

**Hotel Reservation/Management Software**

**Software Requirement Specification (SRS) Document**

**Sprint 2 Implementation**

**Project Timeline: 28.11.2022 to 9.12.2022**

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**1. Introduction**

The aim of the project “Hotel Reservation/ management software” is to provide an online platform for reservation. This application provides the availability of several types of rooms, prices. The system will be so simple and attractive which will make the customer comfortable to use and choose their ideal room. The final bill will be shown to the client.

* 1. **Purpose**

This document is intended to provide all the technical and non-technical requirements that are to be implemented in the project.

**1.2Intended Audience**

This application is intended to be read by Client.

**1.3Intended Use**

* Maintenance Team
* Clients
* This a general-Purpose Software anyone can access it.

**1.4 Project Scope**

The Hotel Management System is to simplify the day-to-day processes of the hotel. The system will be able to handle many services to take care of all customers in a quick manner by providing multiple client facility by the server. The client-side operation will display a menu-based interface to select their requirement.

**2. Overall Description**

This Hotel Reservation/Management System is an online platform where users can access and check for available rooms, manage room and choose no. of days of stay. Clients can choose from a wide range of varieties as far as rooms are concerned like deluxe/non-deluxe suite/presidential suite, AC/Non-AC, single/double bed on a comfort-based criteria through which the prices will be decided accordingly. This project is concerned with the creation of a computerized system to manage bookings for available rooms in different classes of luxury.

**2.1 Product Perspective**

The Hotel Reservation/Management System is a project developed in order to overcome the problems that have occurred due to the current manual system. It also helps in eliminating the hectic paperwork required when reserving a room in a hotel. The newly introduced system will provide easy access to the system, and it will contain user-friendly functions. The system will give better options for the errors occurring in calculations and all the other required tasks that have been specified by the client. The outcome of this project will increase the efficiency of almost all the tasks done at the hotel in a much more convenient manner.

* 1. **Product Features**
* Customer Login
* Check for Availability of Rooms
* Display the Prices
* Set Room Details
* Confirmation of Booking
* Payment

**2.3. User Classes and Characteristics**

* Client
* Server
* Database

**Clients** are a key part of the system. Clients have access to view the rooms’ information and price range. They should be able to confirm the booking and cancel it if necessary.

**The Database** will contain availability of rooms, customer details, booking details, transaction details.

**Server** has access to the hotel system. Server is responsible for managing hotel resources.

* 1. **Operating Environment**
* Memory: System will have maximum of 5MB space for data.
* Implementation Constraint: Application should be based on CPP and system programming
  1. **Design and implementation Constraints**

Not applicable

**2.6 Assumptions and Dependency**

* System should have Kali Linux/putty installed.
* The system should have either 20MB or more RAM.
* The service is used preferably on a desktop or laptop.

**3. System Features**

**3.1 Functional Requirements**

**3.1.1 Online System for Booking Rooms**

It is an online Hotel Reservation System, an online application where users can access and check for availability of rooms.

**3.1.2 Files**

The server maintains all the data related to a hotel booking system i.e. rooms/ categories/price etc.

**3.1.3 Booking Room**

The server provides details as requested by the client and proceeds with booking if confirmed.

**3.1.4 Supporting System for Multiple Client Login**

Multiple clients can connect to the server and try to reserve the same/different category of rooms or services. Server uses appropriate protection mechanism for providing this support and avoid corruption.

**3.1.5 Availability of Rooms or Services**

The server provides statistics related to availability of rooms/services etc.

**3.1.6 Authentication**

The clients need to be authorized by the server before accessing the hotel database.

**3.1.7 Confirm/Cancel Booking**

The clients have the option to confirm the reservation or cancel the reservation.

**3.2 Implicit Requirements**

**3.2.1 Error message for invalid users.**

Error messages will be displayed if the user enters an invalid user id and password, or the user doesn’t exist in the system.

**3.2.2 Display Bill**

The server will display the bill upon successful Reservation.

**3.2.3 Check-in and Check-out Period**

The server displays the total number of days a client stayed in a hotel.

**4. External Interface Requirements**

**4.1 User Interface**

* Client is given a menu-based interface.
* The model is client-server model.

**4.2 Hardware Interfaces**

* Necessary computer peripherals such as keyboards etc.
* Internet Connectivity (Wired/ Wireless)

**4.3 Software Interfaces**

* Linux based OS/Putty
* Database
* Server
  1. **Communications Interfaces**

Hotel Management and User can access the application.

**5. Technical Requirements**

* 1. **Tools to be Used**
* Cpp Unit to automate unit testing
* Valgrind to detect memory leak
* Make file - Multi file multi directory solution with two step compilation process.
  1. **Technical Requirements**
* Socket Programming (in C++ - TCP)

**6. Non-functional Requirements**

**6.1 System Features**

### Supportability: The system is easy to use.

### Design Constraints: The system is built using Cpp and system programming language.

### Usability: This application is customer and management friendly, which helps customers to book their room in a convenient way.

### Performance: The system will work on the users and hotel management.