

17 Hotel Management SystemProblem Statement

A hotel management system should be made streamline and automate various process involved in managing a hotel, including reservations, check-ins, billing etc. The system should provide an efficient & user friendly interface for both hotel staff & guests, while ensuring data security, accuracy & reliability.

SRS :1. Introduction

## 1. purpose of this document

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

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 provides a preliminary schedule and budget estimation for the project.

3. Overview

The Hotel Management Software is designed to streamline various operations within a hotel such as reservations, check-ins, check-outs, billing and inventory management. It aims to enhance efficiency, improve guest satisfaction and optimize hotel operations.



## 2. General Description

The Credit Card Processing System facilitates the following functions:

- Authorization of credit card transactions in real time
- Settlement of transactions, including capturing funds and generating receipts.
- Management of customer accounts and payments methods.

## 3. Functional Requirements

### Payment Authorization

- Validate credit card information provided by guest
- Transaction processing
- Initiate payment transactions securely through integrated payment gateway services.
- Transaction Status Monitoring
  - provide real time updates on transaction status to hotel staff.
- Payment Receipt Generation
  - Generate and email payment receipts to guests upon successful transaction completion

Interface Requirements The credit card processing functionality interact with:

- Payment gateway API's for transaction processing
- User interface components for entering & validating credit card details
- Email service for sending payment receipts to guests.



## 5. Performance Requirements

- Response time for user actions:  $< 2$  seconds
- System uptime: 99.9%
- Concurrent users supported: Minimum 100 users
- Data processing speed: Real time updates

## 6. Design Constraints

- Use of secure protocols for data transmission
- Compatibility with existing hardware and software infrastructure
- Compliance with industry standards & 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 backup and recovery mechanisms
- Applications compatibility: Integration with third party services

8. Preliminary Schedule and Budget The development of the hotel management software is estimated to take 6 months with a budget of \$100,000. This includes analysis, design, development, testing and deployment phases.