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**.

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2. Reports

A. A variety of reports are developed to give different perspectives on hospital operations.

- **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.

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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).

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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.

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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.

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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**.