**SOFTWARE REQUIREMENT SYSTEM**

**HOTEL MANAGEMENT SYSTEM**

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1 INTRODUCTION

* 1. PURPOSE:

The software requirements specification (SRS) will provide a details description f the requirements for the hostel management system. This SRS will allow for a complete understanding of what is to be expected from the newly introduced system which is to be constructed. This SRS will provide the foundation for the project.

* 1. DOCUMENT CONVENTIONS:

The document is prepared using Microsoft word 2013 and has used the font type “times new roman”. The fixed font size that has been used to type this document is 14pt with 1.5 line spacing. It has used the bold property to set the headings of the document.

* 1. INTENDED AUDIENCE AND READING SUGGESTIONS:

The intended audience of this document would be owner and specific employees like manager and receptionist of hostel Guyana and project team with the objective to refer and analyze the information. The document would final would provide a clear idea about the system that is building.

1. Overall description
2. System features
3. External interface requirements
4. Nonfunctional requirements.
   1. PRODUCT SCOPE:

The reservation system is to keep track in room and hall reservation and check availability. The room management system is for manage all types room services. The inventory control system will keep track in all inventories of the hostel and guest details will handled by guest management. The system should be user appropriate, easy to use, provide easy recovery of errors and have an overall end user high subjective satisfaction.

1. OVERALL DESCRIPTION
   1. PRODUCT PERSPECTIVE:

The hostel management system is a new self-contained software product which will be product which will be produced by the project team in order to overcome the problems that have occurred due to the current manual system. The system will give better options for the problem of handling large scale of physical file system, for the errors occurring in calculations and all the other required tasks that has been specified by the client.

* 1. PRODUCT FUNCTIONS:
* Make reservations
* Search rooms
* Add payments
* Issue bills
* Manage guest (add, update guest)
* Manage room (add, update guest)
* Manage staff (add, update guest)
* Manage inventory (add, update guest)
* Set rates
* Retrieve reports (staff payment, income)
* Manage users (add, update guest)
* Taking backups
* E-mail notifications
  1. USER CLASSES AND CHARACTERISTICS:

There are three levels in hostel management system. They are:

1. Owner
2. Manger
3. Receptionist

* 1. OPERATING ENVIRONMENT:

Hardware and software requirements.

Hardware requirements:

1.**Operating System:**

Supports all known operating systems, such as Windows, Linux.

2.**Computer:**

512MB+ RAM, monitor with minimum resolution of 1024x768, keyboard, andmouse

3.**Hard Drive:**

should be in NTFS file-system formatted with minimum 10 GB of free space

4.**A Laser printer:**

will need to be used to print these reports and notes.

Software requirements:

1.Software is designed to run on any platform above Microsoft Windows 7 (32bit).

2.Microsoft .NET Frameworks 4.0 or above.

3.Microsoft SQL Server Management Studio Express 2010.

* 1. DESIGN AND IMPLEMENTATION CONSTRAIN:

Software development crew provides their best effort in developing the system. In order to maintain the reliability and durability of system, some design and implementation constraints are applied. Availability of an android app for hotel management system could make the system portable but due to time constraint it is not possible.

* 1. PROJECT DOCUMENTATION:

Project Documentation section reveals the all the details about the document. It includes project charter and project proposal.

* **Project charter:**

This document provides the basic information about the team members their responsible in developing functions, the background of the client and the nature of the main problem identified.

* **Project proposal:**

The proposal of the project consists with the problems that are identified with the client, and the solutions that are going to implement using the proposed system.

* 1. USER DOCUMENTATION:

User manuals provide to the client will give a clear idea in interacting with the system. It will be written in a simple understandable language concealing the inner complexity of the system. A hardcopy of the user manual will be delivered to the client with the delivery of system.

* 1. ASSUMPTIONS AND DEPENDENCIES:

Some software used in implementing the system is with high cost and the client has agreed to afford the amount of money of money needed to purchase them. It’s assumed that client won’t change that decision on the next phases of the software development. Although we assume that client is using windows 7 or windows 8. Otherwise if client use an open source operating system, there is a need of changing the SRS accordingly.

1. EXTERNAL INTERFACE REQUIREMENTS
   1. USER INTERFACES:

Graphical user interface

Description automatically generated

Login interfaces is used to login to the system using username and password for three different users.

* 1. HARDWARE INTERFACES:
* The requirements of the desktop computer where the system going to be installed.
* A specific computer must match with the above-mentioned requirements in order to gain the maximum benefits from the system in an efficient manner.
* A leaser printer will be needed when printing bills and several reports.
  1. SOFTWARE INTERFACES:

The computer this software going to be install need to have windows operating system equal or above, windows 7. There will be an ADO.NET data transmission with the Microsoft SQL server management studio express 2010 R2 edition that will be installed in the same computer.

* 1. COMMUNICATION INTERFACES:

When a specific reservation reserved at the same time an e-mail notification will be send to both relevant staff member’s e-mail account and guest’s account. Guest will be notified in the check-out date. To achieve that functionality, it requires having a stable internet connection. Mostly a broadband connection with the client’s computer will provide the efficient service.

1. SYSTEM FEATURES
   1. ER DIAGRAM

Diagram

Description automatically generated

* 1. USE CASE DIAGRAM

Diagram

Description automatically generated

* 1. ACTIVITY DIAGRAMS:

Chart, diagram

Description automatically generated

1. OTHER NONFUNCTIONAL REQUIREMENTS
   1. PERFORMANCE REQUIREMENTS:

Performance requirements define acceptable response times for system functionality. Although the system id developed suiting for the least system performances, the performance of the system will highly depend on the performance of the hardware and software components of the installing computer.

* 1. SAFETY REQUIREMENTS:

There are several users level in hotel management system. Access to the various subsystems will be protected by a user log in screen that requires a username and password. This gives different views and accessible functions of user levels through the system. Maintaining backups ensure the system data base security. System can be restoring in any case of emergency.

* 1. SECURITY REQUIREMENTS:

Customer service representatives and managers and owner will be able to log in to the hostel management system. Customer service representatives will have access to the reservation/booking and subsystems. Owner must protect their user log in id and password.

* 1. SOFTWARE QUALITY ATTRIBUTES:
* Availability:

The system shall be available during normal hotel operating hours.

* Correctness:

Extent to which program satisfices specifications, fulfils user’s mission objectives.

* Efficiency:

How much smaller number of resources and time are required to achieve a particular task through the system.

* Flexibility:

Ability to add new features to the system and handle them conveniently.

* Integrity:

How the system could insecure the information in the system and how it avoids the data losses. Referential integrity in database tables and interfaces.

* Maintainability:

How easy is to keep the system as it is and correct defects with making changes.

* Portability:

The hostel management system shall run in any Microsoft, windows environment.

* Reliability:

Specify the factors required to establish the required reliability of the software system at time of delivery. Mean time between failures and mean time to recovery.

* Reusability:

What is the ability to use the available components of the system in other systems as well

* Testability: -

Effort needed to test to ensure performs as intended.

* Usability:

How easily a person can be taken the benefits of the system and the user friendliness.

* Robustness: Strength of the system to handle system functions accurately and maintain the database without facing to unexpected failures.
  1. BUSINESS RULES:

The system is designed in a way where responsibility and privileges are decreased in the order of owner, manager, and receptionist. The role of manager is elected in the arm of the making the owner’s hands free from regular interfering with the system. This is critical and important.

1. OTHER REQUIREMENT:

When the system is completely developed and submitted to the client, few sessions will be required to make the users of the system understand about the functionality of it and some time to adapt to the system.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*END\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*