# Phase 9: Reporting, Dashboards & Security Review

## 1. Reports

Salesforce provides robust reporting capabilities to analyze and visualize data in the Student Accommodation Finder project. Different types of reports can be created based on requirements:

### a) Tabular Reports

- **Description:** Simple lists of records with basic data.
- Use Case: Listing all accommodations available in a city with rent details.
- **Example:** A report showing all students and their booked accommodations.

### b) Summary Reports

- **Description:** Allows grouping of records by fields, provides subtotals.
- **Use Case:** Summarizing bookings per city or per landlord.
- **Example:** Total bookings per accommodation type.

### c) Matrix Reports

- **Description:** Data grouped by both rows and columns.
- Use Case: Comparing booking counts by city and accommodation type.
- **Example:** Number of male vs female students booked in each city.

### d) Joined Reports

- **Description:** Combines multiple report blocks in a single report.
- **Use Case:** Comparing payment status with booking status.
- **Example:** Report showing students with pending payments alongside confirmed bookings.

# 2. Report Types

- **Standard Report Types:** Predefined by Salesforce for objects like Student, Accommodation, Booking, Payment.
- **Custom Report Types:** Created for complex reporting requirements, e.g., a report combining Student, Accommodation, and Landlord details for administrative insights.

#### 3. Dashboards

- **Description:** Visual representation of key metrics using charts, tables, and gauges.
- Use Case: Provides at-a-glance insights for admins and managers.
- Example Components:

- Pie chart showing accommodation occupancy status.
- o Bar chart of monthly booking trends.
- Gauge showing percentage of payments completed.

## 4. Dynamic Dashboards

- **Description:** Dashboards that display data based on the logged-in user's access.
- **Use Case:** Landlords see their own accommodation data, students see only their bookings.
- Benefits: Ensures security while providing personalized analytics.

## 5. Sharing Settings

- Organization-Wide Defaults (OWD): Set to Private for sensitive objects like Student and Booking.
- Role Hierarchy: Ensures managers or admins can view subordinate records.
- **Sharing Rules:** Grant access to records based on criteria, e.g., all bookings in a city visible to city managers.

## 6. Field Level Security

- Description: Restricts visibility and edit access to specific fields.
- **Use Case:** Sensitive fields like Payment Amount or Student Contact Info are visible only to authorized users.
- **Implementation:** Set field permissions in profiles or permission sets for each user role.

# 7. Session Settings

- Description: Controls user session behavior and security.
- Examples:
  - Session timeout policies (e.g., 30 minutes of inactivity).
  - Force logout after inactivity.

# 8. Login IP Ranges

- **Description:** Restricts login access based on IP addresses.
- **Use Case:** Admins can access Salesforce only from corporate networks; students and landlords from anywhere.

#### 9. Audit Trail

- **Description:** Tracks all configuration changes in Salesforce.
- Use Case: Ensures compliance and accountability.
- **Example:** Monitoring who modified sharing rules, profiles, or permissions.
- Retention: Salesforce keeps a 6-month audit history by default.