Software requirements specification

Project: Hotel room reservation system "Hotel APS"

Instrucciones para el uso de este formato

Este formato es una plantilla tipo para documentos de requisitos del software.

Está basado y es conforme con el estándar IEEE Std 830-1998.

Las secciones que no se consideren aplicables al sistema descrito podrán de forma justificada indicarse como no aplicables (NA).

Notas:
Los textos en color azul son indicaciones que deben eliminarse y, en su caso, sustituirse por los contenidos descritos en cada apartado.

Los textos entre corchetes del tipo "" permiten la inclusión directa de texto con el color y estilo adecuado a la sección, al pulsar sobre ellos con el puntero del ratón.

Los títulos y subtítulos de cada apartado están definidos como estilos de MS Word, de forma que su numeración consecutiva se genera automáticamente según se trate de estilos "Titulo1, Titulo2 y Titulo3".

La sangría de los textos dentro de cada apartado se genera automáticamente al pulsar Intro al final de la línea de título. (Estilos Normal indentado1, Normal indentado 2 y Normal indentado 3). c

El índice del documento es una tabla de contenido que MS Word actualiza tomando como criterio los títulos del documento.
Una vez terminada su redacción debe indicarse a Word que actualice todo su contenido para reflejar el contenido definitivo.

.

Ficha del documento

Fecha	Revisión	Autor	Verificado dep. Calidad.
12/04/2012		Rodríguez Juan Tapias Juan Mendoza Leonardo	

Documento validado por las partes en fecha:

Por la comunidad	Por la universidad
Centro de Formación Socialista "Metalminero de la Victoria."	Universidad Politécnica Territorial de Aragua Doct. Federico Brito Figueroa

Content

1 Introduction

Advancement in technology and application development has allowed RRSS Developments Solutions to grow in object-oriented application development.
This document will detail the compliance with the guidelines given by IEEE 830

1.1   Purpose

This document defines the requirements that the system will meet for adequate automation in the operation of a Hotel. In which it will allow the different users (Guest, Receptionist, Cleaning Staff, Room Service) to carry out their corresponding activities in the best way.

1.2   Scope

The system is called "Hotel APS" (Automatic Payment of Services). It will allow the automation of the operation of the hotel, giving the facility both for the Guests (User) and the workers of the same (Receptionist, Cleaning staff, Room Service).

Efficiently showing the Guest the information necessary to reserve a room, keeping a record of their room service orders, automating the purchase and generating an invoice with the corresponding user data.

For the workers, it will facilitate the collection of the stay in the hotel, the update of the warehouse inventory, showing if a room is already in conditions of use.

Providing truthful information, and this will allow optimizing the hotel's resources in a satisfactory way by automating its service.

.

1.3   Involved Personnel

Name	Yulliana Román
Role	Analyst, designer and programmer
Professional Category	Student
Responsibility	Information analysis, design and programming of the system
Contact information	iyroman@espe.edu.ec

Name	Gabriel Rosero
Role	Analyst, designer and programmer
Professional Category	Student
Responsibility	Information analysis, design and programming of the system

Contact information	gsrosero2@espe.edu.ec

Name	Santiago Sañay
Role	Analyst, designer and programmer
Professional Category	Student
Responsibility	Information analysis, design and programming of the system
Contact information	sssanay@espe.edu.ec

Name	Jimmy Simbaña
Role	Analyst, designer and programmer
Professional Category	Student
Responsibility	Information analysis, design and programming of the system
Contact information	jasimbana14@espe.edu.ec

1.4   Definitions, acronyms and abbreviations

Nombre	Descripción
Usuario	Persona que usará el sistema para gestionar procesos
ERS	Especificación de Requisitos Software
RF	Requerimiento Funcional
RNF	Requerimiento No Funcional
FTP	Protocolo de Transferencia de Archivos

1.5   Referencias

Título del Documento	Referencia
Standard IEEE 830 - 1998	IEEE

1.6   Summary

This project refers to the issue of hotel reservations through the Web and a program that, when reserving a room, is more accessible with data that is not so complicated and provides good customer service.

The main objective of this project is how to speak and present the idea of how to server the client, therefore this project is carried out through a program whose initial procedure is to enter the page, give information about the client: name, ID, age, credit card, and for how many people you want to reserve, that at the time of the client's arrival the receptionist asks for an ID and he already knows where his respective room will be located, he is given his respective key and he can enjoy the services that may have the Hotel.

This Program will help the client to have greater accessibility and ease to power book a room with little data input, and that you have confidence in how it works and so that the client has satisfaction with the Hotel.
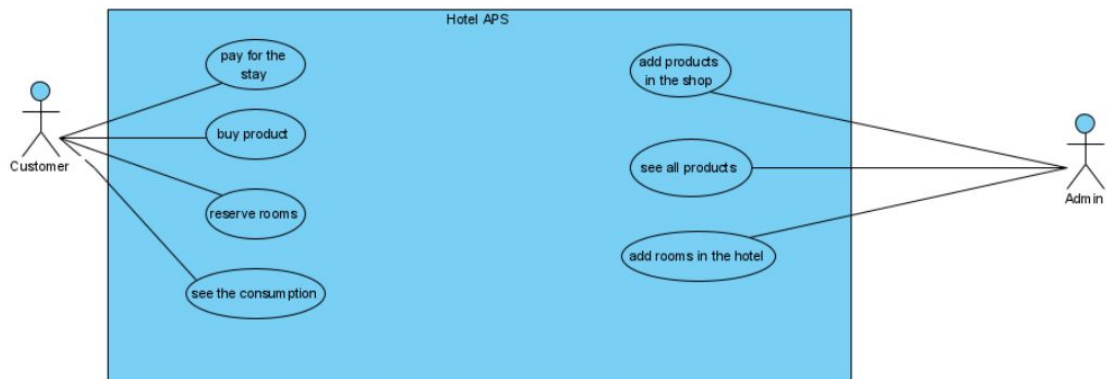
2 General description

2.1   Product perspective

The product we are creating is about the reservation of hotels through a program or several rooms, which when being able to reserve ask for few requirements such as the name of the client, ID, credit card to give greater security to the client, we also give knowledge of our product such as offers, services, food, among other things.

When the reservation has already been made and the client wants to go to the point of arrival, upon entering the reservationist will be there who will ask for the identification number as data, verifying that if it appears in the system, he will give the key where he will stay.

2.2   Product Functionality

2.3   User characteristics

Type of user	Receptionist
Formation	Leader
Activities	Serve the customer

Type of user	Cleaning service
Formation	NA
Activities	clean the room

Type of user	Room service
Formation	NA
Activities	Food

Type of user	Visitor
Formation	NA
Activities	Consumes the product

.

2.4 Restrictions

- Interface to be used with the internet.
- Languages in use: JAVA
- The system will be designed to be a friendly and intuitive model for the user.
- The system should have a simple design and implementation, independent of the platform or the programming language.

.

2.5 Suposiciones y dependencias

- It is assumed that the requirements described here are stable The equipment on which the system is to be run must meet the above requirements to ensure proper execution of the same (in this case the specifications are a set of characteristics of the various pc's used to create the project).

3 Specific requirements

Functional Requirements

Identification of the requirement:	RQF 001
Name of the requirement:	Selection of the user's role.
Characteristics:	The user must enter by keyboard the option corresponding to his role.
Requirement description:	The system will allow the user to choose the role.
NON functional requirement:	● RNF01 ● RNF02 ● RNF03 ● RNF06
Priority of the requirement: high	

Identification of the requirement:	RQF 002
Name of the requirement:	Reservation, modification or cancellation of a reservation
Characteristics:	The user must enter by keyboard the option corresponding to his role.

Requirement description:	The system will allow the customer to book or cancel the room.
NON functional requirement:	- RNF01 - RNF02 - RNF03 - RNF04 - RNF05 - RNF06
Priority of the requirement: high	

Identification of the requirement:	RQF 003
Name of the requirement:	Purchase of a product.
Characteristics:	The user will request products from the room.
Requirement description:	The system will allow the customer to place orders to the room.
NON functional requirement:	- RNF01 - RNF02 - RNF03 - RNF04
Priority of the requirement: high	

Identification of the requirement:	RQF 004
Name of the requirement:	Add products to the shop.
Characteristics:	The admin adds products to the store, typing data like: name, price, id, stock
Requirement description:	The system will allow the administrator to add products to the system.
NON functional requirement:	- RNF01 - RNF02 - RNF03 - RNF06
Priority of the requirement: high	

Identification of the requirement:	RQF 005
Name of the requirement:	Show consumption
Characteristics:	Customer will be able to see all consumption
Requirement description:	The system will allow the user to see his consumption.
NON functional requirement:	● RNF01 ● RNF02 ● RNF03 ● RNF04
Priority of the requirement: high	

Non-Functional Requirements.

Identification of the requirement:	RNF01
Name of the requirement:	System interface
Characteristics:	The system shall have a user-friendly interface.
Requirement description:	The system should contain an interface that is easy for the user to use, displaying instructions to enhance usage.
Priority of the requirement: High	

Identification of the requirement:	RNF02
Name of the requirement:	System response time
Characteristics:	The system should respond in less than 5 seconds.
Requirement description:	The system will respond quickly to expedite the booking process
Priority of the requirement: High	

Identification of the requirement:	RNF03
Name of the requirement:	System maintenance
Characteristics:	The system will be able to respond to changes and have the necessary documents for maintenance.
Requirement description:	The system must include a manual that facilitates the maintenance of the system.
Priority of the requirement: High	

Identification of the requirement:	RNF04

Name of the requirement:	Information protection
Characteristics:	The system must protect the user's personal data (id, name, number phone, number room, etc).
Requirement description:	The system must take care of the information of each user that uses the application.
Priority of the requirement: High	

Identification of the requirement:	RNF05
Name of the requirement:	User level
Characteristics:	The system will allow access to information or actions depending on the user's role.
Requirement description:	The system will restrict access to actions that do not correspond to the role of each user.
Priority of the requirement: High	

3.1. Common interface requirements

3.1.1. User Interfaces

The user interface will consist of a set of options that allow the user to interact with the system and meet the requirements.

3.1.2. Interfaces de hardware

It will be necessary to have computer equipment in perfect condition with the following characteristics:

- Network adapters.
- 1.66GHz processor or higher.
- Minimum memory of 256Mb.
- Mouse.
- Keyboard.

3.1.3. Software interfaces

- Operating System: Windows XP or higher.

3.2. Requisitos funcionales

3.2.1. Functional requirement 1

- **Selection of the user's role:** users should choose the role they play within the process of booking a hotel room.

    ✔ The system will allow the user to choose the role.

3.2.2. Functional requirement 2

- **Reservation, modification or cancellation of a room:** The user will provide the necessary information to reserve a room (id, name, room number, number of beds, time of stay) , also you can make changes in the reservation or cancel it.

3.2.3. Functional requirement 3

- **Purchase of a product:** The system will allow the user to request products from the store.

  - ✔ The system should display a list with all available products.
  - ✔ The user must select the product he wants to buy
  - ✔ The system should save the information.

3.2.4. Functional requirement 4

- **Add products to the shop:** The admin adds products to the store, typing data like: name, price, id, stock.

3.2.5. Functional requirement 5

- **Show consumption**:Customers will be able to see all consumption.

3.3 Non-functional requirements

3.3.1. Performance requirements

- Ensure that the performance of all applications and application operations are optimal.

3.3.2. Security

- Guarantee that the information belonging to the client will be safe and that it will not be filtered.

- Restrict access to information or operations that do not belong to the user's role.

3.3.3. Reliability

- The system should contain an interface that is easy to use for the user and contain a manual to help guide the user.

3.3.4. Availability

- The availability of the system must be continuous and optimal, since the application must work 7 days and 24 hours a day.

3.3.5. Maintainability

- The system should contain a guide to make the maintenance of the program much easier.

3.3.6. Portability

- The system will be compatible with Windows.