

LAB-01Software Requirement Specification (SRS)1. HOTEL MANAGEMENT SYSTEM SRS:1. Introduction:

1.1. Purpose of this document: This document comprises the requirements of a Hotel Management System used for the automation of hotel operations like room bookings, check-in and check-outs, billing and meal booking.

1.2. Scope of this document: The Hotel Management System will automate manual labor for customer services and staff management. It will increase efficiency and accuracy in room bookings and payments. The system will include room services catalog, user-friendly room booking system, secure payment gateways and meal bookings. Development cost and timeline will be determined after finalizing system features.

1.3. Overview: The Hotel Management System is a digital approach to Hotel Management procedures. Users can reserve rooms online by checking their availability and make payments. Hotel staff can manage guest check-ins, check-outs and manage overall room occupancy.

2. General Description:

The system aims to simplify hotel operations for users and hotel staff. Customers can use the platform to book rooms, while

hotel management can handle check-ins, room assignments, billing and generate reports on guest history.

### 3. Functional Requirements:

- (i) User registration and Login.
- (ii) Room occupancy catalog.
- (iii) Room reservation and cancellation.
- (iv) Invoice generation.
- (v) Room service management.

### 4. Interface Requirements:

- (i) User Interface (UI) - A responsive web interface that allows users to search for available rooms, make reservations, and complete payments.
- (ii) Application Programming Interfaces (APIs) - Communicates between the web interface and the servers to check and update room availability in real-time.
- (iii) Database Interfaces - The system will interact with a backend database to store and retrieve guests records, reservations, billing data, and other hotel-related information.

### 5. Performance Requirements:

The system must handle multiple concurrent bookings, process payments in real-time, and generate reports quickly. It should be scalable to handle increasing user activity.



## 6. Design Constraints:

The system must comply with data protection laws, such as GDPR. Integration with payment gateways and other third-party services will require careful design.

## 7. Non-functional attributes:

(i) Security - Data encryption for sensitive information.

(ii) Reliability - The system should have minimal downtime.

(iii) Scalability - Must accommodate future growth and demand.

## 8. Preliminary Schedule and Budget

Initial development is estimated to take 6 months with a budget of \$50,000, including software and hardware requirements, <sup>requirements</sup> design phase (\$1000), design and implementation (\$15000), validation & testing (\$20000), evolution and maintenance (\$14000).

11.

## CREDIT CARD PROCESSING SYSTEM SRS.

### 1. Introduction:

1.1. Purpose of the document: This document outlines the requirements for a Credit Card Processing System (CCPS), which will manage the authorization and settlement of credit card transactions.

1.2. Scope of the document: The system will handle transactions such as authorizations, billing, fraud detection, and secure payment processing. Development will be aligned with industry standards for data security and transaction speed.

1.3. Overview: The CCPS will provide businesses