

Salesforce Capstone Project: Hotel Room Booking & Guest Management System

Problem Statement

Business Challenge A mid-sized hotel chain struggles with a manual booking process that is time-consuming, error-prone, and lacks real-time visibility into room availability and revenue metrics. This inefficiency negatively impacts guest satisfaction, revenue tracking, and operational efficiency.

Current Pain Points 1. Manual tracking of room availability using spreadsheets. 2. No real-time updates on room status or bookings. 3. Lack of automated guest communication for booking confirmations. 4. Limited visibility into revenue by room type and occupancy rates. 5. Risk of booking conflicts and invalid data entry. 6. Inadequate reporting and analytics capabilities.

Business Requirements

Functional Requirements 1. Guest Management - Maintain guest profiles with details: name, email, phone, ID. - Unique guest identification and search capability.

1. Room Management

2. Track room inventory with types (Single, Double, Suite).
3. Real-time room status: Available, Booked, Maintenance.
4. Pricing management per room type and availability checks.

5. Booking Management

6. Create, update, and cancel bookings.
7. Automatic billing calculation based on room type and duration.
8. Booking status tracking: Confirmed, Completed, Cancelled.
9. Prevent double bookings or date conflicts.

10. Automation & Validation

11. Auto-update room status when bookings are made or canceled.
12. Validate check-out date is after check-in date.
13. Automated email confirmations for guests.

14. Reporting & Analytics

15. Occupancy and revenue reports by room type.
16. Monthly booking summaries.
17. Dashboard with key performance indicators for managers.

Technical Requirements - Platform: Salesforce Lightning Platform - User Interface: Lightning Web Components (LWC) - Data Model: Custom objects for Guests, Rooms, and Bookings with proper

relationships - Business Logic: Apex triggers and classes - Automation: Flows and Process Builder for validation and notifications - Testing: Unit tests with >75% coverage - Security: Role-based access, sharing rules, and field-level security

Success Criteria - Reduce booking processing time by 60%. - Eliminate manual booking errors. - Instant booking confirmations for guests. - Real-time visibility into room occupancy and revenue. - 99.9% system uptime with error handling. - Intuitive interface requiring minimal training.

Target Users - Front Desk Staff: Manage bookings and guest check-ins. - Hotel Managers: Monitor revenue, occupancy, and performance metrics. - Guests: Receive booking confirmations and updates automatically. - Housekeeping: Update room maintenance status.

Expected Outcomes - Streamlined booking process with real-time room availability. - Automated guest communication and confirmation system. - Comprehensive reporting and analytics dashboard. - Accurate revenue tracking and optimized room utilization. - Enhanced guest experience through efficient service delivery. - Reduced operational costs via automation and process efficiency.

Project Scope The system will deliver a complete Salesforce-based hotel management solution, including: - Custom objects for Guests, Rooms, and Bookings with relationships. - Lightning Web Components for an intuitive interface. - Automated business processes via Apex, Flows, and Process Builder. - Dashboards and reports for monitoring KPIs. - Sample data and documentation for deployment and testing.

The solution will be scalable, maintainable, and aligned with Salesforce best practices.