Airline Management System Project

Problem Statement

The airline management system is designed to streamline and automate core airline operations. Manual flight scheduling, booking, and passenger management often lead to: - Errors in flight scheduling and seat allocation. - Difficulty in tracking bookings and passenger information. - Lack of role-based access for staff, managers, and administrators. - Inefficient reporting and management oversight.

The Airline Management System aims to solve these issues by building a Salesforce-based application that: - Enables staff to manage flights and schedules digitally. - Allows passengers to book flights and view their booking status. - Tracks passenger details and bookings in a centralized system. - Provides dashboards and reports for managers to monitor overall operations.

Phase 1: Problem Understanding & Industry Analysis

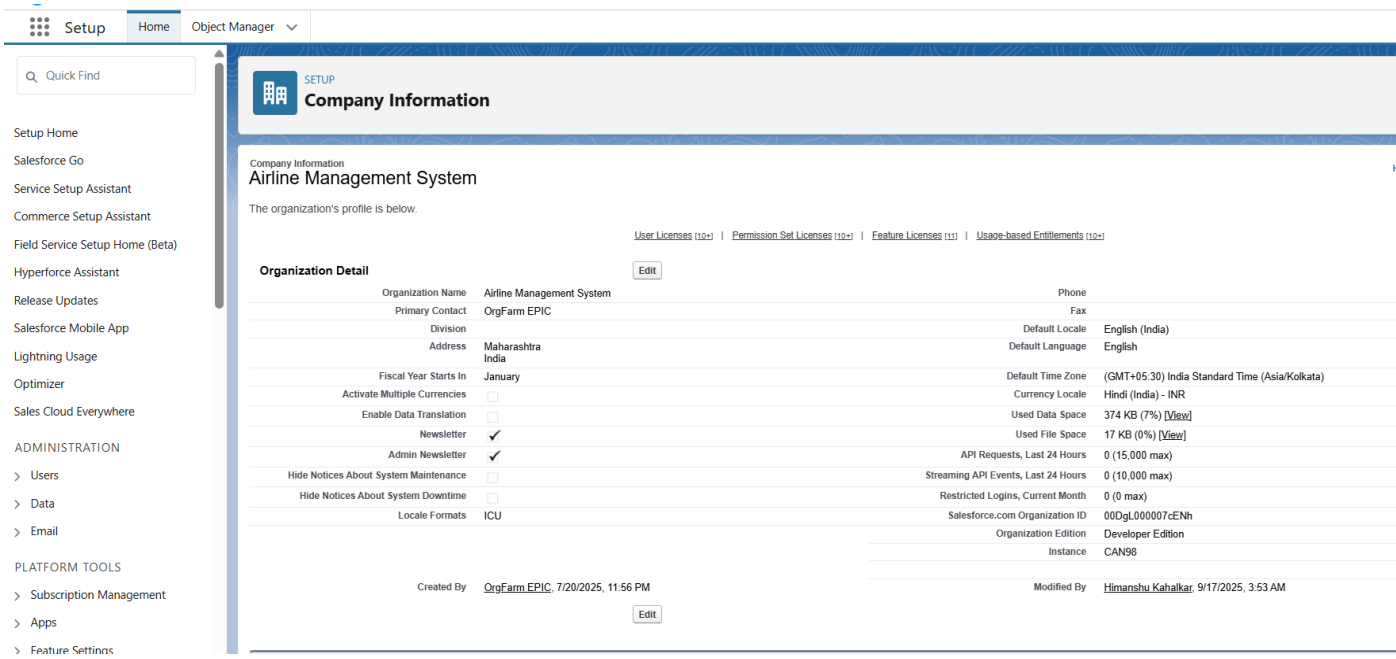
What has been done:

1. **Requirement Gathering:** Identified functional and non-functional requirements, including flight scheduling, bookings, passenger management, and reporting.
2. **Stakeholder Analysis:** Defined key stakeholders (Airline Staff, Manager, Admin, Passengers) and their roles.
3. **Business Process Mapping:** Mapped airline operations: flight scheduling → booking → payment → confirmation → reporting.
4. **Industry-specific Use Case Analysis:** Studied airline workflows to align the system with real-world operations.
5. **AppExchange Exploration:** Explored Salesforce AppExchange for airline-related apps .

Phase 2: Org Setup & Configuration

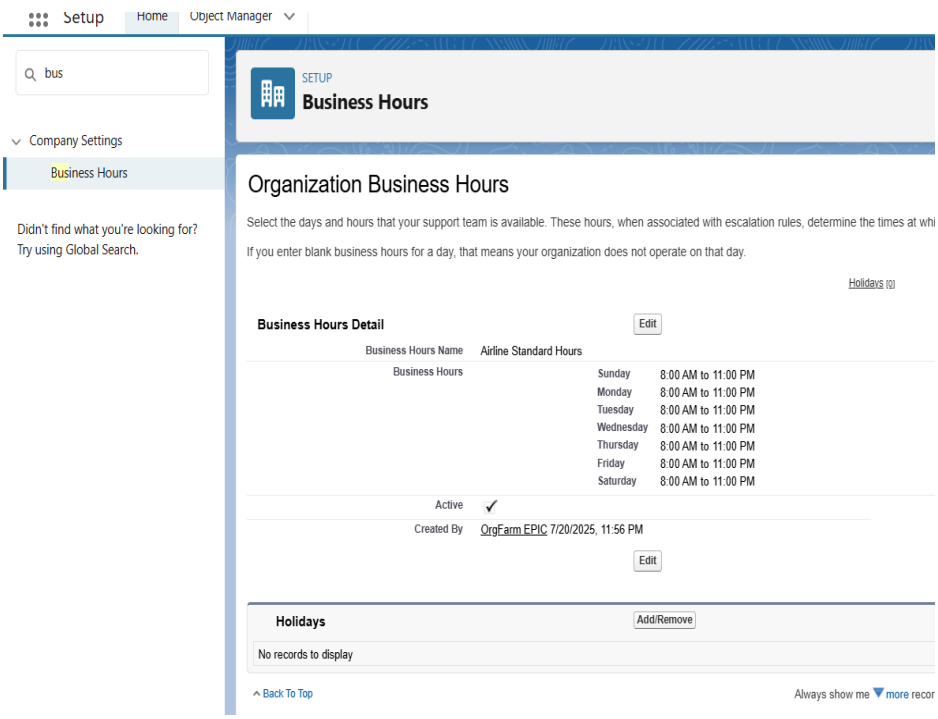
1. **Salesforce Edition:** Used Developer Edition; includes custom objects, Flows, Apex, and Lightning components.

2. **Company Profile Setup:** Updated organization name to “Airline Management System”, set currency, locale, and timezone.

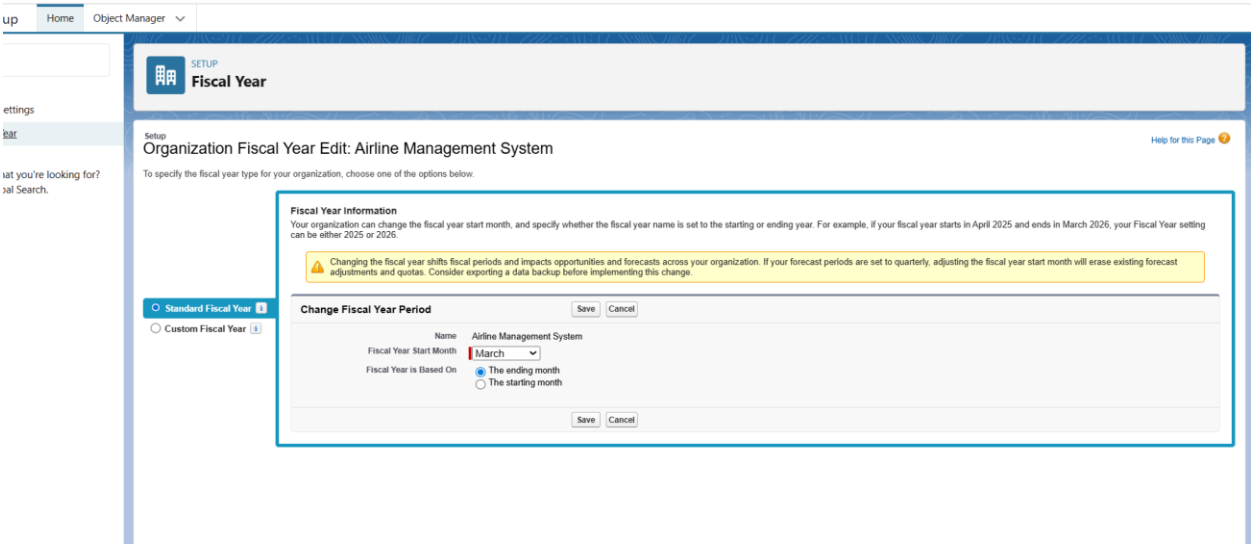


3. Business Hours & Holidays:

Defined working hours : Monday–Friday, 9 AM–6 PM



4. **Fiscal Year Settings:** Default settings retained.



5. **User Setup & Licenses:**

   Created Admin, Manager, and Staff users; assigned roles and licenses.

   Create users for different roles:

Staff User

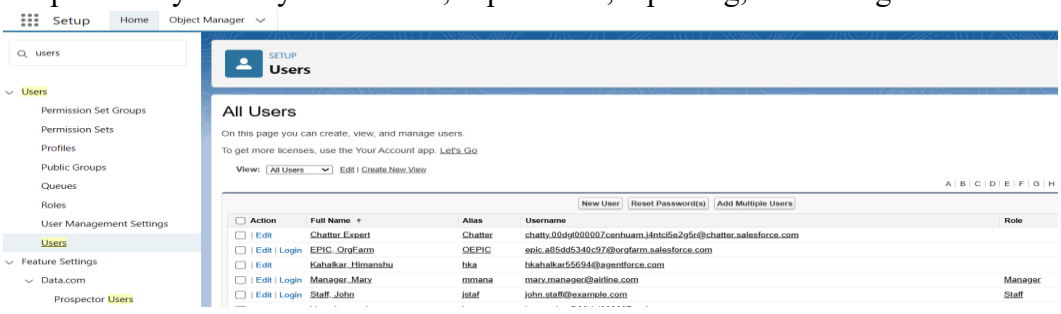
- Profile → Airline Staff Profile
- Role → Staff
- License → Salesforce Platform / Standard User
- Responsibility: Manage Flights & Bookings.

Support User

- Profile → Support Profile
- Role → Support
- License → Salesforce Platform / Standard User
- Responsibility: View Flights & Bookings for reporting/support (Read-only).

Manager/Admin User

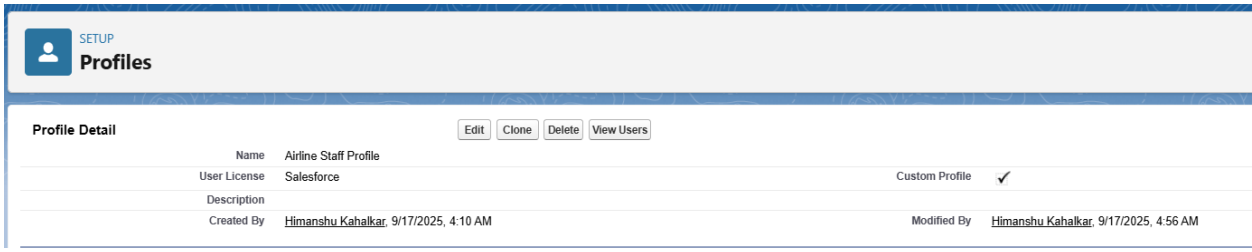
- Profile → Admin Profile
- Role → Manager / Admin
- License → Salesforce Platform / System Administrator
- Responsibility: Full system access, supervision, reporting, and configuration.



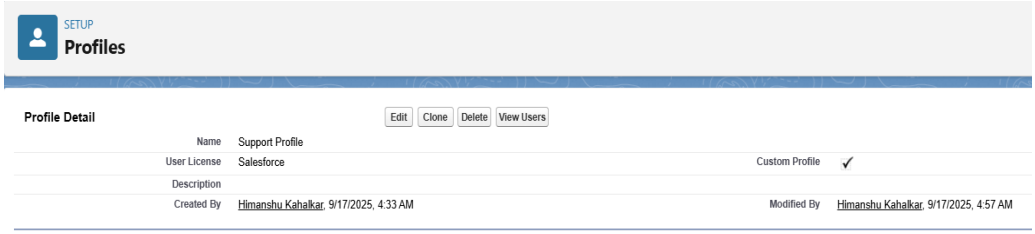
6. **Profiles:**

Customized profiles for Airline Staff, Manager, and Admin with appropriate permissions.

- Airline Staff Profile
  - Permissions: Create, Read, Update, Delete (CRUD) on Flights and Bookings.
  - Purpose: For airline staff who handle flight scheduling and booking operations.



- Support Profile
  - Permissions: Read-only on Flights and Bookings.
  - Purpose: For customer support/reporting team, who need access to view records but not modify them.



- Admin Profile
  - Permissions: Full access (Modify All Data, View All Data).
  - Purpose: For Admin/Manager, who supervises staff, views all records, generates reports, and manages system setup/configuration
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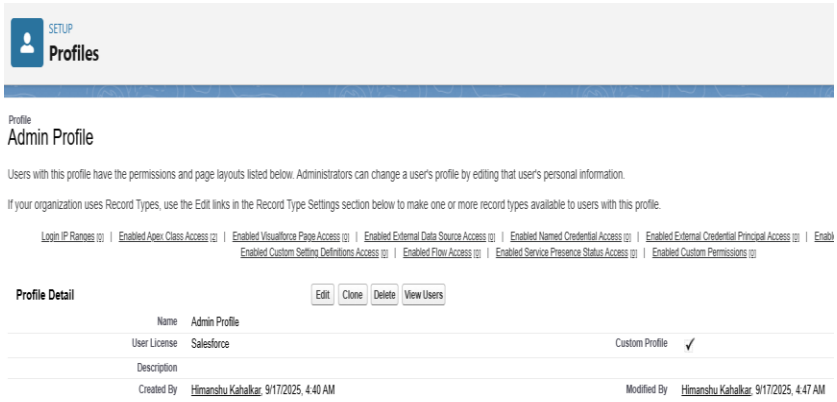
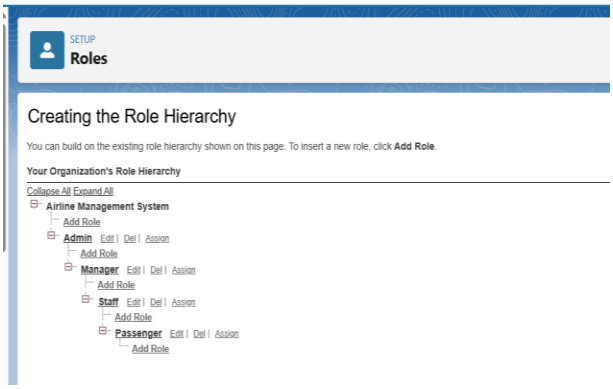
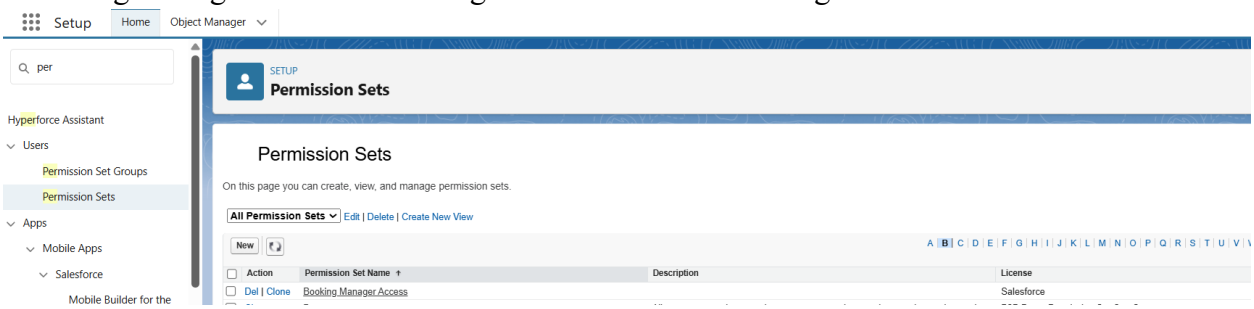


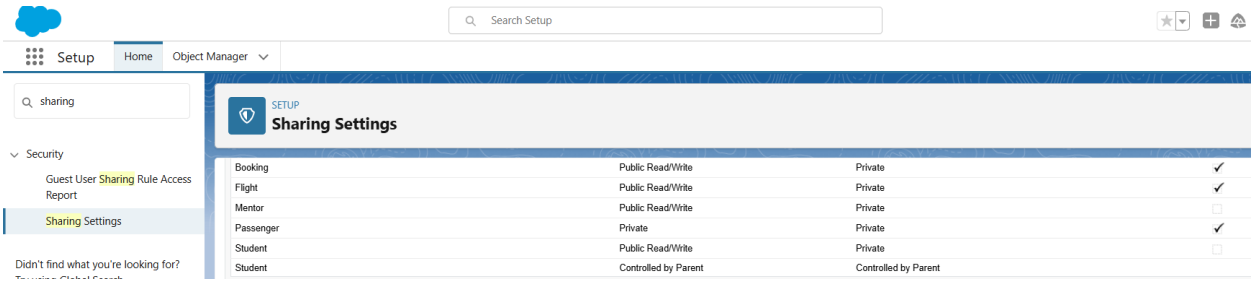
7. **Roles:**
   Create hierarchy Staff → Manager → Admin under Setup → Roles



8. **Permission Sets:**
   Booking Manager Access → Managers can edit/delete bookings.

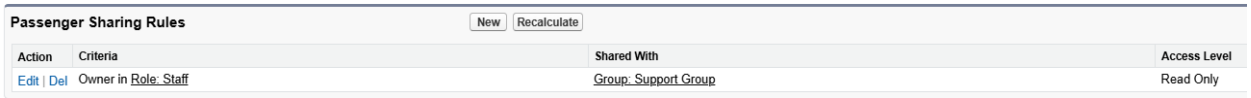


9. **Organization-Wide Defaults (OWD):**
   Flights And Bookings = Public Read/Write;
   Passengers = Private.

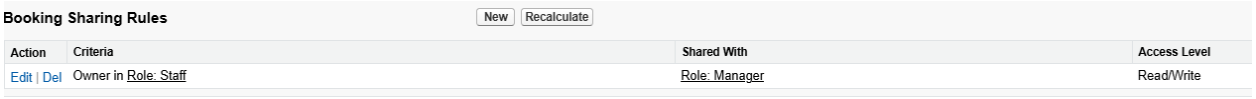


10. Sharing Rules:

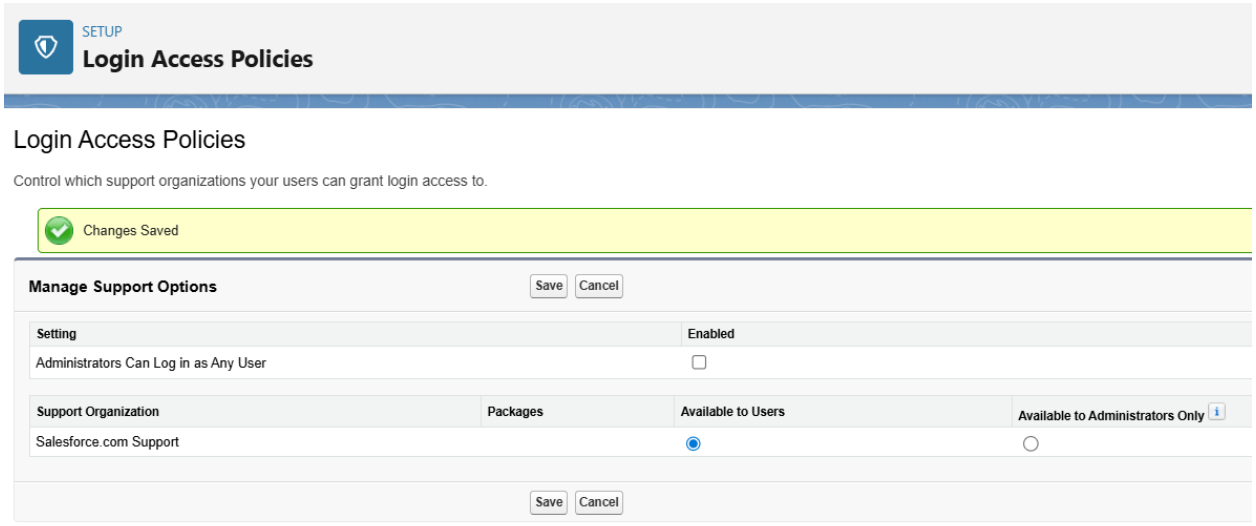
Passenger Sharing Rule: Allowed Support users to view passenger records (Passenger_c is Private).



Booking Sharing Rule: Allowed Managers to view and edit bookings created by Staff (Booking__c is Private).



11. Login Access Policies:



12. Dev Org Setup: Configured development org for testing and deployment.

13. Sandbox Usage