# Project Documentation

**Hospital Appointment & Health Tracker System on Salesforce**

## Phase 9: Reporting, Dashboards & Security Review

### 1. Introduction

In this phase, we design **reports and dashboards** to provide meaningful hospital insights, and we perform a **security review** to ensure compliance with healthcare standards (HIPAA/GDPR).

The goal is to provide **real-time visibility** into patient care, doctor performance, and hospital efficiency while maintaining **data privacy and security**.

### 2. Reports

#### A. Appointment Reports

* **Appointments by Doctor** → Shows the number of appointments handled by each doctor.
* **Appointments by Department** → Tracks workload across hospital departments.
* **Missed vs Completed Appointments** → Monitors patient engagement and attendance.

#### B. Patient Reports

* **Patient Visit History** → Displays appointment and health record details for each patient.
* **New Patients Registered per Month** → Helps track patient growth trends.

#### C. Health Record Reports

* **Prescriptions by Doctor** → Summarizes medication prescribed by doctors.
* **Lab Reports Pending vs Completed** → Tracks turnaround time for diagnostic results.

#### D. Administrative Reports

* **Doctor Availability & Utilization** → Shows how efficiently doctors’ schedules are being used.
* **Department Performance** → Measures department-wise appointments, surgeries, and outcomes.

### 3. Report Types

* **Standard Report Types** → For basic reports (Patients, Appointments).
* **Custom Report Types** → For complex analysis (Appointments with Doctors and Departments, Health Records linked to Appointments).

### 4. Dashboards

#### A. Patient Dashboard

* Upcoming Appointments.
* Health Tracker (last 5 records).
* Notifications (Reminders, Reports Ready).

#### B. Doctor Dashboard

* Today’s Appointments.
* Pending Health Records.
* Patient Follow-ups.

#### C. Admin Dashboard

* Department Workload (Appointments per Department).
* Doctor Utilization.
* Hospital KPIs (Total Patients, Appointments Completed, Missed Appointments).

#### D. Dynamic Dashboards

* Patient-specific → Displays only the logged-in patient’s data.
* Doctor-specific → Shows appointments and reports only for that doctor.

### 5. Security Review

#### A. Sharing Settings

* **Private OWD (Organization-Wide Defaults)** for Patient and HealthRecord objects.
* Sharing rules for Doctors to view only their own appointments.

#### B. Field Level Security

* Sensitive data like Diagnosis, Prescription, Reports visible only to authorized doctors.
* Patient personal data masked for non-clinical staff.

#### C. Session Settings

* Enforce login session timeouts.
* Enable multi-factor authentication (MFA) for doctors and admins.

#### D. Login IP Ranges

* Restrict logins to hospital networks for Admin users.
* Allow patient portal logins from anywhere with OAuth authentication.

#### E. Audit Trail

* Track all critical changes (Appointment cancellations, HealthRecord updates).
* Maintain compliance logs for healthcare audits.

### 6. Benefits of Reporting & Security Review

* Provides **real-time insights** into hospital operations.
* Helps doctors **track patient progress** and follow-ups.
* Improves **decision-making** for hospital administrators.
* Protects **sensitive health data** with strict security controls.
* Ensures compliance with **healthcare regulations**.

**Phase 9 Deliverable:**

Created custom & standard reports for Patients, Doctors, Appointments, and Health Records.

Built dynamic dashboards for Patients, Doctors, and Admins.

Configured sharing settings, field-level security, and session policies.

Implemented audit trails and login restrictions for data protection.

This prepares the system for the final **Phase 10: Presentation & Demo Day**.