

# Hotel Management

## Problem Statement

The current manual system for managing hotel operations is time consuming and prone to errors. This is a need for a more efficient and automated system to streamline these processes and overall hotel management.

## 1. Introduction

### 1.1. Purpose of this document

The purpose of this document is to outline the requirements and specifications for the development of a Hotel Management Software.

### 1.2. Scope of this document

This document outlines the overall functionality, interface requirements, performance expectations, design constraints, and non-functional attributes of the Hotel Management Software. It also includes a preliminary schedule and budget estimation for the project.

### 1.3. Overview

The Hotel Management Software will cater to the needs of hotel staff, managers, and guests. It will feature user-friendly interfaces, real-time data updates, and robust security measures. Key features include:

- Reservation Management
- Check-in / Check-out Management



- Billing and Invoicing
- Room Inventory Management
- Guest Profile Management
- Reporting and Analytics

### 3. Functional Requirements.

- Reservation Management
  - Ability to create, modify and cancel reservations
  - Real time availability updates
  - Guest Preferences and special requests management
  - Check in / Check out Management
  - Efficient check in and check out processes
  - Room Assignment and key management
- Billing and Invoicing
  - Generation of accurate bills and invoices
  - Integration with payment gateways for online payments
- Room Inventory Management
  - Tracking of Room availability and occupancy
  - Room status updates
- Guest Profile Management
  - Storage and retrieval of guest information
  - History of past stays and preferences
  - Reporting Analytics
  - Generation of various reports
  - Data analysis for decision making

### G. Interface Requirements

The Hotel Management Software will interact with users through

- GUI for hotel staff



- Web based interface for online reservations
- Mobile application for guests

### 5. Performance Requirements

- Response time for user actions < 2 seconds
- System uptime: 99.9%
- Concurrent user support: Min 100 users
- Compliance with industry standard and regulations

### 6. Design Constraints

- Use of secure protocol for data transmission
- Compatibility with existing hardware and software infrastructure
- Compliance with industry standards and regulations

### 7. Non Functional Attributes

- Security: Encryption of sensitive data, role based access control
- Portability: Compatibility with multiple devices and platforms
- Reliability: Minimal downtime, data backups and recovery mechanisms
- Reusability: Modular design for future enhancements
- Application Compatibility: Integration with third party services
- Data Integrity: Data validation and error handling mechanisms
- Scalability Capacity: Ability to handle increasing workload.



### 8. Preliminary Schedule and Budget

The development of this Hotel Management Software is estimated to take 6 months with a budget of \$100,000. This includes analysis, design, development, testing and deployment phases.