

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.

The screenshot shows the Salesforce 'Edit Custom Object' page for a custom object named 'Traveler'. The page is titled 'SETUP > OBJECT MANAGER Traveler'. On the left, there is a sidebar with navigation links: Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Restriction Rules, Scoping Rules, Object Access, Triggers, Flow Triggers, and Validation Rules. The main content area is titled 'Edit Custom Object Traveler' and contains the 'Custom Object Definition Edit' form. The form has three main sections: 'Custom Object Information', 'Context-Sensitive Help Setting', and 'Enter Record Name Label and Format'. In the 'Custom Object Information' section, the 'Label' is 'Traveler' (Example: Account), the 'Plural Label' is 'Travelers' (Example: Accounts), and the 'Object Name' is 'Traveler' (Example: Account). The 'Context-Sensitive Help Setting' section has two radio buttons: 'Open the standard Salesforce.com Help & Training window' (selected) and 'Open a window using a Visualforce page'. The 'Enter Record Name Label and Format' section has a 'Record Name' field with 'Traveler Name' (Example: Account Name) and a 'Data Type' dropdown set to 'Text'. A warning message at the bottom states: 'Warning: If you plan to insert a high volume of records in this object, via the API for example, use the Text data type.'

B. Trip:

Setup → Object Manager → Create → Custom Object:

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

Setup Home Object Manager

SETUP > OBJECT MANAGER

Trip

Details

- Fields & Relationships
- Page Layouts
- Lightning Record Pages
- Buttons, Links, and Actions
- Compact Layouts
- Field Sets
- Object Limits
- Record Types
- Related Lookup Filters
- Restriction Rules
- Scoping Rules
- Object Access
- Triggers
- Flow Triggers
- Validation Rules

Edit Custom Object
Trip

Custom Object Definition Edit Save Save & New Cancel

Custom Object Information Required Information

The singular and plural labels are used in tabs, page layouts, and reports. Be careful when changing the name or label as it may affect existing integrations and merge templates.

Label Trip Example: Account

Plural Label Trips Example: Accounts

Starts with vowel sound ☐

The Object Name is used when referencing the object via the API.

Object Name Trip Example: Account

Description

Context-Sensitive Help Setting ☒ Open the standard Salesforce.com Help & Training window ☐ Open a window using a Visualforce page

Content Name --None--

Enter Record Name Label and Format

The Record Name appears in page layouts, key lists, related lists, lookups, and search results. For example, the Record Name for Account is "Account Name" and for Case it is "Case Number". Note that the Record Name field is always called "Name" when referenced via the API.

Record Name Trip Name Example: Account Name

Data Type Text data type. Warning: If you plan to insert a high volume of records in this object, via the API for example, use the Text data type.

C. Booking:

Setup → Object Manager → Create → Custom Object:

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

Setup Home Object Manager

SETUP > OBJECT MANAGER

Booking

Details

- Fields & Relationships
- Page Layouts
- Lightning Record Pages
- Buttons, Links, and Actions
- Compact Layouts
- Field Sets
- Object Limits
- Record Types
- Related Lookup Filters
- Restriction Rules
- Scoping Rules
- Object Access
- Triggers
- Flow Triggers
- Validation Rules
- Conditional Field Formatting

Edit Custom Object
Booking

Custom Object Definition Edit Save Save & New Cancel

Custom Object Information

The singular and plural labels are used in tabs, page layouts, and reports. Be careful when changing the name or label as it may affect existing integrations and merge templates.

Label Booking Example: Account

Plural Label Bookings Example: Accounts

Starts with vowel sound ☐

The Object Name is used when referencing the object via the API.

Object Name Booking Example: Account

Description

Context-Sensitive Help Setting ☒ Open the standard Salesforce.com Help & Training window ☐ Open a window using a Visualforce page

Content Name --None--

Enter Record Name Label and Format

The Record Name appears in page layouts, key lists, related lists, lookups, and search results. For example, the Record Name for Account is "Account Name" and for Case it is "Case Number". Note that the Record Name field is always called "Name" when referenced via the API.

Record Name Booking Name Example: Account Name

Data Type Auto Number Warning: If you plan to insert a high volume of records in this object, via the API for example, use the Text data type.

Display Format BK-{0000} Example: A-{0000} What Is This?

Optional Features

☐ Allow Reports

☐ Allow Activities

D. Payment:

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

The screenshot shows the Salesforce Setup interface for creating a custom object. The breadcrumb trail is Setup > OBJECT MANAGER. The page title is 'Payment'. On the left, a sidebar lists various configuration options: Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Restriction Rules, Scoping Rules, Object Access, Triggers, Flow Triggers, Validation Rules, and Conditional Field Formatting. The main content area is titled 'Edit Custom Object Payment' and contains the 'Custom Object Definition Edit' form. This form includes sections for 'Custom Object Information' (with fields for Label 'Payment', Plural Label 'Payments', and a checkbox for 'Starts with vowel sound'), 'Enter Record Name Label and Format' (with fields for Record Name 'Payment Name', Data Type 'Auto Number', and Display Format 'PM-{0000}'), and 'Optional Features' (with checkboxes for 'Allow Reports' and 'Allow Activities').

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.

Setup Home Object Manager

SEARCH Setup

SETUP > OBJECT MANAGER

Traveler

Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Restriction Rules
Scoping Rules
Object Access

Fields & Relationships

8 Items, Sorted by Field Label

Quick Find

New Deleted Fields Field Dependencies Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Email	Email__c	Email		
Last Modified By	LastModifiedById	Lookup(User)		
Nationality	Nationality__c	Text(50)		
Owner	OwnerId	Lookup(User,Group)		✓
Passport Number	Passport_Number__c	Text(20)		
Phone	Phone__c	Phone		
Traveler Name	Name	Text(80)		✓

B. Trip:

In Trip → Fields & Relationships → New:

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

Setup Home Object Manager

SEARCH Setup

SETUP > OBJECT MANAGER

Trip

Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Restriction Rules
Scoping Rules
Object Access
Triggers
Flow Triggers
Validation Rules

Fields & Relationships

8 Items, Sorted by Field Label

Quick Find

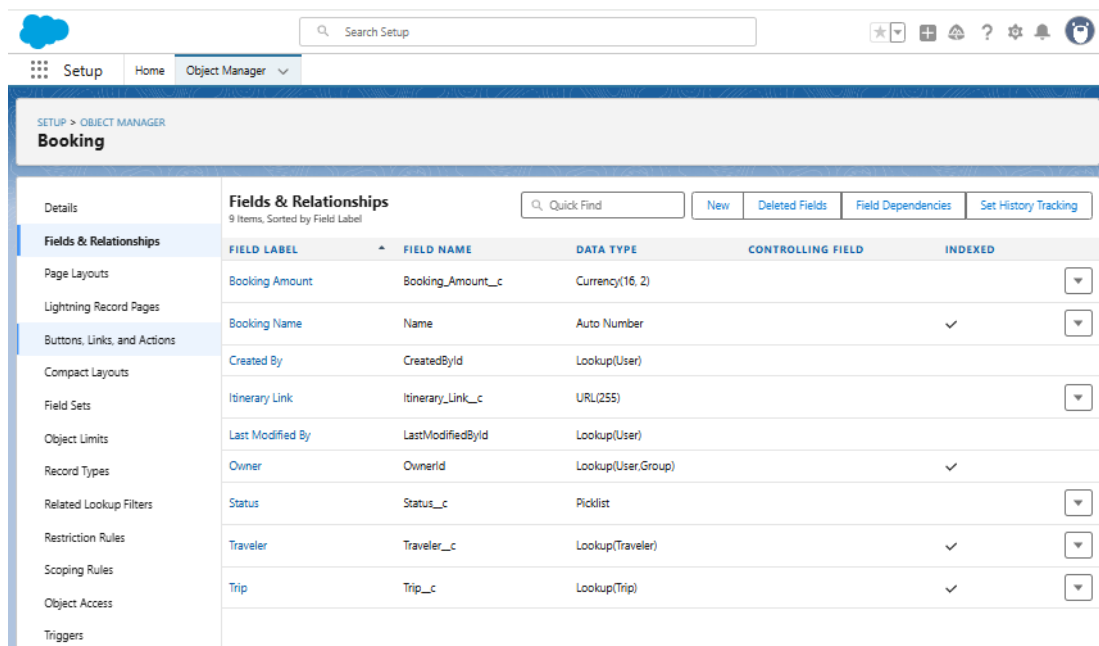
New Deleted Fields Field Dependencies Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Cost	Cost__c	Currency(16, 2)		
Created By	CreatedById	Lookup(User)		
Destination	Destination__c	Text(100)		
End Date	End_Date__c	Date		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Start Date	Start_Date__c	Date		
Trip Name	Name	Text(80)		✓

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.



FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Booking Amount	Booking_Amount__c	Currency(16, 2)		
Booking Name	Name	Auto Number		✓
Created By	CreatedById	Lookup(User)		
Itinerary Link	Itinerary_Link__c	URL(255)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Status	Status__c	Picklist		
Traveler	Traveler__c	Lookup(Traveler)		✓
Trip	Trip__c	Lookup(Trip)		✓

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

Setup Home Object Manager

SETUP > OBJECT MANAGER
Payment

Details

Fields & Relationships
8 Items, Sorted by Field Label

Quick Find New Deleted Fields Field Dependencies Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Amount	Amount__c	Currency(16, 2)		
Booking	Booking__c	Master-Detail(Booking)		✓
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Payment Date	Payment_Date__c	Date		
Payment Mode	Payment_Mode__c	Picklist		
Payment Name	Name	Auto Number		✓
Payment Status	Payment_Status__c	Picklist		

Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Restriction Rules
Scoping Rules
Object Access
Triggers
Flow Triggers
Validation Rules
Conditional Field Formatting

3. Page Layouts:

A. Traveler:

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

Search Setup

Setup Home Object Manager

SETUP > OBJECT MANAGER
Traveler

Details

Page Layouts

Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Restriction Rules
Scoping Rules
Object Access
Triggers
Flow Triggers
Validation Rules
Conditional Field Formatting

Save Quick Save Preview As... Cancel Undo Redo Layout Properties

Quick Find Related List Name

Approval History Groups
Bookings Notes & Attachments
Content Deliveries Related Content
Files

Custom Buttons

Information (Header visible on edit only)

Traveler Name Sample Text Owner Sample Text

Email sarah.sample@company.com

Phone 1-415-555-1212

Passport Number Sample Text

Nationality Sample Text

System Information (Header visible on edit only)

Created By Sample Text Last Modified By Sample Text

Custom Links (Header visible on edit only)

Mobile Cards (Salesforce mobile only)

Drag expanded lookups and mobile-enabled Visualforce pages here to display them as mobile cards.

Related Lists

Bookings

Booking Name

Sample Text

B. Trip:

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

SETUP > OBJECT MANAGER
Trip

Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Restriction Rules
Scoping Rules
Object Access
Triggers
Flow Triggers
Validation Rules
Conditional Field Formatting

Save | Quick Save | Preview As... | Cancel | Undo | Redo | Layout Properties

Quick Find: Related List Name

Approval History | Groups
Bookings | Notes & Attachments
Content Deliveries | Related Content
Files

Edit | Delete | Clone | Change Owner | Change Record Type | Printable View | Sharing | Sharing Hierarchy | Edit Labels

Custom Buttons

Information (Header visible on edit only)
Trip Name Sample Text Owner Sample Text
Destination Sample Text
Start Date 9/23/2025
End Date 9/23/2025
Cost ₹123.45

System Information (Header visible on edit only)
Created By Sample Text Last Modified By Sample Text

Custom Links (Header visible on edit only)

Mobile Cards (Salesforce mobile only) ⓘ
Drag expanded lookups and mobile-enabled Visualforce pages here to display them as mobile cards.

Related Lists
Bookings
Booking Name
Sample Text

C. Booking:

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

Setup | Home | Object Manager

SETUP > OBJECT MANAGER
Booking

Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Restriction Rules
Scoping Rules
Object Access
Triggers
Flow Triggers
Validation Rules
Conditional Field Formatting

Save | Quick Save | Preview As... | Cancel | Undo | Redo | Layout Properties

Quick Find: Related List Name

Approval History | Notes & Attachments
Content Deliveries | Payments
Files | Related Content
Groups

Custom Buttons

Information (Header visible on edit only)
Booking Name GEN-2004-001234 Owner Sample Text
Traveler Sample Text
Trip Sample Text
Status Sample Text
Itinerary Link www.salesforce.com
Booking Amount ₹123.45

System Information (Header visible on edit only)
Created By Sample Text Last Modified By Sample Text

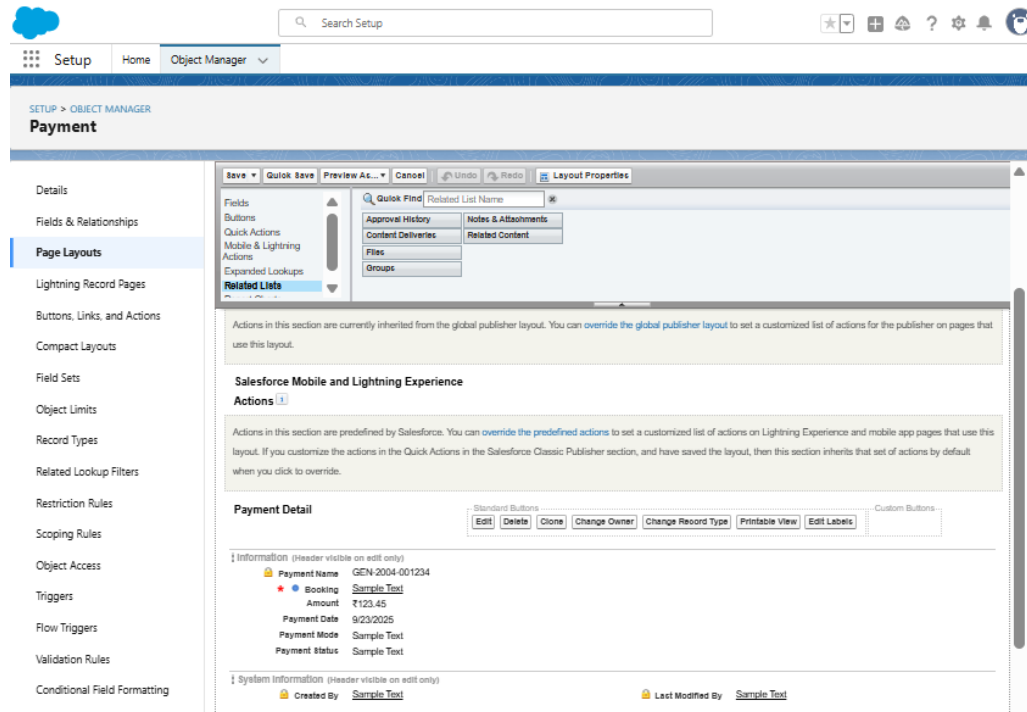
Custom Links (Header visible on edit only)

Mobile Cards (Salesforce mobile only) ⓘ
Drag expanded lookups and mobile-enabled Visualforce pages here to display them as mobile cards.

Related Lists
Payments
Payment Name
Sample Text

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.

The screenshot shows the 'Traveler Compact Layout Edit' interface in Salesforce Setup. The left sidebar lists navigation options: Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts (selected), Field Sets, Object Limits, Record Types, Related Lookup Filters, Restriction Rules, Scoping Rules, Object Access, and Triggers. The main content area is titled 'Edit Traveler Compact Layout' and 'Traveler Compact Layout'. Below this is a 'Compact Layout Edit' section with 'Enter Compact Layout Information' and 'Select Compact Layout Fields'. The 'Enter Compact Layout Information' section has fields for 'Label' (Traveler Compact Layout) and 'Name' (Traveler_Compact_Layout). The 'Select Compact Layout Fields' section shows 'Available Fields' (Created By, Last Modified By, Nationality, Owner) and 'Selected Fields' (Traveler Name, Email, Phone, Passport Number). A 'Top' button is visible next to the selected fields.

B. Trip Compact Layout:

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

The screenshot shows the 'Trip Compact Layout Edit' interface in Salesforce Setup. The left sidebar lists navigation options: Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts (selected), Field Sets, Object Limits, Record Types, Related Lookup Filters, Restriction Rules, Scoping Rules, Object Access, Triggers, and Flow Triggers. The main content area is titled 'Trip Compact Layouts' and 'New Compact Layout'. Below this is a 'Compact Layout Edit' section with 'Enter Compact Layout Information' and 'Select Compact Layout Fields'. The 'Enter Compact Layout Information' section has fields for 'Label' (Trip Compact Layout) and 'Name' (Trip_Compact_Layout). The 'Select Compact Layout Fields' section shows 'Available Fields' (Created By, Last Modified By, Owner) and 'Selected Fields' (Trip Name, Destination, Start Date, End Date, Cost). A 'Top' button is visible next to the selected fields.

C. Booking Compact Layout:

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

Setup Home Object Manager

Search Setup

Setup > OBJECT MANAGER

Booking

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Restriction Rules

Scoping Rules

Object Access

Triggers

Flow Triggers

Validation Rules

Conditional Field Formatting

Edit Booking Compact Layout

Booking Compact Layout

Compact layouts are used in the mobile app and some Chatter feed items to display a record's key fields at a glance. You can select and prioritize up to ten fields for the compact layout, but the number of fields that display may vary based on the device's screen, which record page is being viewed, and the permissions of the user.

Compact Layout Edit

Enter Compact Layout Information

Label: Booking Compact Layout

Name: Booking_Compact_Layout

Select Compact Layout Fields

Available Fields		Selected Fields	
Created By	Add Remove	Booking Name	Top Up Down Bottom
Itinerary Link		Traveler	
Last Modified By		Trip	
Owner		Status	
		Booking Amount	

Use SHIFT + click to select adjacent fields. Use CTRL + click to select an assortment of fields.

Save Cancel

D. Payment Compact Layout:

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

Setup Home Object Manager

Search Setup

Setup > OBJECT MANAGER

Payment

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Restriction Rules

Scoping Rules

Object Access

Triggers

Flow Triggers

Validation Rules

Conditional Field Formatting

Payment Compact Layouts

New Compact Layout

Compact layouts are used in the mobile app and some Chatter feed items to display a record's key fields at a glance. You can select and prioritize up to ten fields for the compact layout, but the number of fields that display may vary based on the device's screen, which record page is being viewed, and the permissions of the user.

Compact Layout Edit

Enter Compact Layout Information

Label: Payment Compact Layout

Name: Payment_Compact_Layout

Select Compact Layout Fields

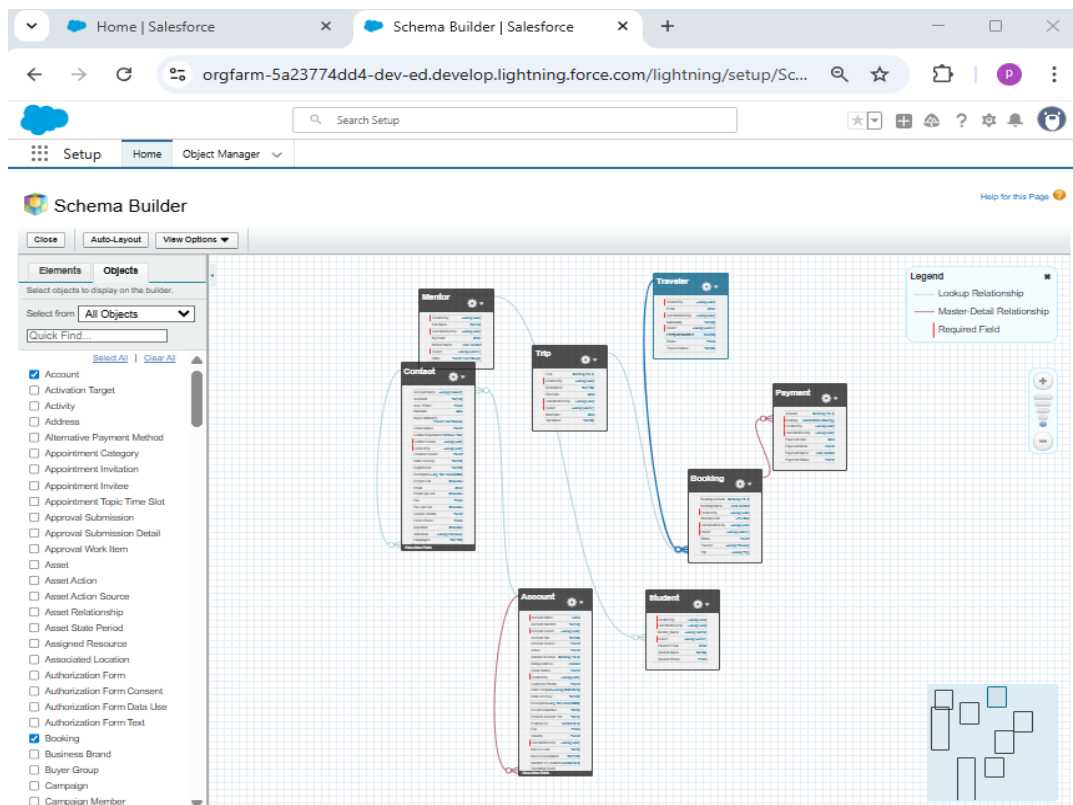
Available Fields		Selected Fields	
Created By	Add Remove	Payment Name	Top Up Down Bottom
Last Modified By		Booking	
Payment Mode		Amount	
		Payment Date	
		Payment Status	

Use SHIFT + click to select adjacent fields. Use CTRL + click to select an assortment of fields.

Save Cancel

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.

