

18/8/25

# Software Requirements Document

## 1. Hotel Management System

### 1. Introduction

#### 1.1 Purpose of this Document:

Purpose of this document is to outline the requirements and specifications for the development of a Hotel Management System. It will provide a clear understanding of the project objectives, Scope, and deliverables.

#### 1.2 Scope of this Document

This document defines the overall working and main objectives of the Hotel management System.

It includes a description of the development cost and time required for the project.

#### 1.3 Overview

The hotel management System is a software solution designed to streamline hotel operations including reservation management, guest check-in check out, room assignment, billing & reporting.

## 2. General Description

The Hotel management System will be designed to manage the needs of hotel staff and management providing features such as room booking, guest profiles inventory management and financial reporting. It will be accessible to users with varying levels of expertise.

### 3. Fundamentals

### 3. Functional Requirements

#### 3.1 Room management

- to assign rooms to guests based on availability & preferences

- Track room status in real-time

#### 3.2 Reservation management

- Allow users to make room reservations online / in place

- To generate reservation confirmations and notify users

#### 3.3 Guest management

- maintaining guest information, preferences and history

- Facilitate check in / check out

#### 3.4 Billing and invoicing

- generate accurate bills for room charges additional services and taxes

- accept various payment methods

- generate invoices of corporate clients

## 4. Interface Requirements

### 4.1 User Interface:

- user-friendly interface for both hotel staff and guests
- Accessible via browser, device mobile & desktop

### 4.2 Integration

- Integration with payment gateways
- Integration with third-party platforms for booking/reservation.

## 5. Performance Requirements

### 5.1 Response Time

- The system should respond to user action within 2 seconds

### 5.2 Scalability

- able to handle around 1000 customers during peak hours.
- maintain load during events/holidays.

### 5.3 Data Integrity

- To ensure data consistency and accuracy across all modules.

## 6. Design Constraints

### 6.1 Hardware Limitations:

- The system should be compatible with standard hotel hardware (PCs, printers, POS)

### 6.2 Software Dependencies

- utilize a RDBMS (eg MySQL) for data storage.
- utilize Java, Springboot for interface.

## 7. Non Functional Attributes

### 7.1 Security

- Implement robust authentication & authorization

### 7.2 Reliability

- ensure high availability and min fault tolerance

### 7.3 Scalability

- Design system to accommodate future growth.

### 7.4 Portability

- Support multiple platforms & devices.

### 7.5 Usability

- user friendly interface with easy navigation.

### 7.6 Reusability

- usage of modular code to facilitate future enhancements & maintenance

## 8. Preliminary Schedule & Budget

→ Development of this H.M.S is estimated to take 6 months

→ A budget of \$100,000 is proposed

→ This includes planning, development, testing, & deployment phases.