Phase 3: Data Modeling & Relationships:

Standard Objects And Custom Objects

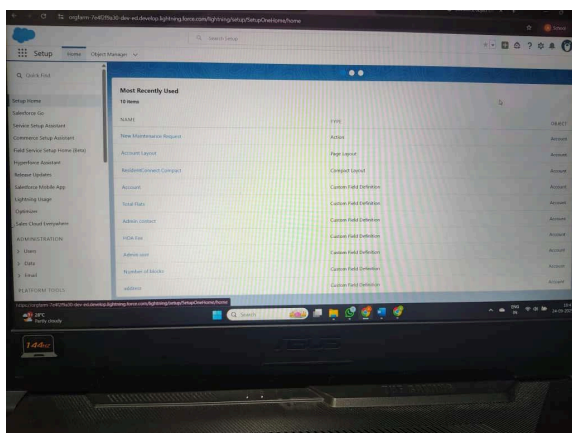Contact → Resident

Case → Service/Maintenance Request

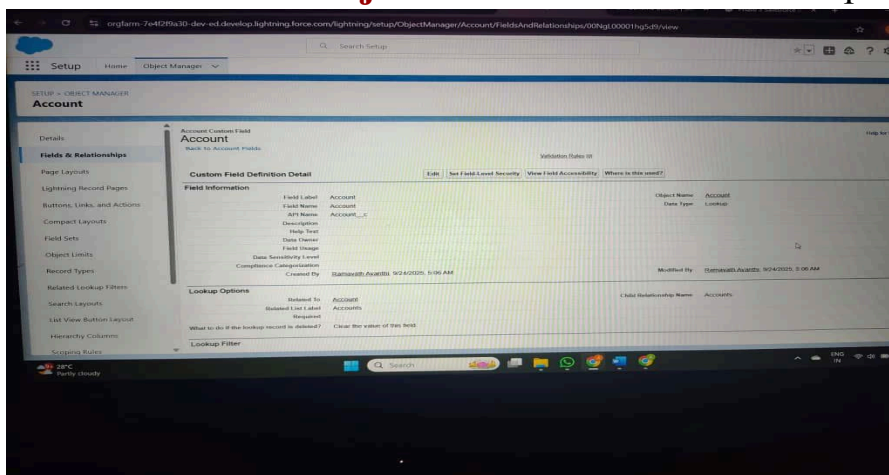Account → Housing Society / Apartment Complex

Flat/Apartment

Community Event

Notice Board

Resident_Event (junction object for many-to-many Resident ↔ Event)

Added Fields to Objects: Add custom fields to capture required info.

Record Types:

Object Manager → Case → Record Types → New.

Object Manager

Case

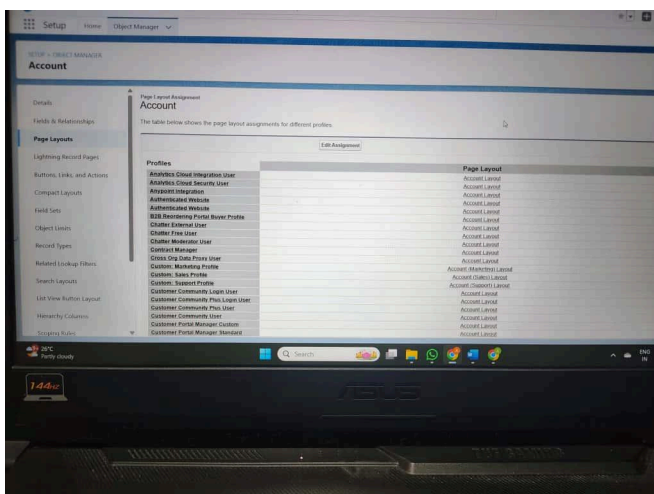|	
Details	
Fields & Relationships	
Page Layouts	
Lightning Record Pages	
Buttons, Links, and Actions	
Record Types	

Record Types

Record types let you offer different business processes, picklist values, and page layouts to different users.

New

Action	Record Type
Edit	Emergency Request
Edit	General Request

Page Layout:

Object Manager → Account → Page Layout Assignment → Edit Assignment → select profiles (Admin, Staff, Resident) → save
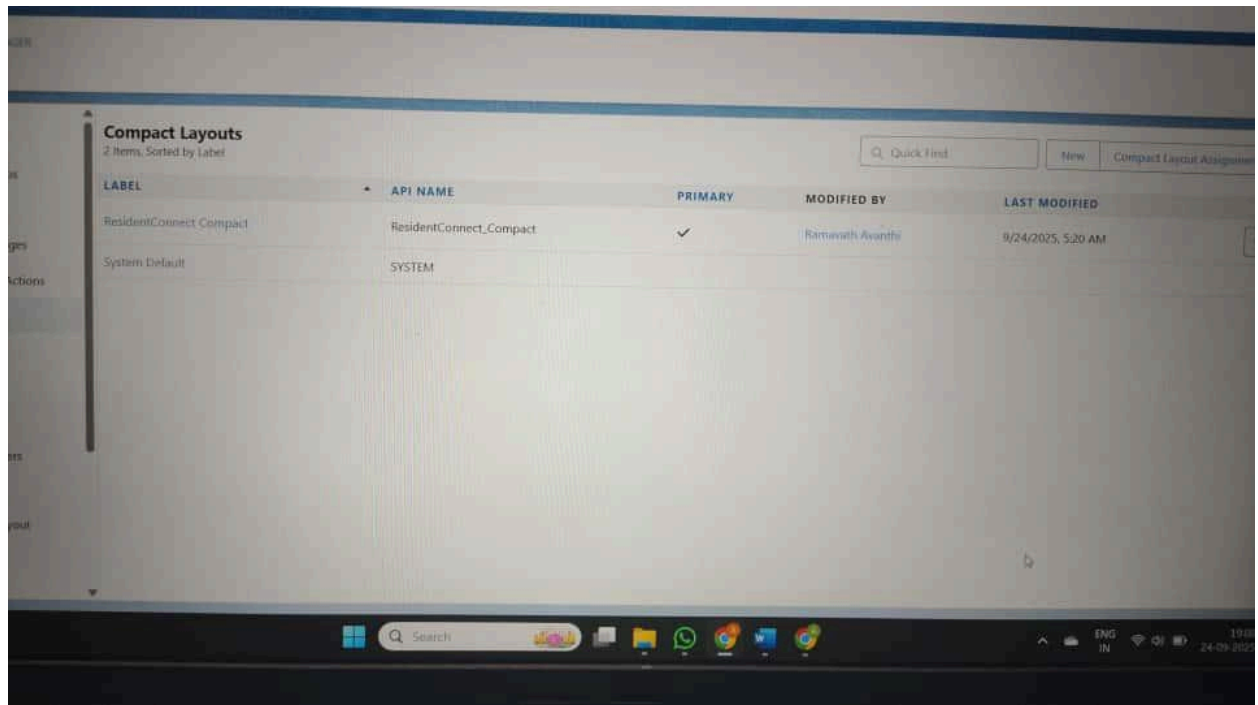

Created a compact layout :

Object Manager → Account → Compact Layouts → New.
Name it **ResidentConnect Compact**.
Added these fields (in order): **Account Name**, **Society Type**,
Admin_Contact__c, **Total_Flats__c**.
Save → Click **Compact Layout Assignment → Edit Assignment → set
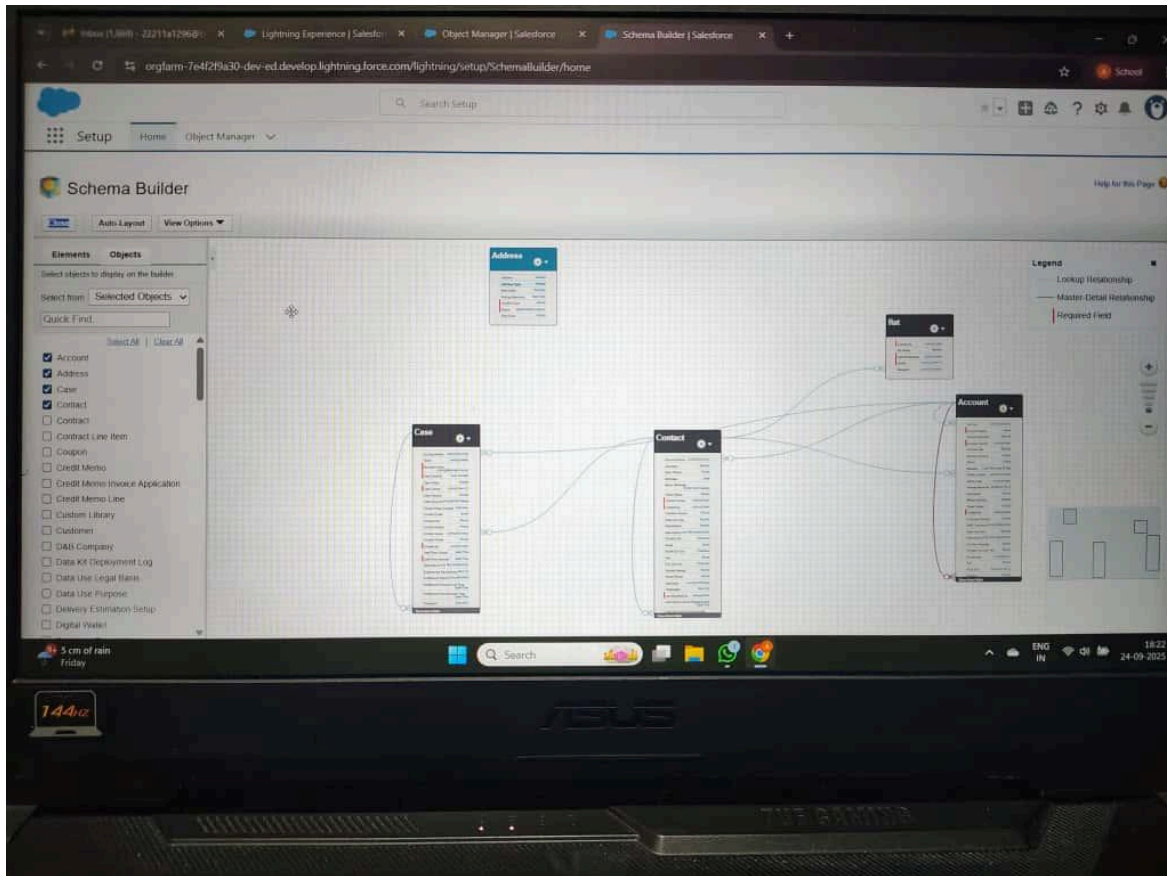ResidentConnect Compact** as the org default → Save.

Schema Builder:

Go to Setup → Schema Builder.
Check all objects: Account, Contact, Flat, Maintenance Request, Event,
Notice, Resident_Event.
See the lines connecting objects (Lookup = dotted line, Master-Detail =
solid line).

Lookup vs Master-Detail vs Hierarchical Relationships :

1. Relationship Types in Salesforce

Lookup Relationship

- Definition: A loose link between two objects; records are related but independent.

- Example: Contact → Related to Account (but Contact can exist without Account).

- Where: Setup → Object Manager → Select Object → Fields & Relationships → New → Lookup Relationship.

Master-Detail Relationship

- Definition: A strong parent-child link; child record's life depends on parent.

- Example: Expense (Child) → Related to Report (Parent). If Report is deleted, Expenses are deleted.

- Where: Setup → Object Manager → Select Object → Fields & Relationships → New → Master-Detail Relationship.

Hierarchical Relationship

- Definition: A special Lookup relationship only available on User Object, used to define hierarchy between users.

- Example: User A → Manager = User B.

- Where: Setup → Object Manager → User → Fields & Relationships → New → Lookup (User).

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2. Junction Objects

- Definition: Custom object with two Master-Detail relationships to create many-to-many links.

- Example:

  - Course ↔ Enrollment (Junction) ↔ Student.

  - One student can enroll in many courses, and one course can have many students.

- Where: Setup → Object Manager → New Custom Object (Enrollment) → Add two Master-Detail fields (to Course and Student).
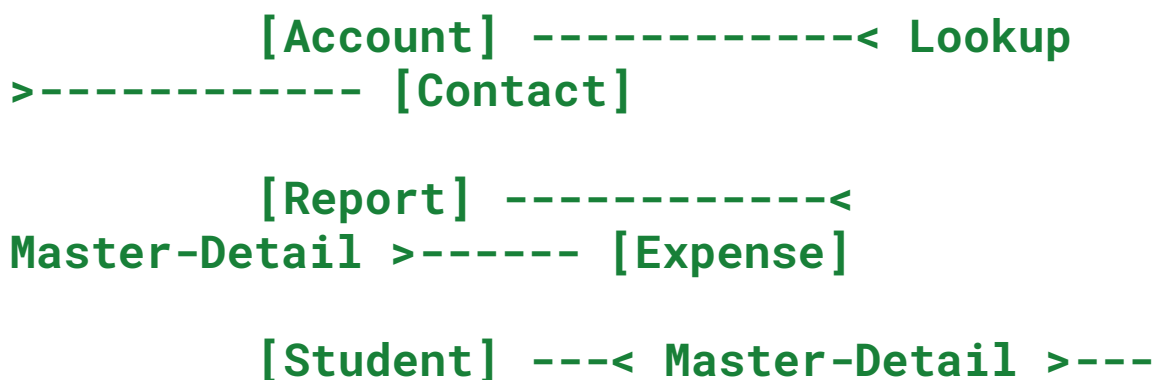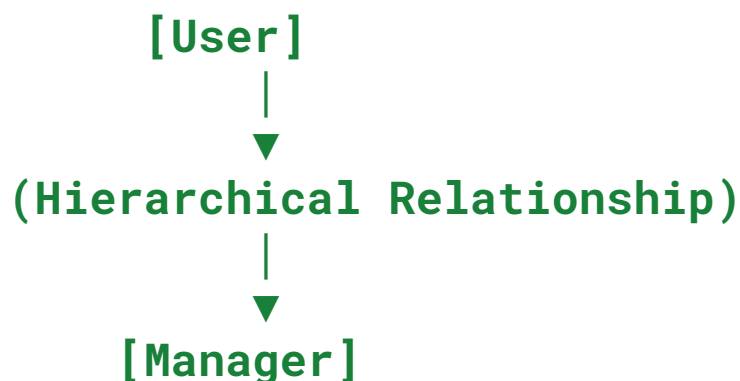
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3. External Objects

- Definition: Objects that map to data outside Salesforce (via Salesforce Connect).

- Example: External Orders stored in SAP or Heroku but viewed in Salesforce as External Object: Order__x.

  Where: Setup → External Data Sources → New External Data Source → Select Type (OData/Heroku/Postgres etc.) → Validate → Sync → External Object created.

◆ **Flow Chart Example**

```
              [User]
                 |
                 ▼
      (Hierarchical Relationship)
                 |
                 ▼
             [Manager]


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      [Account] ------------< Lookup
>------------ [Contact]

      [Report] ------------<
Master-Detail >------ [Expense]

      [Student] ---< Master-Detail >---
```

[Enrollment] ---< Master-Detail >--- [Course]
                                (Junction Object)

        [External System (SAP/DB)] ---< External Object >--- [Order__x]