

LAB 1

Design SRS document for Hotel Management System

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1. Introduction

1.1 Purpose

The purpose of this document is to provide a detailed description of the software requirements for a Hotel Management System (HMS) that includes functionalities for hotel operations, restaurant management, and parking services.

1.2 Scope

The Hotel Management System will facilitate the management of hotel operations, including guest reservations, room assignments, billing, restaurant services and parking facilities.

2. Overview

2.1 Product Perspective

The HMS is a standalone application with a client-server architecture. It will interface with various subsystems, including payment gateways, restaurant management systems, and parking management systems.

2.2 Product Functions

- Guest check-in and check out
- Room availability management
- Reservation processing
- Restaurant menu management and order processing
- Parking space management

2.3 User classes and characteristics

- Front desk staff
- Restaurant staff
- Housekeeping
- Management

2.4 Design and Implementation constraints

- compliance with data protection regulations
- Integration with third-party payment systems.

2.5 Assumptions and dependencies

- User will have basic knowledge of computer systems
- Availability of internet connectivity

3. Functional Requirements

3.1 User Authentication

- The system shall provide a secure login interface
- The system shall support password recovery and user registration.

3.2 Guest Management

- The system shall allow staff to add, edit and delete guest profiles.
- The system shall track guest preferences and history.

3.3 Room Management

- The system shall provide a real time view of room availability
- The system shall allow staff to update room status.

3.4 Reservation Management

- The system shall allow online and offline booking

3.5 Billing and Payment Management

- System shall support online and offline modes of payment and generate invoices

3.6 Restaurant Management

- System shall allow staff to manage menu, take orders and manage tables

3.7 Parking Management

- System shall allow guests to reserve spots and track available spots



4. Non Functional Requirements

4.1 Performance

- System shall support upto 100 simultaneous users with average response time of 2 seconds

4.2 ~~Secure~~ Security

- System shall encrypt sensitive information. Role based access to the system

4.3 Usability

- Intuitive GUI and documentation

4.4 Reliability

- 99.9% uptime with regular backups

4.5 Maintainability

- Follow standard practices and support modular updates

4.6 Portability

- System should be compatible with major web browsers with a responsive design

5. Domain requirements

5.1 Business rules

- Guests must provide valid identification during check in.
- Reservations must be confirmed with a valid payment.
- All guest information must be stored in compliance with data protection laws.
- Cancellation policy must be conveyed.

5.2 Data management

- System shall maintain a centralized database.
- Historical data of ^{at least} past 5 years to be stored.
- System must retrieve past records of guests & to provide personalized service.