Phase 3: Data Modeling & Relationships - TourEase Project

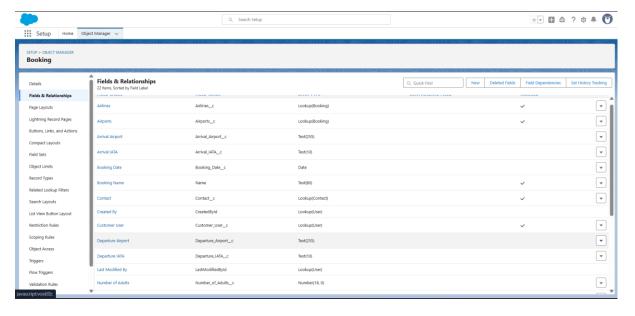
1. Standard & Custom Objects

- **Purpose:** Store data in Salesforce. Standard objects come built-in (e.g., Account, Contact), while custom objects are created for project-specific data.
- **Example:** Booking__c, Travel_Package__c as custom objects for TourEase.



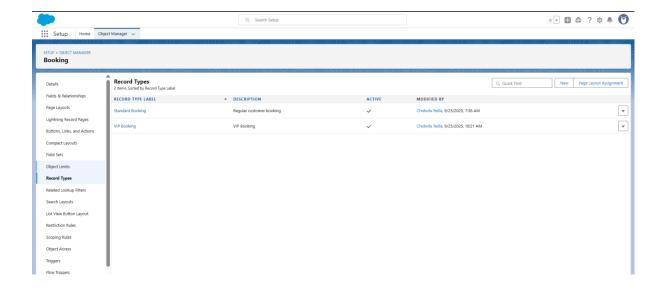
2. Fields

- **Purpose:** Store specific data attributes in objects. Can be Text, Number, Date, Lookup, etc.
- **Example:** Booking_c → Booking_Date_c, Status_c; Travel_Package_c → Destination_c, Price_c.



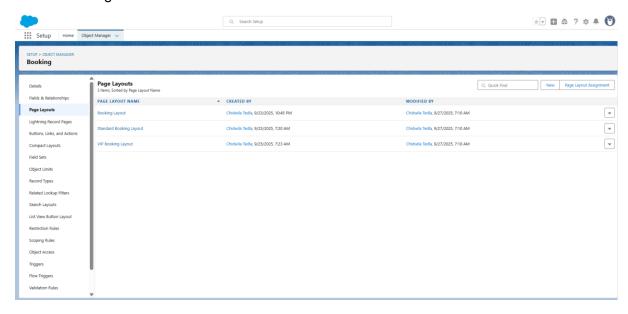
3. Record Types

- Purpose: Different layouts, picklist values, or business processes for the same object.
- **Example:** Booking c → Record Types: Domestic Booking, International Booking.



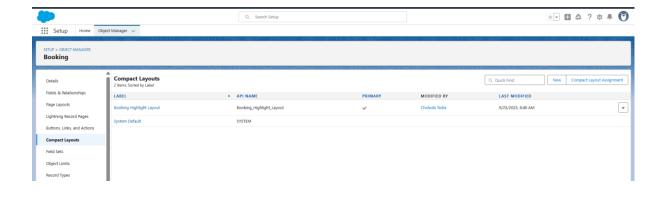
4. Page Layouts

- Purpose: Organize fields, related lists, and sections visible to users.
- **Example:** Booking Page Layout showing Booking details, Contact info, and Travel Package related list.



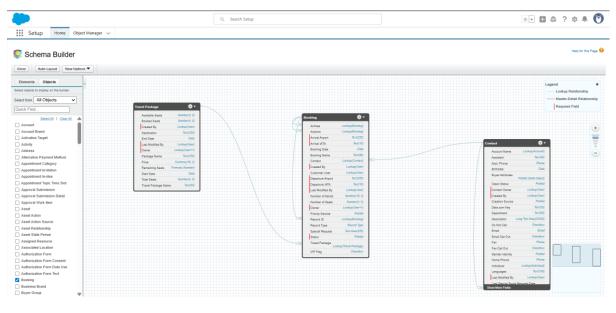
5. Compact Layouts

- Purpose: Display key fields in the record header for quick view.
- **Example:** Booking c → Booking Date c, Status c, Destination c.



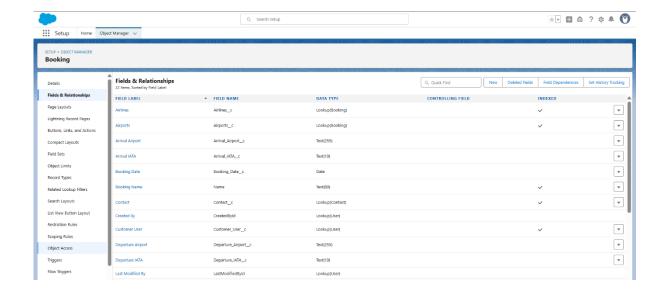
6. Schema Builder

- Purpose: Visualize objects and their relationships in a drag-and-drop interface.
- **Example:** Display relationships between Booking__c, Contact, and Travel_Package__c.



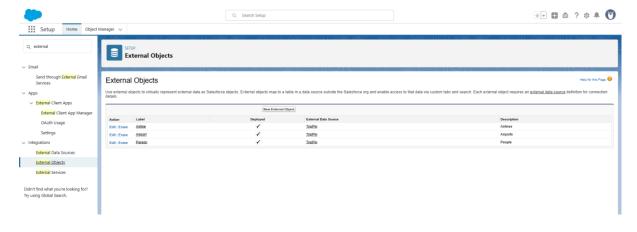
7. Lookup vs Master-Detail vs Hierarchical Relationships

- Purpose: Define how objects relate to each other:
 - Lookup: Optional relationship, e.g., Booking_c → Contact.
 - Master-Detail: Strong relationship, e.g., Booking_c → Travel_Package_c (deleting package deletes bookings).
 - o Hierarchical: Only for User object relationships (e.g., manager).



8. External Objects

- Purpose: Access data stored outside Salesforce (e.g., external APIs, databases).
- **Example:** Connect to an external flights API to display available flights without storing them in Salesforce.



Conclusion:

In Phase 3, the TourEase project focused on designing an efficient and scalable data model to manage travel bookings, packages, and customer information. By creating custom objects, fields, record types, and layouts, the system ensures that data is organized and easily accessible. Relationships—Lookup, Master-Detail, Hierarchical, and Junction objects—enable seamless connections between records, while Schema Builder provides a clear visual representation of the data structure. Additionally, compact layouts and external objects enhance usability and integration with external data sources. Overall, this phase demonstrates how a well-structured Salesforce data model supports accurate data management, better reporting, and a streamlined user experience.

