1.INTRODUCTION  
This Software Requirement Specification document provides a complete description of all the functionalities and the specifications of the Hotel Management System. The developers and the testers can use this document as a reference for developing the design and test plan documents.

1.1 PURPOSE

The Software Requirement Specification (SRS) will provide a detailed description of the requirement for the Hotel Management System (HMS). This SRS will allow for a complete understanding of what is to be expected of the HMS to be constructed. The clear understanding of the HMS and its functionality will allow for the correct software to be developed for the end user and will be used for the development of the future stages of the project. This SRS will provide the foundation for the project. From this SRS, the HMS can be designed, constructed and finally tested.

This system will be used to carry out all hotel management tasks which are unwieldy when done manually. This system will provide the current status of all rooms and will handle all major hotel operations.

1.2 SCOPE

The purpose of Hotel Management System is to automate and ease the tasks of managing hotel reservation system. The first subsystem is a Reservation and Booking System to keep track of reservations and room availability. The second subsystem is the Tracking and Selling Food System that charges the current room. The third subsystem is a General Management Services and Automated Tasks System which generates reports to audit all hotel operations and allows modification of subsystem information. There are two end users for the HMS – the hotel staff and hotel managers. Both user types can access the Reservation and Booking System and the Food Tracking and Selling System. The General Management System will be restricted to the management user.

The end-users’ day-to-day job of managing a hotel will be simplified by a considerable amount through the automated system. The system will be able to handle many services to take care of all customers in a quick manner. The system should be user appropriate, easy to use and have an overall satisfaction.

1.3 DEFINITIONS , ACRONYMS AND ABBREVIATIONS

SRS – Software Requirement Specification

HMS – Hotel Management System

End users – The people who will be actually using the system

1.4 OVERVIEW

The SRS is organized into two main sections. The first is The Overall Description and the second is the Specific Requirements. The Overall Description will describe the requirements of the HMS from a general high level perspective. The Specific Requirements section will describe in detail the requirements of the system.

2. The Overall Description

Describes the general factors that affects the product and its requirements. This section does not state specific requirements. Instead it provides a background for those requirements, which are defined in section 3, and makes them easier to understand.

2.1 Product Perspective

The HMS is an independent stand-alone system. It is totally self-contained.

2.2 Product Functions

Reservation and Booking System

* Allows for typing in customer information
* Has a default room rate that is adjustable
* Includes a description field for the changed rate
* When a customer checks in, the status of room will be changed to occupied in the database.
* Ability to modify a reservation
* Displays the bill on check-out and changes the status of the room to vacant in the database.
* Adds extra-charges based on the delay in check-out time.

Tracking and Selling Food System

* Tracks all meals purchased
* Charges the current room on defined rates.

General Management Services and Automated Tasks System

* Generates report to audit hotel occupancy, future occupancy, room revenue and food revenue.
* Allows addition, deletion and modification of information on rooms and rates , menu items and prices, user profiles.
* Creation of users and assigning passwords.

2.3 User Characteristics

Educational Level of HMS computer software – Low

Experience of HMS software – None

Technical Expertise of hotel staff – Little

Technical Expertise of hotel manager – Average

Access privilege to General Management Services and Automated Tasks System – Hotel Managers

2.4 Constraints

* This system is designed for a specific hotel.
* Number of rooms is expected to be around 100.

2.5 Assumptions and Dependencies

* The system is not required to save generated reports
* Credit card payments are not included
* Access of information is allowed only to verified users

3. External Interface Requirements

3.1 User Interface

The User Interface Screens are described in the table below.

Table 1

|  |  |
| --- | --- |
| SCREEN NAME | DESCRIPTION |
| LOGIN | Log into the system as hotel staff or hotel manager |
| Reservation | Update/save/cancel/modify reservation, adjust room rate based on discount, input expected check-in date and time, accept payment |
| Check-in | Check-in customer (with or without reservation)with valid identification documents, accept payment |
| Checkout | Check-out customer, generate bill |
| Hotel Payment | Accept payment for room and food |
| Room Service/Restaurant | Create /modify/view/cancel order, generate meal bill |
| Customer record | Add or update customer record |
| Administer Room | Availability and rates |
| Administer User | Create/modify/delete user, change passwords |
| Administer Meal | Create/modify/delete meal items and prices |
| Report | Select/View/delete reports |

3.2 Software Interfaces

The software interface required for the implementation of this project are:

* Java compiler.
* Operating System (Microsoft Windows and all other that support Java).
* Oracle/Access database

3.3 Hardware Interfaces

The HMS will use the standard input/output devices for a personal computer. This includes the following

* Keyboard
* Mouse
* Monitor
* Printer
* Scanner

3.4 Communication Interfaces

The system shall be a stand-alone product that does not require any communication interfaces.

4. Functional Requirement

Functional requirements define the fundamental actions that system must perform. The functional requirements for the system are divided into 3 main categories, Reservation/Booking, Food and Management.

1. Reservation and Booking
   1. The system shall keep a record of reservations
   2. The system shall record customer details (First name, Last name, contact number)
   3. The system shall allot a room number based on availability
   4. The system shall display the default room rate
   5. The system shall record the number of occupants
   6. The system shall generate a unique confirmation number for each reservation
   7. The system shall display whether or not the room is guaranteed
   8. The system shall automatically cancel non-guaranteed reservations if the customer fails to show up without any prior notice within 1 hour of expected check-in time
   9. The system shall record the expected check-in date and time
   10. The system shall record the expected check-out date and time
   11. The system shall check-in customers.
   12. The system shall allow reservations to be modified without having to re-enter the customer details
   13. The system shall check-out customers
       1. The system shall display the amount owed by customer
       2. The system shall charge the customer for an extra night if they check-out after

12 p.m.

* + 1. The system shall record the payment
    2. The system shall change the status of room to available

1. Food
   1. The system shall track all meals purchased in hotel (restaurant and room-service)
   2. The system shall record payment for meals
   3. The system shall bill the current room if payment is not made at the time of service
2. Management
   1. The system shall display the hotel occupancy for a specified period of time(days, including past, present and future dates)
   2. The system shall display room and food revenue for a specified period of time(days)
   3. The system shall display an exception report, showing where default room and food prices have been overridden
   4. The system shall allow for the addition/deletion/modification of information regarding rooms, rates, menu items, prices and user profiles
   5. The system shall allow manager to create user accounts and assign passwords

5. Other Non-Functional Requirement

5.1 Performance Requirement

Performance requirements define acceptable response-time for system functionality.

* The load time for user interface screen shall take no longer than 2 seconds 90% of the time.
* The login information shall be verified within 5 seconds 80% of the time.
* Queries shall return results within 3 seconds 90% of the time.

5.2 Software Quality Attributes

5.2.1 Reliability

The average duration between 2 successive system failures should be greater than\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5.2.2 Availability

The system shall be available during normal hotel operating hours.

5.2.3 Security

Only verified hotel staff shall be granted access to Reservation/booking and Food subsystems. Hotel managers will have access to all 3 subsystems. Access to various subsystems will be protected by a user login screen that requires a user name and password.

5.2.4 Maintainability

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5.2.5 Portability

The HMS shall run in any Microsoft Windows environment that contains Java runtime and the Microsoft Access database.