
SOFTWARE REQUIREMENTS SPECIFICATION

for

ONLINE HOTEL ROOM RESERVATION SYSTEM

Version 1.0

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1 Introduction

Planning a vacation has always been a stressful affair, going through several websites, deceptively attractive travel brochures, and several sleepless nights, only to be troubled by "technical difficulties" at the venue itself. Upon arrival, tourists are often told that the amenities they receive are different from those advertised, or maybe even sent to different rooms entirely, owing to clerical errors and miscommunications between hotels and travel agencies. Having the already exhausted families adjust to a slew of unexpected changes really dampens a vacation. **Yoyo.com**© aims to remind vacationers the true purpose of a holiday: to relax, and spend a few days devoid of worry.

We have decided to investigate the use of an Online Hotel Room Reservation System. This system would be used by people customers or staff of the hotel to check the availability of rooms, reserve or cancel bookings and by the admin(s) to update databases for check-in and check-out. The purpose of this document is to analyze and elaborate on the high-level needs and features of the Online Hotel Room Reservation System.

1.1 Purpose

The purpose of Software Requirements Specification (SRS) document is to describe the external behavior of the Online Hotel Room Reservation System. Requirements Specification defines and describes the operations, interfaces, performance, and quality assurance requirements of the System. The document also describes the nonfunctional requirements such as the user interfaces. It also describes the design constraints that are to be considered when the system is to be designed, and other factors necessary to provide a complete and comprehensive description of the requirements for the software. The Software Requirements Specification (SRS) captures the complete software requirements for the system, or a portion of the system.

1.2 Project Scope

The Software Requirements Specification captures all the requirements in a single document. The Online Hotel Room Reservation System that is to be developed provides the admin and customers of the hotel with information on vacancy, online blocking of rooms and many other facilities. The system is supposed to have the following features:

- Customers of the hotel are able to reserve and cancel a room at a hotel of their choice under the group, under the date specified.

- The system provides unique login facilities to each customer, staff and admins of the hotel(s).
- Members of the hotel are able to view and update their profile details, in addition to being able to store payment and card details.
- The system allows the staff to check in and check out customers at any time of the day, and is up and running all 24x7.
- Vacancies are posted on the website for perusal and updated each time a reservation/cancellation is made.
- Payments are handled at the time of check-out, and handled appropriately depending on membership.
- Members are given special privileges like seasonal discounts and travel packages.
- Customers have the options to avail facilities like swimming pool and the like, at overhead prices.

1.3 References

[IEEE] The applicable IEEE standards are published in “IEEE Standards Collection,” 2001 edition.

1.4 Overview

This document has 3 chapters remaining. Chapter 2 focuses on the overall description, including product perspective, and functions, constraints, dependencies and characteristics of the users. The following chapter is regarding the specific requirements, functionality, reliability, usability and the like. The final chapter gives the supporting information for the product.

2 Overall Description

2.1 Product Perspective

Yoyo.com© is an application to optimize the process of managing a vacation, from start to end. This will greatly benefit anyone running a hotel, as well as the tourists who wish to stay at the aforementioned hotels. The system itself operates on two categories of users: staff and tourists. The former will be used by hotel staff, allowed access to the database of tourists, including regular visitors, and will have to update the status of rooms and other hotel services. The tourist category will be applied visitors, to plan and book trips, with the help of suggestions, courtesy of Yoyo.com©. These suggestions will take into account the season, location, prices and duration of stay when prompting suggestions for itineraries.

The product will have interactions with hotel staff and tourists, switching modes accordingly. It will also interact with other systems, such as the Internet, Billing System, Booking Database, Traveler Database and the Hotel Database. The complete overview of the system is shown in Figure 2.1.

2.2 Product Functions

The Online Hotel Room Reservation System provides real time information about the rooms available in the respective hotels and their pricing based on service. The Product functions are more or less the same as described in the product perspective. The functions of the system include the system providing different type of services based on the type of user [Guest/Staff of a Hotel].

- The guest should be provided with the updated information about the availability of Rooms across all the hotels registered on the site.
- Provisions for the guests to book the room they want, according to their availability.
- The guest is given a provision to check his account information and change the account information any time in the given valid period.
- The guests are provided with the rooms available at each hotel and allowed to reserve the rooms where they would like to stay prior of their visit and also allowed to cancel the rooms.
- The staff can get the information about the guests who have booked or cancelled rooms.

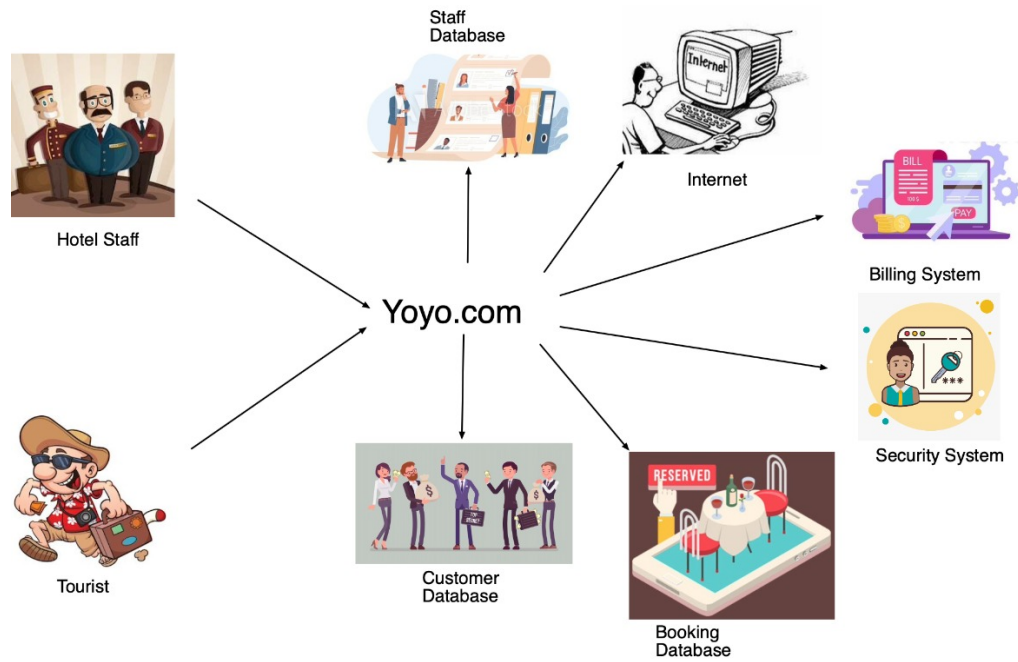


Figure 2.1: System Overview

- The staff is provided with interfaces to add/delete rooms available in his hotel.
- The guests will have to pay a small advance, for the room as well as all the accessories that the guest has requested access to that the hotel has provided which will be calculated by the system accordingly and the information about the guest and the advance is sent to the manager.

2.3 User Characteristics

The users of this system are customers and staff who use and maintain it. They are assumed to have basic computer knowledge and that of online booking. The staff are to have a higher level of insight of the inner workings of the system and assumed to be capable of handling catastrophic failures owing to disk crashing or power failure. Guides made to instruct users and to setup and maintain system by staff should be self sufficient.

2.4 Constraints

- The information about all users (Hotel staff and Tourists), bookings, and hotels must be stored in a database that is accessible by the booking system.

- The user information security system must be compatible with Internet applications.
- The booking and update system is running as long as it is connected to the Internet.
- The user can access the system from any device that has Internet browsing capabilities and an Internet connection.
- The billing system is connected to the booking system and the database used by the billing system must be compatible with the interface of the booking system.
- The users must enter their correct usernames and passwords to login to the booking and update system.
- Certain facets of the systems may only be available during certain times of the year.

2.5 Dependencies

- Access to Databases.
- Stable internet connection.
- Sufficient knowledge of English and computers.

3 Specific Requirements

3.1 Functionality

3.1.1 Logon Capabilities:

The system shall provide the users with logon capabilities.

3.1.2 Mobile Devices:

The Online Hotel Room Reservation System is also supported on mobile devices.

3.1.3 Alerts:

The system will alert the administrator in case of any problems.

3.2 Usability

- The system shall allow the users to access the system from the Internet using HTML or it's derivative technologies. The system uses a web browser as an interface.
- Since all users are familiar with the general usage of browsers, no specific training is required.
- The system is user friendly and self-explanatory.

3.3 Reliability

The system has to be very reliable due to the importance of data and the damages incurred due to incorrect or incomplete data.

3.3.1 Response Time:

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3.3.2 Availability:

The system shall be operational 24 hours a day and 7 days a week.

3.3.3 Mean Time Between Failures(MTBF):

The system will be developed in such a way that it may fail at most once annually.

3.3.4 Mean Time to Repair(MTTR):

Even if the system fails, the system will be recovered and be back up within an hour or less.

3.3.5 Accuracy:

The accuracy of the system is limited by the accuracy of the speed at which the employees of the hotel and users use the system.

3.3.6 Access Reliability

The system shall provide 100% access reliability.

3.4 Performance

3.4.1 Response Time:

The information is refreshed every two minutes. The system shall respond to the member in not more than two seconds from the time of the request being submitted. The system shall be allowed to take more time when doing large processing jobs.

3.4.2 Throughput:

The number of transactions is directly dependent on the number of users, the users may be the manager, employees and also the people who use the system for reserving and cancelling reservations and checking their account details.

3.4.3 Resource Utilization:

The resources are modified according to the user requirements.

3.5 Supportability

The system designers shall take into consideration the following supportability and technical limitations.

3.5.1 Internet Protocols:

The system shall comply with the TCP/IP protocol standards and shall be designed accordingly.

3.5.2 Information Security Requirement:

The system shall support the information privacy requirements of customers and staff and use the same standard as the legal information security requirements.

3.5.3 Billing System Data Compatibility:

The member balance amount that will be calculated and sent to the billing system shall be compatible with the data types and design constraints of the billing system.

3.6 Design Constraints

- Software Language used.
- Development Tools.
- Class Libraries.

3.7 Online Help Documentation and Help System Requirements

Online help is provided for each of the feature available with the system. All the applications provide an online help system to assist the user. The nature of these systems is unique to application development as they combine aspects of programming (hyperlinks, etc) with aspects of technical writing (organization, presentation). An installation document will be provided that includes the installation instructions and configuration guidelines, which is important to a full solution offering. Also, a ReadMe file is typically included as a standard component.

3.8 Licensing Requirements

The usage is restricted to only Yoyo Group of Hotels© who have purchased the Online Hotel Room Reservation System from Shshsh® and signs the maintenance contract.

3.9 Legal, Copyright and other notices

Online Hotel Room Reservation System, Yoyo.com© is a trademark of Shshsh® and cannot be used without its consent.

3.10 Applicable Standards

The ISO/IEC 6592 guidelines for the documentation of computer based application systems will be followed.

4 Supporting Information

The use-case storyboards or the user-interface prototypes are not available. The appendices are not to be considered as part of the requirements.