Software Requirements Specification

for

HOTEL MANAGEMENT SYSTEM

Version 1.0 approved

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Revision History

Name	Date	Reason For Changes	Version

1. Introduction

1.1 Purpose

The main purpose of the document is to give a detailed description of the requirements for the first version of the Hotel Management System software. The document describes in detail the functional requirements and helps the user understand the requirements along with the purpose of the project. It illustrates the software's interfaces and it's interactions with external applications. It details the hardware as well as software specifications.

1.2 Document Conventions

- *Entire document has justified alignment*
- *Numbering scheme : decimated enumeration*
- *Convention for Main Title:*
    - *Font Face: Times New Roman*
    - *Font Style : Bold*
    - *Font Size : 18*
- *Convention for Sub Title:*
    - *Font Face : Times New Roman*
    - *Font Style : Bold*
    - *Font Size : 14*
- *Convention for Body:*
    - *Font Face : Arial*
    - *Font Style : Italic*
    - *Font Size : 11*

1.3 Intended Audience and Reading Suggestions

- *Developers to develop the first stage of the project*
- *Management Team for the effective management*
- *Testers for ensuring bug-free implementation*

1.4 Product Scope

This software facilitates the user to perform various hotel room management operations and keep a track of the database and to manage the system efficiently. The software system includes functions such as check-in, check-out, and maintaining accounts. The aim of the software is to provide a user-friendly environment for the user. This software is expected to complete within 1 month of time and is to be built on C++ platform using Microsoft Visual Studio.

1.5 References

(TO BE FILLED IN LATER as the document evolves)

2. Overall Description

2.1 Product Perspective

The Hotel Management System is a new self contained and independent software system. It provides a software interface to perform common hotel management activities. It will be used by the administration of the hotel to perform their management duties in a time and cost-effective manner.

2.2 Product Functions

2.2.1 Reservation: Primarily the Hotel Management System will be used by the management to help schedule bookings efficiently given the guest's travel particulars. The software will attempt to place reservations on hotel rooms such that guest's are given fair preference and profitability of the hotel is maximised.
2.2.2 Room Management: Keeps track of the available rooms in the hotel and allows for modification of these rooms.
2.2.3 Guest Management: Maintains a record of the guests and their activities in the hotel.

2.3 User Classes and Characteristics

The intended users of the Hotel Management System are the administrative staff of the hotel. The staff is expected to be proficient in using computer systems as well as have some previous training with the Hotel Management System in particular. The administration of the hotel is skilled in running the hotel under the present system and may not be quick to change how they perform their day-to-day activities. All of the users are expected to have good reading and typing skills.

2.4 Operating Environment

- Tool : Microsoft Visual Studio(G++14)
- Storage of Code : VC++ format
- Operating System : Windows(8 or higher)

- Database : SQL server compact edition(included in Visual Studio Solution Format)
- RAM : Greater than 2GB
- Storage : 500GB internal hard drive
- Processor : Intel i3 or greater
- Chrontab : Inactive

2.5 Design and Implementation Constraints

The Hotel Management System will be designed and implemented using C++ 14 as promoted by the development tool Microsoft Visual Studio,14. It will not need any external database access or network permissions. It is a standalone implementation not requiring administrative rights which is stored in the VC++ format by means of Visual Studio Solutions format. Following are the design constraints:

2.5.1 The completed Hotel Management System software must be delivered before April 1, 2018.
2.5.2 The system should have ways to perform all management duties already performed by the hotel staff.
2.5.3 The software system should be responsive to user input.
2.5.4 It should be easy to implement new features and packages into the HMS.
2.5.5:The Hotel's Organization will take up full responsibility of maintaining the software.

2.6 User Documentation

Visual Studio Documentation (official)

User Guide - Portable Document Format(PDF)

2.7 Assumptions and Dependencies

The dependencies of the product are as follows:

- *C++(14 or higher)*
- *Windows(8 or higher)*
- *Microsoft Visual Studio(14 or higher)*

3. External Interface Requirements

3.1 User Interfaces

Will be described as the project evolves.

3.2 Hardware Interfaces

The product can be run on the minimum hardware defined in section 2.4 and it also requires input devices like mouse that enable it to move the cursor on the screen to click on certain buttons or to select certain text boxes to enter information in, and enter text information through an input device like keyboard.

3.3 Software Interfaces

Will be described as the project evolves.

3.4 Communications Interfaces

Since the product will be a stand-alone solution, we will not be requiring any communication interfaces.

4. Functional Requirements

4.1 Reservation/Booking : *Allows reservations of customers on the basis of customer's first and last name.Booking is based on scheduling algorithm maximizing the total number of customers in the hotel and the number of rooms. 4.1.1 Input the record reservations.*

4.1.2 Input customer's name.

4.1.3 The system shall record the number of occupants.

4.1.4 The system shall record the room number and shall display the default room rate.

4.1.5 The system shall display whether or not the room is confirmed.

4.1.6 The system shall record the expected check-in date.

4.2 Room Management *: Keeps track of the rooms in the hotel*

4.2.1 The system shall track all rooms in the hotel, with their type.

4.2.2 The system shall record occupancy of the rooms.

4.2.3 The system shall allow new rooms to be added.

4.3 Guest Management: *Manages guests currently staying and wishing to stay.*

4.3.1 Allows new guests to be added taking in their required details.

4.3.2 Tracks the guests information as they are staying in the hotel.

5. Nonfunctional Requirements

5.2.1 Security: *Accepting a certain security deposit and giving it back after the checkout.*

5.2.2 Performance Analysis: *Handing out an online sheet to let the customer give feedback and review about the services and hotel in general.*

5.2.3 Network Check : *Ensuring in providing Internet connection for registered customers.*

5.2.4 Design Constraints : *The Hotel Management System shall be a stand-alone system running in a Windows environment. The system shall be developed using Java and an Access or Oracle database.*

5.2.5 Reliability *: Specify the factors required to establish the required reliability of the software system at time of delivery.*

5.2.6 Availability : *The system shall be available during normal hotel operating hours*

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5.2.7 Maintainability: *The Hotel Management System is being developed in C++. C++ is an object oriented programming language and shall be easy to maintain.*

5.2.8 Portability : *The Hotel Management System shall run in any Microsoft Windows environment that contains C++ Runtime.*

6. Other Requirements

Will be described as the project evolves.

Appendix A: Glossary

Will be described as the project evolves.

Appendix B: Analysis Models

Will be described as the project evolves.

Appendix C: To Be Determined List

Will be described as the project evolves.