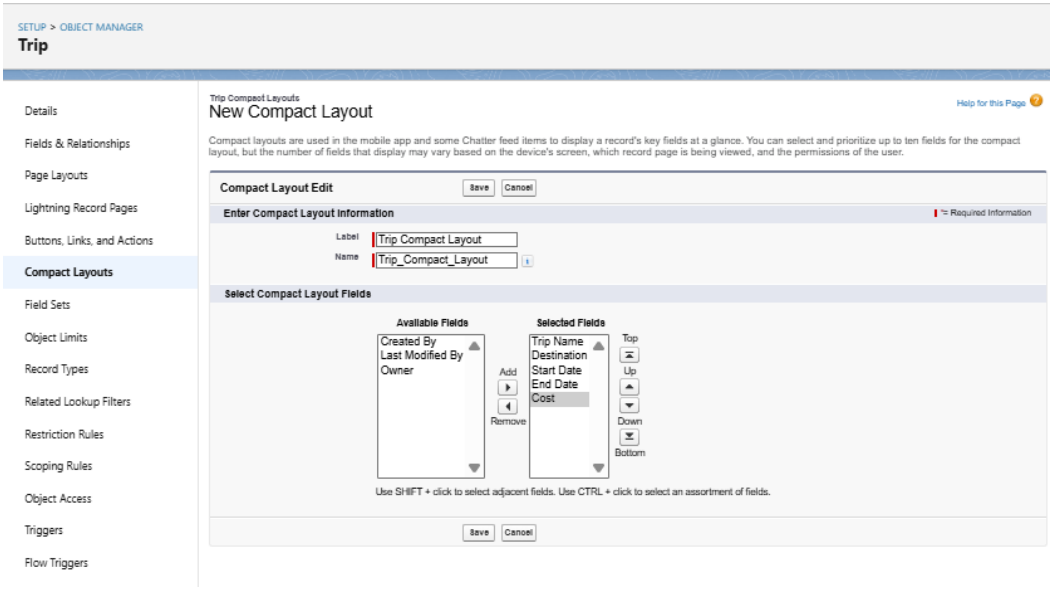
A. Traveler Compact Layout:

- Click New → Label = Traveler Compact Layout
- Fields to display: Traveler Name, Email, Phone, Passport Number
- Save → Click Compact Layout Assignment → Assign as Primary.



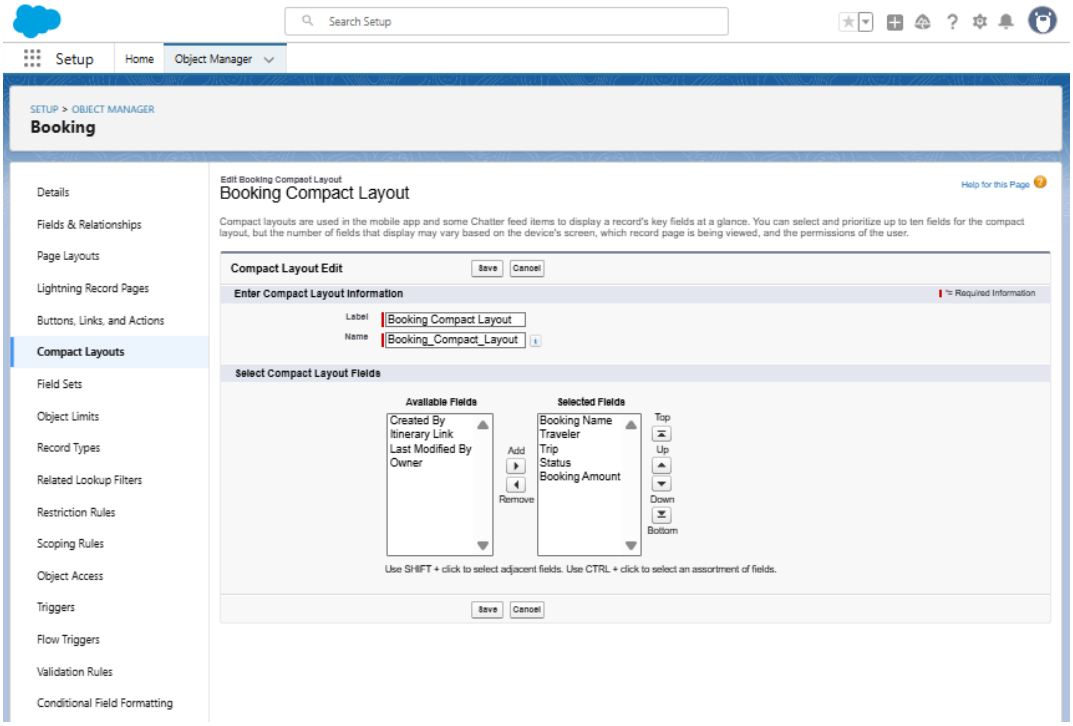
B. Trip Compact Layout:

- New → Label = Trip Compact Layout
- Fields: Trip Name, Destination, Start Date, End Date, Cost
- Save & assign.



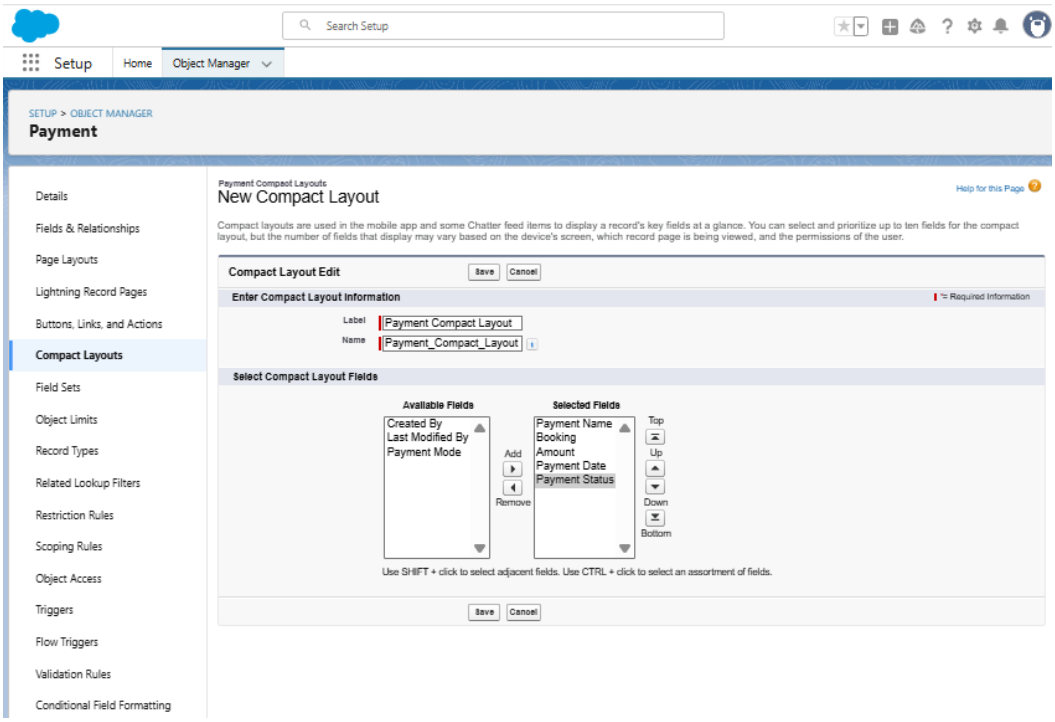
C. Booking Compact Layout:

- New → Label = Booking Compact Layout
- Fields: Booking Number, Traveler, Trip, Status, Booking Amount
- Save & assign.



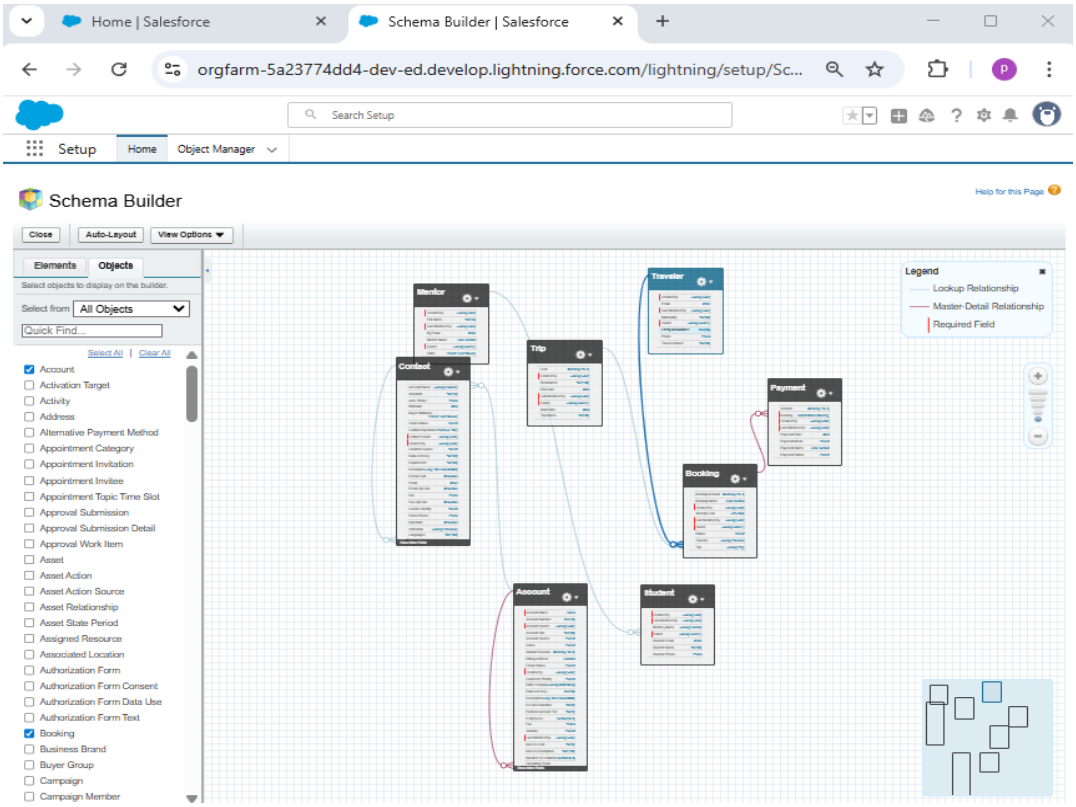
D. Payment Compact Layout:

- New → Label = Payment Compact Layout
- Fields: Payment Number, Booking, Amount, Payment Date, Payment Status
- Save & assign.



5. Schema Builder:

1. In Setup → search Schema Builder.
2. On the left pane, check the boxes for Traveler, Trip, Booking, Payment.
   You'll see:
3. Traveler ↔ Booking (Lookup)
4. Trip ↔ Booking (Lookup)
5. Booking ↔ Payment (Master-Detail)



6. Lookup vs Master-Detail Relationships:

Lookup Relationship:

- Used between Traveler–Booking and Trip–Booking.
- Allows related records but does not enforce dependency.

Master-Detail Relationship:

- Used between Booking–Payment.
- Child (Payment) cannot exist without parent (Booking).

7. Junction Objects:

- A Junction Object is used to model a many-to-many relationship.
- In this app, Booking is effectively a Junction Object because:
  - One Traveler can have many Bookings.
  - One Trip can have many Bookings.
  - Booking connects them together.
- This design allows multiple Travelers to book the same Trip, and each Traveler can book multiple Trips.