

## Phase 3: Data Modeling & Relationships

### 3.1 Standard & Custom Objects

#### Standard Objects Used:

- User: Represents students, landlords, and administrators.
- Account: Landlord details and organization-level data.
- Contact: Student details (linked to user and accommodation booking).

#### Custom Objects Created:

| Object        | Key Fields  |
|---------------|---|
| Student       | Name, Email, Phone, Student City, Student College, Gender, Course   |
| Landlord      | Name, Email, Phone, Address, Owner  |
| Accommodation | Name, Location, Rent, Type, Status, Landlord Lookup, Furnished, Meals Included, Mess Facility, Number of Beds |
| Booking       | Booking Date, Status, Student Lookup, Accommodation Lookup, Amount  |
| Payment       | Amount, Payment Date, Mode, Booking Master-Detail, Payment Name   |

### 3.2 Fields

Student Fields: Name, Email, Phone, Student City, Student College, Gender, Course

Landlord Fields: Name, Email, Phone, Address, Owner

Accommodation Fields: Name, Location, Rent, Type, Status, Landlord Lookup, Furnished, Meals Included, Mess Facility, Number of Beds

Booking Fields: Booking Date, Status, Student Lookup, Accommodation Lookup, Amount

Payment Fields: Amount, Payment Date, Mode, Booking Master-Detail, Payment Name

### 3.3 Record Types

Purpose: Different processes or picklist values for same object.

#### Accommodation Record Types

- Hostel → Fields: Mess Facility, Curfew Time, Number of Beds
- PG → Fields: Meals Included, Room Sharing Option

- Apartment → Fields: Furnished (Yes/No)
- Flat → Fields: Status (Available/Booked)
- Single Room → Fields: Type, Status

Booking\_c Record Types

- Student-Initiated Booking → Status: Pending, Cancelled
- Admin-Assigned Booking → Status: Pending, Confirmed, Cancelled, Assigned

3.4 Page Layouts

Purpose: Control fields, sections, related lists visible to different roles

Accommodation Layouts

| Layout Name      | Record Type | Profile  | Fields Visible  |
|------------------|-------------|----------|---|
| Hostel Layout    | Hostel      | Landlord | Name, Location, Rent, Mess Facility, Number of Beds, Status |
| PG Layout        | PG          | Landlord | Name, Location, Rent, Meals Included, Room Sharing, Status  |
| Apartment Layout | Apartment   | Landlord | Name, Location, Rent, Furnished, Status                     |

| PAGE LAYOUT NAME     | ▲ | CREATED BY                         | MODIFIED BY                       |
|----------------------|---|------------------------------------|-----------------------------------|
| Accommodation Layout |   | Aakarsh verma, 9/20/2025, 10:47 PM | Aakarsh verma, 9/23/2025, 9:02 AM |
| Apartment layout     |   | Aakarsh verma, 9/23/2025, 3:55 AM  | Aakarsh verma, 9/23/2025, 9:02 AM |
| Hostel Layout        |   | Aakarsh verma, 9/23/2025, 3:28 AM  | Aakarsh verma, 9/23/2025, 9:02 AM |
| PG Specific layout   |   | Aakarsh verma, 9/23/2025, 3:54 AM  | Aakarsh verma, 9/23/2025, 9:02 AM |

## Booking Layouts

| Layout Name            | Record Type       | Profile | Fields Visible                                 |
|------------------------|-------------------|---------|--|
| Student Booking Layout | Student-Initiated | Student | Property, Booking Date, Status                 |
| Admin Booking Layout   | Admin-Assigned    | Admin   | Property, Student, Booking Date, Status, Notes |

| PAGE LAYOUT NAME         | CREATED BY                         | MODIFIED BY                       |
|--------------------------|------------------------------------|-----------------------------------|
| Admin-Assigned Layout    | Aakarsh verma, 9/23/2025, 4:07 AM  | Aakarsh verma, 9/23/2025, 4:08 AM |
| Booking Layout           | Aakarsh verma, 9/20/2025, 11:19 PM | Aakarsh verma, 9/23/2025, 2:30 AM |
| Student-Initiated Layout | Aakarsh verma, 9/23/2025, 4:06 AM  | Aakarsh verma, 9/23/2025, 4:07 AM |

## Payment Layout

- Fields: Booking, Amount, Payment Date, Mode
- Assign to Admin/Landlord

| PAGE LAYOUT NAME | CREATED BY                        | MODIFIED BY                       |
|------------------|-----------------------------------|-----------------------------------|
| Payment Layout   | Aakarsh verma, 9/23/2025, 2:26 AM | Aakarsh verma, 9/23/2025, 4:12 AM |

## 3.5 Compact Layouts

Purpose: Show key fields at the top of record for quick glance in Lightning & Mobile

| Object        | Key Fields Displayed                         |
|---------------|--|
| Accommodation | Name, Type, Rent, Status, Location, Landlord |
| Booking       | Booking Date, Accommodation, Student, Status |
| Payment       | Booking, Amount, Payment Date, Mode          |
| Student       | Name, Email, Phone, Preferred Location       |

Landlord

Name, Email, Phone, Property Count

Accommodation compact layout

| LABEL               | ▲ | API NAME            | PRIMARY | MODIFIED BY   | LAST MODIFIED      |
|---------------------|---|---------------------|---------|---------------|--------------------|
| Property Highlights |   | Property_Highlights |         | Aakarsh verma | 9/23/2025, 4:38 AM |
| System Default      |   | SYSTEM              | ✓       |               |                    |

Booking Compact Layout

| LABEL              | ▲ | API NAME           | PRIMARY | MODIFIED BY   | LAST MODIFIED      |
|--------------------|---|--------------------|---------|---------------|--------------------|
| Booking Highlights |   | Booking_Highlights |         | Aakarsh verma | 9/23/2025, 4:39 AM |
| System Default     |   | SYSTEM             | ✓       |               |                    |

Payment Compact Layout

| LABEL              | ▲ | API NAME           | PRIMARY | MODIFIED BY   | LAST MODIFIED      |
|--------------------|---|--------------------|---------|---------------|--------------------|
| Payment Highlights |   | Payment_Highlights |         | Aakarsh verma | 9/23/2025, 4:40 AM |
| System Default     |   | SYSTEM             | ✓       |               |                    |

Student Compact layout

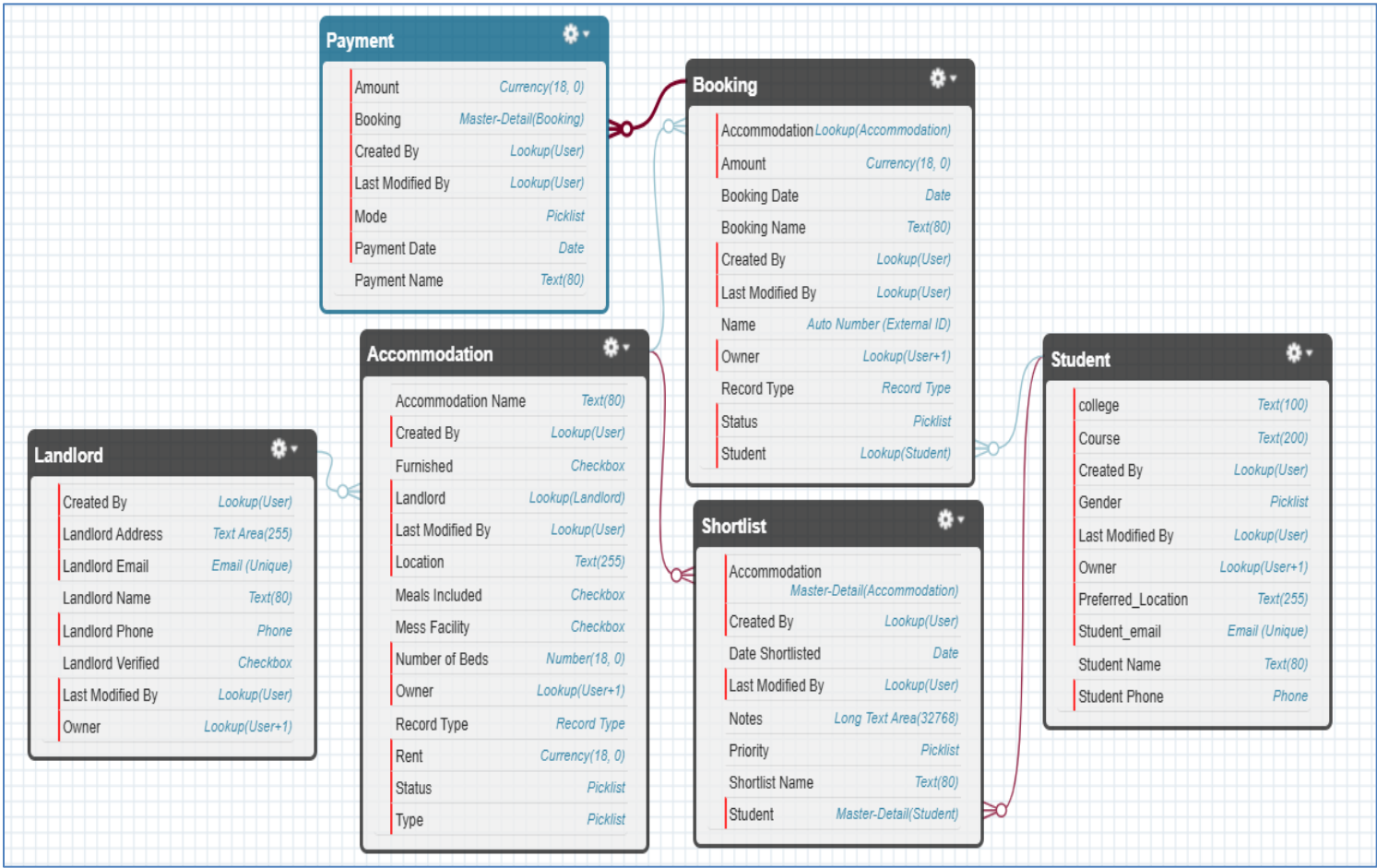
| LABEL              | ▲ | API NAME           | PRIMARY | MODIFIED BY   | LAST MODIFIED      |
|--------------------|---|--------------------|---------|---------------|--------------------|
| Student Highlights |   | Student_Highlights |         | Aakarsh verma | 9/23/2025, 4:41 AM |
| System Default     |   | SYSTEM             | ✓       |               |                    |

Landlord Compact Layout

| LABEL               | API NAME            | PRIMARY | MODIFIED BY   | LAST MODIFIED      |
|---------------------|---------------------|---------|---------------|--------------------|
| Landlord Highlights | Landlord_Highlights |         | Aakarsh verma | 9/23/2025, 4:45 AM |
| System Default      | SYSTEM              | ✓       |               |                    |

3.6 Schema Builder

- Visual representation of objects, fields, and relationships.
  - Property → Landlord (Lookup)
  - Booking → Property, Student (Lookup)
  - Payment → Booking (Master-Detail)
  - Shortlist → Student + Property (Master-Detail junction)



## 3.7 Lookup vs Master-Detail vs Hierarchical Relationships

| Child Object | Parent Object | Relationship Type | Notes  |
|--------------|---------------|-------------------|--|
| Property     | Landlord      | Lookup            | Property can exist independently             |
| Booking      | Property      | Lookup            | Booking linked to Property                   |
| Booking      | Student       | Lookup            | Booking belongs to Student                   |
| Payment      | Booking       | Master-Detail     | Payment depends on Booking; inherits sharing |
| Shortlist    | Student       | Master-Detail     | Junction object for many-to-many             |
| Shortlist    | Property      | Master-Detail     | Junction object for many-to-many             |

## 3.8 Junction Object:

Shortlist enables Student ↔ Property many-to-many relationship.

The screenshot shows the Salesforce Object Manager interface for the 'Shortlist' object. The breadcrumb trail at the top reads 'SETUP > OBJECT MANAGER'. The page title is 'Shortlist'. On the left, a sidebar menu lists various configuration options: 'Details' (selected), 'Fields & Relationships', 'Page Layouts', 'Lightning Record Pages', 'Buttons, Links, and Actions', 'Compact Layouts', 'Field Sets', 'Object Limits', 'Record Types', and 'Related Lookup Filters'. The main content area is titled 'Details' and contains the following information:

- Description:** Junction Object ,Shortlist enables Student ↔ Property many-to-many relationship.
- API Name:** Shortlist\_\_c
- Custom:** (checked)
- Singular Label:** Shortlist
- Plural Label:** Shortlists
- Enable Reports:** (checked)
- Track Activities:** (checked)
- Track Field History:** (checked)
- Deployment Status:** Deployed
- Help Settings:** Standard salesforce.com Help Window

At the top right of the main content area, there are 'Edit' and 'Delete' buttons.