MINISTRY OF EDUCATION AND TRAINING



**HOTEL WEBSITE**

**Software Requirement Specification**

**Project Code: HOWE**

**Document Code: HOWESRS-v1.0**

Hanoi, May 25, 2017

Record of change

\*A - Added M - Modified D - Deleted

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SIGNATURE PAGE

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# Introduction

## Purpose

This is a document created to introduce the HOWE system, including descriptions of all system functions along with descriptions of non-fuctional systems. This is also a document to illustrate the next steps in the development of the HOWE project including detailed design, testing and validation. This documentation provides the most overview of the system for both the developer and the system user

## Scope

The HOWE system is built based on a website that makes quick and easy access to users and system management. The simple, easy-to-understand designs are suitable for anyone who is able to use website services as well as those who wish to use the services that HOWE provides directly and quickly. The HOWE system targets three main user groups: guest, staff, and administrator. Each user user group will have separate functions as shown in the model in section 1.3

## Use Case diagram



Figure 1.1 – Use Case Diagram

## Definitions, Acronyms, and Abbreviations

Below is an explanation of the terms and acronyms used in this document

|  |  |  |
| --- | --- | --- |
| Acronym | Definition | Note |
| HOWE | Hotel Website | Project’s name |
| SRS | Software Requirement Specifications |  |
| Admin | Administrator |  |
| AT | Acceptance Test |  |
| IT | Integration Test |  |
| KLOC | 1000 lines of code |  |
| QA | Quality Assurance |  |
| UT | Unit Test |  |
| PC | Personal Computer |  |
| UI | User Interface |  |

Table 1.1 – Definitions, acronyms and abbreviations

## References

|  |  |  |
| --- | --- | --- |
| No. | Document | Source/Web Address |
| 1 | System Requirements Specification Template | FPT Software Cop. |

## Overview

The main items mentioned in this document are 4 parts:

* Introduction: provides general information about SRS. Includes purpose, Scope, References and Overview.
* Overall description: Describe the basic elements that affect the project and the requirements of the system.
* Entity relation model: describes the database structure used in the system and its detailed information.
* Specific requirement: Describe detailed descriptions of system functions, as well as descriptions of non-functions.

# Overall Description

## Product perspective

When using HOWE, users can easily find information about the hotel, seeing room status as well as the facilities and services of the hotel, giving customers the most intuitive view of the hotel without to the place. By booking online to help customers minimize the time, cost savings improve work efficiency. Moreover, the HOWE system also provides users with the most up-to-date information about the resort, food, entertainment, etc… to make the perfect choice.

## Product functions

|  |  |  |  |
| --- | --- | --- | --- |
| User | Group of functions | Function | Description |
| Guest | Guest | Booking room | Allow user book online |
| Sent feedback, Q&A | Allow user sent feedback to hotel by e-mail |
| View hotel page | Allow user view webpage in HOWE |
| Cancel booking room | Allow user cancel booked room |
| Receptionist | Common | View hotel page | Allow staff view webpage in HOWE |
| Send e-mail | Send e-mail to customer |
| Change password | Change password |
| Booking room management | Booking online | Manage booking online information |
| Booking walk-in | Allow user book walk-in |
| Check-in | Allow check-in for customer |
| Check-out | Allow check-out for customer |
| View reservated rooms | List of all reservated rooms |
| Edit booking room information | Edit reservated room’s information |
| Delete booking | Instead of guest, staff can delete reservated rooms |
| Create bill | Allow create bill |
| Manager | Page management | Add content | Add new content to webpage |
| Edit content | Edit content of webpage |
| Delete content | Detele content of webpage |
| Room management | Room’s status management | List of all room and its status |
| Edit room detail | Edit detail information of room |
| Service management | Add service | Allow user add new service |
| Edit service | Allow user edit service |
| Delete service | Allow user delete service |
| Account management | Add account | Add new account |
| Delete account | Delete account |
| Edit account | Edit account |
| Accounting | Finance & Services | Handover finance by shift | Allow user manage finance by shift |
| Search bill | Allow user search for bill |
| Revenue statistics | Monthly revenue report |

Table 2.1 – Product functions

## User characteristics

HOWE is developed towards all those who wish to search, rent hotel rooms, along with information on many other services. Therefore, the system is divided into four main groups.

* Guest: Customers who wish to use the services provided by HOWE. With this user object they can use the main functions like:
  + Booking room
  + Send feedback, Q&A
  + View hotel page
  + Cancel booking room
* Receptionist: The staff at the hotel and has been provided with an account to be entered into the system. With this group of users, they can use the functions mentioned below:
  + View hotel page
  + Change password
  + Send E-mail
  + Booking room management
    - Booking online
    - Booking walk-in
    - Check-in
    - Check-out
    - View reservated rooms
    - Edit booking room information
    - Delete booking
    - Create bill
* Manager: they have role as an staff and are responsible for managing the operation of the system as well as staff login information:
  + Page management
    - Add page content
    - Delete page content
    - Edit page content
  + Room management
    - Room’s status management
    - Edit room detail
  + Service management
    - Add service
    - Delete service
    - Edit service
  + Account management
    - Add account
    - Delete account
    - Edit account
  + Accounting
    - Handover finance by shift
    - Search bill
    - Revenue statistics

## Constraints

## Assumptions and dependencies

Phụ thuộc môi trường gì

Phụ thuộc vào phần mềm nào

Chạy trên đâu đạt hiệu quả cao nhất, tránh các trường hợp như thế nào

# Specific Requirement

## Functionality Requirement

### Guest

#### Booking room

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Use Case ID | | | UC001 | Version | 1.0 |
| Use Case Name | | | Booking room | | |
| Created by: | | | QuyenTB | **Date Created:** | 29/05/2017 |
| Primary Actor | | | Guest | **Secondary Actor** | Staff |
| Description: | | | User can find room’s information and book room | | |
| Preconditions: | | | 1. User computer must be connected to the Internet 2. User access to HOWE website | | |
| Trigger: | | | Enter information and click on “Search” button on the website | | |
| Post conditions: | | | 1. Displays the room list that matches the entered condition 2. Show general information of each room | | |
| Normal Flow | | | | | |
| Step | **Actor** | | **Action** | | |
|  | Guest | | 1. Select check-in and check-out date, number of rooms, number of people 2. Click on “Search” button | | |
|  | HOWE | | Display RoomList page includes:   * Room title * Photo representative of the room * General information of room * Room of price * “Add” button * Selected room’s information * Total price * “Payment” button * “Delete” button | | |
|  | Guest | | 1. Click on “Add” button in order to choose suitable room 2. Click on “payment” button | | |
| 4-1 | HOWE | | Send email notification | | |
| 4-2 | Receptionist | | Call to customer | | |
| 5 | HOWE | | Display Homepage | | |
| Alternative Flows | | | | | |
| AT1 | At step 3, user click “Back” button of browser | | | | |
| Step | **Actor** | | **Action** | | |
| 3.1 | HOWE | | Redirects user to previous page | | |
|  | | | | | |
| AT2 | At step 3 in the main flows, if user click other hyperlinks or buttons | | | | |
| Step | **Actor** | **Action** | | | |
| 3.1 | HOWE | Redirects user to chosen hyperlink or button | | | |
|  | | | | | |
| Exceptions: | | | | | |
| EC1 | At step 1, required fields are not entered | | | | |
| Step | **Actor** | | **Action** | | |
| 4.1 | HOWE | | Display RoomList page with message | | |
| 4.2 | HOWE | | Mark error fields | | |
|  | | | | | |
| Priority | | | High | | |
| Frequency of Use: | | | High | | |
| Business Rules: | | |  | | |
| Other Information: | | | N/A | | |

#### Payment

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Use Case ID | | | UC002 | Version | 1.0 |
| Use Case Name | | | Payment | | |
| Created by: | | | QuyenTB | **Date Created:** | 29/05/2017 |
| Primary Actor | | | Guest | **Secondary Actor** | Staff |
| Description: | | | User perform payment for booked rooms | | |
| Preconditions: | | | 1. User has to choose room | | |
| Trigger: | | | Click on “Payment” button on the website | | |
| Post conditions: | | | 1. Show successful billing notifications 2. Send confirm E-mail to customer’s E-mail | | |
| Normal Flow | | | | | |
| Step | **Actor** | | **Action** | | |
|  | Guest | | 1. Click on “Payment” button | | |
|  | HOWE | | Display Payment page includes:   * “Booking room information” label * “Detailed” label * “Bill” label * “Price” label * “Total” label * “Customer information” label * “First Name” textbox * “Last Name” textbox * “E-mail” textbox * “Phone Number” textbox * “Payments” label * “Photos of bank cards” image * “Card number” textbox * “Expire Date” textbox * “Book now” button | | |
|  | Guest | | 1. Enter customer information 2. Select payment method by click on corresponding icon 3. Enter card number and expire date 4. Click on “Book now” button | | |
| 4 | HOWE | | Redirect to successful notifications page | | |
| 5 | HOWE | | Send confirm E-mail to customer | | |
| Alternative Flows | | | | | |
| AT1 | At step 3, customer click on “Cancel” button | | | | |
| Step | **Actor** | | **Action** | | |
| 3.1 | HOWE | | Redirects to previous page | | |
|  | | | | | |
| AT2 | At step 3 in the main flows, if user click other hyperlinks or buttons | | | | |
| Step | **Actor** | **Action** | | | |
| 3.1 | HOWE | Redirects user to chosen hyperlink or button | | | |
|  | | | | | |
| Exceptions: | | | | | |
| EC1 | At step 3, required fields are not entered | | | | |
| Step | **Actor** | | **Action** | | |
| 3.1 | HOWE | | Display Payment page with message “Required fields is not blank” | | |
| 3.2 | HOWE | | Mark error fields | | |
|  | | | | | |
| EC2 | At step 3 in the main flows, payment method is not selected | | | | |
| Step | Actor | | Action | | |
| 3.1 | HOWE | | Display Payment page with message “Choose payment method” | | |
|  | | | | | |
| Priority | | | High | | |
| Frequency of Use: | | | High | | |
| Business Rules: | | |  | | |
| Other Information: | | | N/A | | |

#### Send feedback

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Use Case ID | | | UC003 | Version | 1.0 |
| Use Case Name | | | Payment | | |
| Created by: | | | QuyenTB | **Date Created:** | 29/05/2017 |
| Primary Actor | | | Guest | **Secondary Actor** |  |
| Description: | | | User send feedback about Hotel to hotel’s E-mail | | |
| Preconditions: | | | 1. User computer is connected to internet 2. User access to HOWE website | | |
| Trigger: | | | Click on “Payment” button on the website | | |
| Post conditions: | | | 1. Show successful billing notifications 2. Send confirm E-mail to customer’s E-mail | | |
| Normal Flow | | | | | |
| Step | **Actor** | | **Action** | | |
|  | Guest | | 1. Click on “Payment” button | | |
|  | HOWE | | Display Payment page includes:   * “Booking room information” label * “Detailed” label * “Bill” label * “Price” label * “Total” label * “Customer information” label * “First Name” textbox * “Last Name” textbox * “E-mail” textbox * “Phone Number” textbox * “Payments” label * “Photos of bank cards” image * “Card number” textbox * “Expire Date” textbox * “Book now” button | | |
|  | Guest | | 1. Enter customer information 2. Select payment method by click on corresponding icon 3. Enter card number and expire date 4. Click on “Book now” button | | |
| 4 | HOWE | | Redirect to successful notifications page | | |
| 5 | HOWE | | Send confirm E-mail to customer | | |
| Alternative Flows | | | | | |
| AT1 | At step 3, customer click on “Cancel” button | | | | |
| Step | **Actor** | | **Action** | | |
| 3.1 | HOWE | | Redirects to previous page | | |
|  | | | | | |
| AT2 | At step 3 in the main flows, if user click other hyperlinks or buttons | | | | |
| Step | **Actor** | **Action** | | | |
| 3.1 | HOWE | Redirects user to chosen hyperlink or button | | | |
|  | | | | | |
| Exceptions: | | | | | |
| EC1 | At step 3, required fields are not entered | | | | |
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| 3.2 | HOWE | | Mark error fields | | |
|  | | | | | |
| EC2 | At step 3 in the main flows, payment method is not selected | | | | |
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| 3.1 | HOWE | | Display Payment page with message “Choose payment method” | | |
|  | | | | | |
| Priority | | | High | | |
| Frequency of Use: | | | High | | |
| Business Rules: | | |  | | |
| Other Information: | | | N/A | | |

## Non-functionality Requirement

### Usability

Hệ thống được thiết kế với giao diện đơn giản, thống nhất giữa các màn hình. Các bước thực hiện ngắn gọn dễ dàng giúp người dùng có thể thao tác với hệ thống ngay sau khi được training

### Availability

Hệ thống đảm bảo hoạt động 24/7. Nó phải được đảm bảo để hệ thống có thể làm việc bất cứ lúc nào, những yếu tố đó không phụ thuộc vào sự sẵn của internet. Tất cả các chức năng đều phải sẵn sàng ở cùng thời điểm, không có chức năng nào bị lỗi gây ảnh hưởng đến các function có sử dụng đến nó

### Reliability

Hệ thống được xác định là đảm bảo chạy được bao nhiêu phần trăm. Đảm bảo tính sẵn sàng khi tương tác với các hệ thống khác

### Performance

Băng thông của hệ thống như thế nào

Thời gian response

Khả năng lưu trữ data đến đâu

### Supportability

All predefined values (price, dropdown values) must be easy to maintain, i.e. change/update and delete/add (where applicable). All the dropdown values can be upgraded in the period of one day without any shutdown. All the changed dropdown values before one specific time (the midnight ,…) can be displayed in the GUI after that time. Other should be done in the downtime.

As wordings are critical, all displayed text (error messages, labels, captions, information messages) must be easy to maintain, i.e. change/update and delete/add (where applicable). All the change for displayed text should be done in the downtime.

The website deployment and upgrade will be specified in the Installation Guide documents.

### Design Constraints

Các màn hình được thiết kế dựa trên điều kiện như thế nào: định dạng ngày tháng, định dạng số, các ngôn ngữ hỗ trợ trên website, page size, sử dụng trên hệ điều hành nào, trình duyệt nào

### Interfaces

User interfaces:

Hardware interfaces: các hardware interface mà hệ thống hỗ trợ như các logical structure…..

Software interfaces: liên kết tới các component của 1 hệ thống hay 1 ứng dụng nào đó khác

Communication interfaces: những liên kết tới 1 hệ thống hay 1 thiết bị nào đó khác

### Licensing Requirements

### Legal, Copyright, and Other Notices

### Applicable Standards

# Supporting Information