

**Timeshare Exchange Platform**

**Software Requirement Specification**

TE: TE

Document Code: SP24SE17

**<Ho Chi Minh, March 2024>**

**RECORD OF CHANGES**

\*A - Added M - Modified D - Deleted

| **Effective Date** | **Changed Items** | **A\* M, D** | **Change Description** | **New Version** |
| --- | --- | --- | --- | --- |
| 11/2/2024 | Initial | a | Add project overview |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

**SIGNATURE PAGE**

**ORIGINATOR:**   
 Hà Văn Phước (leader)

Lê Viết Quốc Thịnh

Trần Gia Phúc

Nguyễn Song Trọng Thắng

**REVIEWERS:** <Name> <Date>

<Position>

**APPROVAL:** <Name> <Date>

<Position>

**Table Of Contents**

[**1**](#_heading=h.1fob9te) **INTRODUCTION 7**

[1.1](#_heading=h.3znysh7) Purpose 7

[1.2](#_heading=h.2et92p0) Scope 7

[1.3](#_heading=h.tyjcwt) Definitions, Acronyms, and Abbreviations 7

[1.4](#_heading=h.3dy6vkm) References 7

[1.5](#_heading=h.1t3h5sf) Overview 8

[**2**](#_heading=h.4d34og8) **OVERALL DESCRIPTION 9**

[**3**](#_heading=h.2s8eyo1) **FUNCTIONAL REQUIREMENTS 10**

[3.1](#_heading=h.17dp8vu) <Use Cases Diagram> 10

[3.2](#_heading=h.26in1rg) Use Case Edit project 11

[3.3](#_heading=h.lnxbz9) Use Case Post a new project 14

[3.4](#_heading=h.1ksv4uv) Use Case Get advice queue requests 17

[3.5](#_heading=h.44sinio) Use Case Get advice requests history 20

[3.6](#_heading=h.2jxsxqh) Use Case Sign up 23

[3.7](#_heading=h.z337ya) Use Case Login 26

[3.8](#_heading=h.3j2qqm3) Use Case Log out 29

[3.9](#_heading=h.1y810tw) Use Case Search building projects 31

[3.10](#_heading=h.4i7ojhp) Use Case Get project detail 34

[3.11](#_heading=h.2xcytpi) Use Case Send advice request 37

[3.12](#_heading=h.1ci93xb) Use Case Calculate estimated price 40

[3.13](#_heading=h.3whwml4) Use Case Submit a quotation 43

[3.14](#_heading=h.2bn6wsx) Use Case Get User Account list 46

[3.15](#_heading=h.qsh70q) Use Case Update role Account 49

[3.16](#_heading=h.3as4poj) Use Case Get revenue's dashboard 52

[3.17](#_heading=h.1pxezwc) Use Case Get projects dashboard 55

[3.18](#_heading=h.49x2ik5) Use Case Login with Facebook 58

[3.19](#_heading=h.2p2csry) Use Case Login with Phone and Password 61

[3.20](#_heading=h.147n2zr) Use Case Manage Account 64

[3.21](#_heading=h.3o7alnk) Use Case Register Staff 66

[3.22](#_heading=h.23ckvvd) Use Case Remove Staff 69

[3.23](#_heading=h.ihv636) Use Case Filter Building Projects 72

[3.24](#_heading=h.32hioqz) Use Case Check Advice Request Status 75

[3.25](#_heading=h.1hmsyys) Use Case Check Quotation Status 78

[3.26](#_heading=h.41mghml) Use Case Manage Profile 81

[3.27](#_heading=h.2grqrue) Use Case View Personal Profile 83

[3.28](#_heading=h.vx1227) Use Case Edit Personal Profile 85

[3.29](#_heading=h.3fwokq0) Use Case View Building Project 88

[3.30](#_heading=h.1v1yuxt) Use Case Manage Wish-list 90

[3.31](#_heading=h.4f1mdlm) Use Case Add to Wish-list 93

[3.32](#_heading=h.2u6wntf) Use Case Delete from Wish-list 95

[3.33](#_heading=h.kgcv8k) Use Case Manage Feedback 97

[3.34](#_heading=h.34g0dwd) Use Case Delete Feedback 99

[3.35](#_heading=h.1jlao46) Use Case Edit Feedback 101

[3.36](#_heading=h.43ky6rz) Use Case Create Feedback 104

[3.37](#_heading=h.19c6y18) Use Case Send Notification 107

[3.38](#_heading=h.3tbugp1) Use Case Send OTP Code 110

[**4**](#_heading=h.28h4qwu) **NON-FUNCTIONAL REQUIREMENT 114**

[4.1](#_heading=h.nmf14n) Usability 114

[<Usability Requirement One> 114](#_heading=h.37m2jsg)

[4.2](#_heading=h.1mrcu09) Reliability 114

[<Reliability Requirement One> 114](#_heading=h.46r0co2)

[4.3](#_heading=h.2lwamvv) Performance 115

[<Performance Requirement One> 115](#_heading=h.111kx3o)

[4.4](#_heading=h.3l18frh) Supportability 115

[<Supportability Requirement One> 115](#_heading=h.206ipza)

[4.5](#_heading=h.4k668n3) Design Constraints 115

[<Design Constraint One> 115](#_heading=h.2zbgiuw)

[4.6](#_heading=h.1egqt2p) On-line User Documentation and Help System Requirements 115

[4.7](#_heading=h.3ygebqi) Purchased Components 116

[4.8](#_heading=h.2dlolyb) Interfaces 116

[User Interfaces 116](#_heading=h.sqyw64)

[Hardware Interfaces 116](#_heading=h.3cqmetx)

[Software Interfaces 116](#_heading=h.1rvwp1q)

[Communications Interfaces 116](#_heading=h.4bvk7pj)

[4.9](#_heading=h.2r0uhxc) Licensing Requirements 116

[4.10](#_heading=h.1664s55) Legal, Copyright, and Other Notices 116

[4.11](#_heading=h.3q5sasy) Applicable Standards 117

[**5**](#_heading=h.25b2l0r) **SUPPORTING INFORMATION 118**

# INTRODUCTION thắng

*[The introduction of the* ***Software Requirements Specification (SRS)*** *provides an overview of the entire* ***SRS****. It includes the purpose, scope, definitions, acronyms, abbreviations, references, and overview of the* ***SRS****.]*

*[Note: The* ***SRS*** *document captures the complete software requirements for the system, or a portion of the system. Following is a typical* ***SRS*** *outline for a project using only traditional, natural-language style requirements—with* ***no use-case modeling.*** *It captures all requirements in a single document, with applicable sections inserted from the Supplementary Specifications (which would no longer be needed). For a template of an* ***SRS*** *using use-case modeling, which consists of a package containing Use Cases of the use-case model and applicable Supplementary Specifications and other supporting information, see rup\_srsuc.dot.]*

*[Many different arrangements of an* ***SRS*** *are possible. Refer to [IEEE 830-1998] for further elaboration of these explanations, as well as other options for* ***SRS*** *organization.]*

## Purpose thịnh

*This project aims to develop a "Timeshare exchange platform" website, offering a comprehensive solution for managing and executing timeshare exchanges in the vacation industry between owners (LANDLORD) and RENTER. The system will enhance workflow efficiency, improve the monitoring of client reservation requests, and facilitate the evaluation and comparison of timeshare options. This will provide a visual understanding of vacation needs, helping clients make accurate and effective decisions*

## Scope phúc

*The "Civil housing construction quotation system" website is designed to support communication between clients, contractors (admins), and authorized staff. It offers features for tracking, creating, managing, and comparing quotations for residential construction projects. Additionally, it integrates with project and financial management systems to optimize workflow processes.*

## Definitions, Acronyms, and Abbreviations thịnh

* Timeshare Exchange Platform: A platform facilitating the exchange of timeshare ownership.
* Client: An individual interested in exploring timeshare pricing, submitting consultation requests, executing timeshare exchanges, or seeking other information about the company on the website.

## References thịnh

*IEEE 830-1998: Recommended Practice for Software Requirements Specifications*

## Overview

***1. Introduction***

*This section lays the foundation for the SRS document, outlining its purpose, scope, and the definitions, acronyms, and abbreviations used throughout. It also includes references for further reading and an overview to give readers a snapshot of the document's contents.*

***2. Overall Description***

*Provides a high-level overview of the system, including its general capabilities, user interactions, constraints, and assumptions. This section sets the context for the detailed requirements that follow.*

***3. Functional Requirements***

*Detailed descriptions of the system's functionalities, represented through various use cases.*

***3.1 Use Cases Diagram:*** *Visual representation of the system’s functionalities and their interactions with the users.*

***3.2 - 3.38 Specific Use Cases:*** *Detailed scenarios that describe the system's interactions with users and other systems, covering everything from project management and user authentication to feedback management and notifications.*

***4. Non-Functional Requirements***

*Specifies the criteria not directly related to the functionality of the system but critical for its effectiveness and user satisfaction. This includes usability, reliability, performance, supportability, design constraints, and more. Each sub-section outlines specific requirements that ensure the system's quality and operational integrity.*

***5. Supporting Information***

*Additional information that supports the understanding, development, and implementation of the system. This could include data models, additional requirements, guidelines for developers, and any supplementary documents or references needed for a comprehensive understanding of the system.*

*Non-functional Requirements:*

1. **Performance**: The system must respond quickly, with a response time of no more than 3 seconds for each request.
2. **Scalability**: The system should be designed to easily accommodate user and data growth.
3. **Security**: The system must comply with high security standards to protect personal information and transaction data.
4. **Availability**: The system needs to be highly available, with a minimum uptime of 99.9%.
5. **Compatibility**: The system must be compatible with popular web browsers and mobile devices.
6. **Usability**: The user interface should be intuitive and easy to use for both clients and contractors.

*Functional Requirements:*

1. **Login/Register:** The system allows guests to create customer accounts.
2. **Profile Management:** Users can view and update their personal profile information.
3. **Create and Manage Quotes:** Contractors can create, review, and update quotes for projects.
4. **Search and Filter Quotes:** Customers can search and filter quotes based on criteria such as location, budget, and project type.
5. **Submit a Consulting Request:** Customers can send a consulting request directly to the contractor through the system.
6. **Review Feedback:** Both customers and contractors can provide reviews and feedback on projects or services.
7. **Notification:** The system will send notifications to users via email when there are new quotes, updates, or feedback.

# OVERALL DESCRIPTION

*Product Perspective*

*The Rent Timeshare system is a standalone product designed to bridge the gap between timeshare owners who wish to rent out their properties and potential renters looking for accommodations. It operates within the broader ecosystem of real estate and vacation rental platforms, offering specialized functionalities tailored to the unique aspects of timeshare rentals. This includes integration capabilities with existing property management systems, real estate databases, and payment gateways to ensure a seamless operation from listing to booking.*

*Product Functions*

*The system provides a comprehensive suite of functions designed to facilitate the rental process for both owners and renters:*

*Listing Creation and Management: Allows owners to create, edit, and manage listings for their timeshare properties, including descriptions, availability, and pricing.*

*Search and Booking: Enables renters to search for available timeshares based on various criteria (location, availability, price) and make bookings through the platform.*

*Payment Processing: Integrates secure payment processing functionalities for booking transactions.*

*User Account Management: Supports account creation and management for both renters and owners, including profile editing and rental history.*

*Advice and Support: Offers a system for users to request and receive advice on properties, along with a support system for queries and issues.*

*Feedback and Ratings: Allows users to provide feedback and rate their experiences with properties and renters, contributing to the community’s trust and transparency.*

*User Characteristics*

*The Rent Timeshare system caters to two main user groups:*

*Timeshare Owners: Property owners looking for an efficient way to rent out their timeshares. They require a simple, intuitive interface to manage their listings and transactions.*

*Renters: Individuals or groups seeking temporary accommodations with the unique benefits timeshares offer. They value ease of use, variety of choices, and the ability to securely book and pay for rentals.*

*Constraints*

*Regulatory Compliance: The system must adhere to local and international regulations governing real estate rentals, privacy, and online transactions.*

*Integration with Existing Systems: Seamless integration with existing property management systems and payment gateways is essential but may be limited by API availability and compatibility.*

*Market Variation: The demand for timeshare rentals can vary significantly by season and location, affecting listing availability and pricing strategies.*

*Assumptions and Dependencies*

*Market Demand: The system assumes a steady demand for timeshare rentals and an adequate supply of properties to list.*

*Internet Accessibility: It presumes users have uninterrupted access to the internet to use the platform.*

*Third-party Services: The system's performance is contingent upon the reliability of third-party services (e.g., payment processors, SMS gateways for OTP).*

*Requirements Subsets*

*This section will detail specific subsets of requirements derived from the overarching functionalities and constraints outlined above. These subsets will be elaborated in Section 3, focusing on particular scenarios like secure login procedures, responsive design for mobile and desktop platforms, and multilingual support to cater to a global user base.*

# FUNCTIONAL REQUIREMENTS

## Use Cases Diagram

## Use Case Sign Up (thịnh)

| **USE CASE-1 SPECIFICATION** | | | | |
| --- | --- | --- | --- | --- |
| **Use-case No.** | UC001 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Sign Up | | | |
| **Author** | Quốc Thịnh | | | |
| **Date** | 19/01/2024 | **Priority** | High | |

| | **Actor:**  Guest  **Summary:**  This feature allows actors to sign up for a new account on the web application.  **Triggers**  Actors want to sign up for a new account on the web application  **Preconditions:**  The actor is not logged in.  **Post Conditions:**   * Success: The system successfully creates a new account and logs in. * Fail: The system displays an error message, and the new account is not created.   **Main Success Scenario:**   | **No** | **Actor Action** | **System Response** | | --- | --- | --- | | 1 | Actor selects “Đăng ký” button | System shows a form with these fields:  - Username: free text input, required, length 1 - 20.  - Email: free text input, required, regex format /^\S+@\S+\.\S+$/  - Password: free text input, required, must have 1 special character and 1 capital letter.  - Phone number: number text input, required, length 9 – 11.  - OTP number: number text input, required, length 6. | | 2 | Actor clicks “Gửi mã xác thực” after input the email. | System validates email and requests service sends OTP numbers to actor’s email. | | 3 | Actor selects “Tạo tài khoản” button. | System checks OTP numbers. If correct, create a new account and redirect to Homepage. |   **Exceptions:**   | **No** | **Cause** | **System Response** | | --- | --- | --- | | 1 | Actor enters incomplete or invalid information. | System shows error message: “Vui lòng điền vào mục này”. | | 2 | Email or phone number existed in the system | System shows error message: “Tài khoản đã tồn tại trong hệ thống”. | | 3 | OTP number is expired. | System shows error message: “Mã xác thực đã hết hiệu lực”. | | 4 | OTP number is not correct. | System shows error message: “Mã xác thực không đúng”. |   **Business Rules:**   * Only guests can sign up for a new account. * Each new account must have a unique username and a valid email address. * The email must be confirmed via a secret 6-digit number sent to the registered email address. * Required fields must be filled in. | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

## Use Case Book a timeshare (phước)

| **USE CASE-2 SPECIFICATION** | | | | |
| --- | --- | --- | --- | --- |
| **Use-case No.** | UC002 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Book a Timeshare | | | |
| **Author** | Minh Quân | | | |
| **Date** | 19/01/2024 | **Priority** | High | |

| | **Actor:**  *User, Customer*  **Summary:**  *This feature allows both guests and customers to book a timeshare on the Timeshare Exchange Platform.*  **Triggers**  *The actor wants to edit a project on the web application.*  **Preconditions:**  *The actor must be logged in.*  **Post Conditions:**  *A detailed booking confirmation is sent to the actor, including property details, dates, and payment information.*  **Main Success Scenario:**   | **No** | **Actor Action** | **System Response** | | --- | --- | --- | | 1 | The user selects a timeshare. | Redirects to timeshare page and shows detail information such as:  - Name of timeshare  - Owner  - Description  - Location  - Costs  - Images  - Booking form | | 2 | The user choose booking form. | The system allows choose date selection and any specific preferences (view, additional amenities). | | 3 | The user confirms the booking. | The system sends a detailed confirmation to the user’s account and send booking request to Owner |   **Alternative Scenario:**  ***N/A***  **Exceptions:**   | **No** | **Cause** | **System Response** | | --- | --- | --- | | 1 | Project is not found in building projects database. | The system notifies the user and suggests alternative options. |   **Business Rules:**   * *Both Guests and Customers can proceed with bookings.* * *Contact information is required for booking confirmation.* | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

## Use Case Get advice queue requests (thịnh )

| **USE CASE-3 SPECIFICATION** | | | | |
| --- | --- | --- | --- | --- |
| **Use-case No.** | UC003 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Get advice queue requests | | | |
| **Author** | Thanh Dat | | | |
| **Date** | 19/01/2024 | **Priority** | High | |

| | **Actor:**  *Admin, Staff.*  **Summary:**  *This feature allows actors to get advice queue requests in the system.*  **Triggers**  *The actors want to get advice queue requests from users on the web application.*  **Preconditions:**  *The actor has logged in by Admin or Staff account.*  **Post Conditions:**  *The advice queue requests are gotten successfully.*  **Main Success Scenario:**   | **No** | **Actor Action** | **System Response** | | --- | --- | --- | | 1 | Actor selects “Hàng chờ tư vấn” button. | System shows a list of all advice queue requests. Each advice request includes all necessary information:  - Name.  - Phone number.  - Email.  - Description.  - Price quote (if any).  Moreover, they contains 2 buttons for actor to accept or send a quote to the requester. |   **Alternative Scenario:**   | **No** | **Cause** | **System Response** | | --- | --- | --- | | 1 | Actor chooses a “Xác nhận” item in the rightmost drop list. | System update status of the request to “ACCEPTED\_REQUEST” and  save it to database, then  informs “Đã chấp nhận yêu cầu”. |   **Exceptions:**   | **No** | **Cause** | **System Response** | | --- | --- | --- | | 1 | Queue is empty | System informs “Hàng đợi trống”. |   **Business Rules:**   * *Only Admin and Staff can get advice queue requests.* * *Advice queue requests arranged in the latest order* * *Requests in the queue are visible only if they are pending and not yet resolved.* | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

## Use Case Get advice requests history (thịnh )

| **USE CASE-4 SPECIFICATION** | | | | |
| --- | --- | --- | --- | --- |
| **Use-case No.** | UC004 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Get advice requests history | | | |
| **Author** | Thanh Dat | | | |
| **Date** | 19/01/2024 | **Priority** | Medium | |

| | **Actor:**  *Admin, Staff.*  **Summary:**  *This feature allows actors to get advice requests history in the system.*  **Triggers**  *The actor wants to get advice requests history on the web application.*  **Preconditions:**  *The actor has logged in by Admin or Staff account.*  **Post Conditions:**  *The advice requests history are obtained successfully.*  **Main Success Scenario:**   | **No** | **Actor Action** | **System Response** | | --- | --- | --- | | 1 | Actor selects “Lịch sử tư vấn” button. | System shows a list of all advice requests history. Each advice request includes all necessary information:  - Name.  - Phone number.  - Email.  - Description.  - Status.  - Price quote (if any).  - Receive request (time)  - Completion request (time)  **[Exception 1]** |   **Alternative Scenario:**  ***N/A***  **Exceptions:**   | **No** | **Cause** | **System Response** | | --- | --- | --- | | 1 | Requests history is empty | System informs “Không có lịch sử tư vấn nào”. |   **Business Rules:**   * *Only Admin and Staff can get advice request history.* * *The history displays all advice requests, including both resolved and unresolved requests (with unresolved requests placed at the top).* * *Requests history are displayed from newest to oldest.* | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

## Use Case Sign up

| **USE CASE-5 SPECIFICATION** | | | | |
| --- | --- | --- | --- | --- |
| **Use-case No.** | UC005 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Sign up | | | |
| **Author** | Phan Phuoc Duc | | | |
| **Date** | 19/01/2024 | **Priority** | Medium | |

| | **Actor:**  Guest  **Summary:**  This feature allows actors to sign up for a new account on the web application.  **Triggers**  *The* actor wants to sign up for a new account on the web application.  **Preconditions:**  The actor has not logged in.  **Post Conditions:**  The system successfully creates a new account and logs in.  **Main Success Scenario:**   | **No** | **Actor Action** | **System Response** | | --- | --- | --- | | 1 | Actor selects the “Đăng ký” button. | System shows a form with these fields:  - Username: free text input, required, length 1 - 20.  - Email: free text input, required, regex format /^\S+@\S+\.\S+$/  - Password: free text input, required,  must have 1 special character and 1 capital letter.  - Phone number: number text input, required, length 9 – 11.  - OTP number: number text input, required, length 6. | | 2 | Actor clicks “Gửi mã xác thực” after input the email. | System validates email and requests service sends OTP numbers to the actor's email. | | 3 | Actor selects “Tạo tài khoản” button. | System checks OTP numbers. If correct, create a new account and redirect to Homepage. |   **Alternative Scenario:**  **N/A**  **Exceptions:**   | **No** | **Actor Action** | **System Response** | | --- | --- | --- | | 1 | Actor enters incomplete or invalid information. | The system displays error messages for each data field and requests the data be re-entered. | | 2 | Email or phone number existed in the system | System shows error message: “Tài khoản đã tồn tại trong hệ thống”. | | 3 | OTP number is expired. | System shows error message: “Mã xác thực đã hết hiệu lực”. | | 4 | OTP number is not correct. | System shows error message: “Mã xác thực không đúng”. |   **Business Rules:**   * Only guests can sign up for a new account. * Each new account must have a unique username and a valid email address. * The email must be confirmed via a secret 6-digit number sent to the registered email address. * Required fields must be filled in. | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

## Use Case Login (Phước )

| **USE CASE-6 SPECIFICATION** | | | | |
| --- | --- | --- | --- | --- |
| **Use-case No.** | UC006 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Login | | | |
| **Author** | Phan Phuoc Duc | | | |
| **Date** | 19/01/2024 | **Priority** | High | |

| | **Actor:**  Admin, Staff, Member   **Summary:**  This feature allows actors (Admin, Staff, and Members) to log in to their respective accounts on the web application.  **Triggers**  The actor wants to access their accounts on the web application.   **Preconditions:**  The actor is not logged in.  **Post Conditions:**  The system successfully logs in the actor, and they gain access to their respective account functionalities.  **Main Success Scenario:**   | **No** | **Actor Action** | **System Response** | | --- | --- | --- | | 1 | Actor selects “Đăng nhập” button. | System shows a login form with these fields:  - Phone  - Password | | 2 | Actor enters email and password, then submits. | System validates email and password. If correct, redirect the actor to the homepage with the corresponding role (Admin, Staff, or Member).  **[Exception 1, 2]** |   **Alternative Scenario:**  **N/A**  **Exceptions:**   | **No** | **Cause** | **System Response** | | --- | --- | --- | | 1 | The email or password is not the correct format. | System informs error message to remind user inputs correct format. | | 2 | Email or password is not correct. | System inform “Email hoặc mật khẩu không chính xác”. |   **Business Rules:**   * Different actors have different roles (Admin, Staff, Member) with varying levels of access. * Password is not empty and at least 8 characters * Each actor must enter correct credentials to log in successfully. * If a user enters incorrect login information more than 5 times, the account will be temporarily locked for 15 minutes. | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

## Use Case Log out (PHÚC )

### 

| **USE CASE-1 SPECIFICATION** | | | | |
| --- | --- | --- | --- | --- |
| **Use-case No.** | MA01 | **Use-case Version** | | <1.0> |
| **Use-case Name** | User Logging Out | | | |
| **Author** | Trần Gia Phúc | | | |
| **Date** | 16/01/2024 | **Priority** | High | |
| **Actor:**  - *User*  **Summary:**  - *This use case describes the process by which a user logs out of their account on a timeshare exchange platform, ensuring their account remains secure.*  **Goal:**  - *To securely log the user out of the platform, safeguarding their account.*  **Triggers**  - *The user selects the "Log Out" option on the platform.*  **Preconditions:**  - *The user must be logged into their account on the platform.*  - *There should be no ongoing transactions or critical processes associated with the user's account.*  **Post Conditions:**  - *The user is logged out of their account.*  - *Any session-related information is cleared from the user's device.*  **Main Success Scenario:**   | **Step** | **Actor Action** | **System Response** | | --- | --- | --- | | 1 | The user navigates to the account settings. | The platform displays the account settings page. | | 2 | The user selects the “Log Out” option. | The platform confirms there are no ongoing processes. | | 3 |  | The platform logs out the user, redirecting to the login page. | | 4 |  | Session-related data is cleared from the device. |     **Alternative Scenario:**   | **Step** | **Actor Action** | **System Response** | | --- | --- | --- | | 1 | The user selects the “Log Out” option. | The platform detects ongoing processes and alerts the user. | | 2 | The user confirms the decision to log out. | The platform proceeds to log out the user, navigating back to the login page. | | 3 |  | Session-related information is cleared from the device. |             **Exceptions:**   | **Step** | **Actor Action** | **System Response** | | --- | --- | --- | | 1 | The user selects the "Log Out" option. | The platform experiences technical difficulties. | | 2 | The platform experiences technical difficulties. | The platform displays an error message and advises retrying. |   **Relationships:**  - Each user session on the platform is unique and directly associated with the individual user's account.    **Business Rules:**   * The platform reserves the right to implement logouts after specific periods or due to inactivity for enhanced security. * The platform has the authority to terminate Renter and Member accounts under certain conditions. | | | | |

### 

## Use Case Search (Phước)

| **USE CASE-8 SPECIFICATION** | | | | |
| --- | --- | --- | --- | --- |
| **Use-case No.** | UC008 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Search Building Projects | | | |
| **Author** | Phan Phuoc Duc | | | |
| **Date** | 19/01/2024 | **Priority** | High | |

| | **Actor:**  Member, Guest   **Summary:**  This feature allows actors (Members and Guests) to search for building projects on the web application.   **Triggers**  The actor wants to explore and search for building projects on the web application.   **Preconditions:**  • For Members: The actor is logged in.          • For Guests: The actor is not logged in.  **Post Conditions:**  The system displays a list of building projects matching the search criteria.  **Main Success Scenario:**   | **No** | **Actor Action** | **System Response** | | --- | --- | --- | | 1 | Actor selects “Dự án” button. | System redirects to the building projects page and shows a list of all available projects. | | 2 | In the search enterprises page, the actor inputs keywords into the search textbox. | System shows a hide suggestion text for search in Search textbox is “Tên dự án, thể loại, từ khóa…” | | 3 | Actor selects the “Tìm kiếm” button or presses the “enter” key. | System shows a list of projects that match with keywords. | | 4 | Actors choose options in filters according to job catalog, location… and sorters. | System shows a list of projects that match with actors required. |   **Alternative Scenario:**  **N/A**  **Exceptions:**   | **No** | **Cause** | **System Response** | | --- | --- | --- | | 1 | Result is empty. | System informs “Rất tiếc chúng tôi không tìm thấy kết quả theo yêu cầu của bạn.”. |   **Business Rules:**  Guests, Members can search for building projects to find relevant information. | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

## Use Case View timeshares (Thắng)

| **USE CASE-9 SPECIFICATION** | | | | |
| --- | --- | --- | --- | --- |
| **Use-case No.** | UC009 | **Use-case Version** | | 1.0 |
| **Use-case Name** | View timeshares | | | |
| **Author** | Nguyễn Song Trọng Thắng | | | |
| **Date** | 19/01/2024 | **Priority** | High | |

| **Actor:**  Member, Landlord, Admin   **Summary:** This use case involves the action of viewing timeshares, providing detailed information about specific building projects on the web application.  **Triggers:** The user intends to access detailed information about a particular timeshare project on the web application.  **Post Conditions:** Upon completion, the system displays detailed information about the selected timeshare project.  **Main Success Scenario**   | **No** | **Actor Action** | **System Response** | | --- | --- | --- | | 1 | The actor selects a specific timeshare project. | The system redirects to the project information page, displaying details such as project name, author, description, content, location, estimated time, and estimated costs. |   **Alternative Scenario::**  None   | | **No** | **Cause** | **System Response** | | --- | --- | --- | | 1 | The selected project is not found in the database. | The system redirects to the "not found" page (404). |   **Business Rules:**   * Both Members and Guests have access to detailed project information. Guests may have restricted access to certain project details compared to Members. | | --- | --- | --- | --- | --- | --- | --- | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

## Use Case View renter’s booking (Thắng )

| **USE CASE-10 SPECIFICATION** | | | | |
| --- | --- | --- | --- | --- |
| **Use-case No.** | UC010 | **Use-case Version** | | 1.0 |
| **Use-case Name** | View renter’s booking | | | |
| **Author** | Nguyễn Song Trọng Thắng | | | |
| **Date** | 19/01/2024 | **Priority** | High | |

| **Actor:** Member, Admin   **Summary:**  This use case enables Members and Admins to access and review detailed information about a renter's booking.  **Triggers**  *The actor initiates the action of viewing a specific renter's booking information.*   **Preconditions:**  *The actor must be logged in as a Member or Admin.*  **Post Conditions:**  The system displays the requested renter's booking information.  **Main Success Scenario:**   | **No** | **Actor Action** | **System Response** | | --- | --- | --- | | 1 | The actor navigates to the renter's booking. | The system retrieves and displays detailed booking information. | | 2 | The actor reviews the booking details. | The system presents comprehensive renter's booking information. |   **Alternative Scenario:**  *None*   | **Exceptions:**   | **No** | **Cause** | **System Response** | | --- | --- | --- | | 1 | The requested booking information is not found. | The system notifies the actor that the booking information is not found. |   **Business Rules:**   * Only logged-in Members and Admins have access to renter's booking information. * The system provides detailed booking information including renter's details, booking dates, property details, payment status, and any additional remarks. * Admins may have additional privileges such as editing or canceling bookings. | | --- | --- | --- | --- | --- | --- | --- | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

## Use Case Get User Account list

| **USE CASE-13 SPECIFICATION** | | | | |
| --- | --- | --- | --- | --- |
| **Use-case No.** | UC013 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Get User Account list | | | |
| **Author** | Huu Phuoc | | | |
| **Date** | 19/01/2024 | **Priority** | High | |

| | **Actor:**  *Admin, Staff*  **Summary:**  *This feature allows Admin and Staff to retrieve a list of user accounts in the system.*  **Triggers:**  The actor *wants to view the list of user accounts on the web application.*  **Preconditions:**  *The actor has logged in using an Admin or Staff account.*  **Post Conditions:**  *The list of user accounts is displayed successfully.*  **Main Success Scenario:**   | No | Actor Action | System Response | | --- | --- | --- | | 1 | Actor selects "Quản lý người dùng" button. | System shows a list of user accounts with the following details for each user:  - User ID  - Username  - Email  - Role (Admin, Staff, Customer, Guest)  - Status (Active, Inactive, etc.) |   **Exceptions:**   | **No** | **Cause** | **System Response** | | --- | --- | --- | | 1 | List user accounts is empty | System informs “Không có người dùng nào”. |   **Alternative Scenario:**  ***N/A***  **Business Rules:**  -        Only Admin and Staff can get the user account list.  -        The user account list should be regularly updated to reflect any changes in user accounts. | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

## Use Case Manage Account (Thịnh )

| **USE CASE-18 SPECIFICATION** | | | | |
| --- | --- | --- | --- | --- |
| **Use-case No.** | UC019 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Manage account | | | |
| **Author** | LE VIET QUOC THINH | | | |
| **Date** | 16/01/2024 | **Priority** | High | |

| | **Actor:**  *Admin*  **Summary:**  *Manage all users that are logged into the database*  **Triggers:**  *Admin can manage user accounts by getting all user list and delete users.*  **Preconditions:**  *Admin is logged into the system*  **Post Conditions:**  *Admin successfully view and delete users accounts*  **Main Success Scenario:**   | **No** | **Actor Action** | **System Response** | | --- | --- | --- | | 1 | In Admin screen after log in and tab Manage Account | The system shows the list of user detail :  -id  -username  -email  -role  -encoded password |   **Alternative Scenario:**  ***N/A***  **Exceptions:**  ***N/A***  **Business Rules:**  *-Only Admin has the authority to delete Renter and Member accounts.* | | --- | --- | --- | --- | --- | --- | --- | |
| --- | --- | --- | --- | --- | --- | --- | --- |

## Use Case Manage Timeshares (Thịnh)

| **USE CASE-18 SPECIFICATION** | | | | |
| --- | --- | --- | --- | --- |
| **Use-case No.** | UC020 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Manage Timeshares | | | |
| **Author** | LE VIET QUOC THINH | | | |
| **Date** | 19/01/2024 | **Priority** | High | |

| | **Actor:**  *Admin*  **Summary:**  *Manage all LANDLORD real estates.*  **Triggers:**  *Admin navigates to the “Manage real estates” section*  **Preconditions:**  *Admin is logged into the system*  **Post Conditions:**  *Admin successfully authorizes from false to yes section of a real estate.*  **Main Success Scenario:**   | **No** | **Actor Action** | **System Response** | | --- | --- | --- | | 1 | Admin navigate to “Manage timeshares” | The system handles the status of a post from “Inactive” to “Active” . Then shows message: "Đã duyệt bài viết thành công." |   **Alternative Scenario:**  ***N/A***  **Exceptions:**  ***N/A***  **Business Rules:**  - Only the admin has the authority to authorize timeshares. | | --- | --- | --- | --- | --- | --- | --- | |
| --- | --- | --- | --- | --- | --- | --- | --- |

## Use Case Edit Profile (PHÚC )

| **USE CASE-2 SPECIFICATION** | | | | |
| --- | --- | --- | --- | --- |
| **Use-case No.** | MT01 | **Use-case Version** | | <1.0> |
| **Use-case Name** | User Editing Profile | | | |
| **Author** | Trần Gia Phúc | | | |
| **Date** | 16/01/2024 | **Priority** | High | |
| **Actor:**  *User*  **Summary:**  - *This use case outlines the process for a user to update and modify their profile information on the timeshare exchange platform.*  **Goal:**  - *To enable the user to successfully edit and save their updated profile details.*  **Triggers**  - *The user selects the "Edit Profile" option within the account settings.*  **Preconditions:**  - *The user must be currently logged into their account on the timeshare exchange platform.*  - *The user has previously provided profile information that they want to update.*  **Post Conditions:**  - *The user's profile information is updated and saved.*  - *The platform reflects the changes in the user's profile.*  **Main Success Scenario:**   | **Step** | **Actor Action** | **System Response** | | --- | --- | --- | | 1 | User navigates to account settings. | Platform displays account settings page. | | 2 | User clicks the "Edit Profile" option. | Platform displays the profile editing form. | | 3 | User updates profile information. | Platform validates the information in real-time. | | 4 | User clicks the "Save Changes" button. | Platform saves the changes and updates the profile. |     **Alternative Scenario:**   | **Step** | **Actor Action** | **System Response** | | --- | --- | --- | | 1 | User updates profile information. | Platform detects errors, highlights them, and prompts correction. | | 2 | User clicks the "Save Changes" button. | Platform displays an error message and prevents saving. | | 3 | User corrects errors and clicks "Save Changes" again. | Platform saves the corrected information and updates the profile. |   **Exceptions:**   | **Step** | **Actor Action** | **System Response** | | --- | --- | --- | | 1 | User clicks the "Save Changes" button. | Platform displays an error message and suggests retry. |     **Relationships:**  - Each user's profile on the platform is unique and has a direct one-to-one relationship with the user.  **Business Rules:**  - *Some profile information fields may be mandatory, and the platform may impose limitations on the editability of certain details for security or verification purposes.* | | | | |
|  |  |  |  |  |

## Use Case View Personal Profile (PHÚC )

| **USE CASE-2 SPECIFICATION** | | | | |
| --- | --- | --- | --- | --- |
| **Use-case No.** | MT01 | **Use-case Version** | | <1.0> |
| **Use-case Name** | User View Profile | | | |
| **Author** | Trần Gia Phúc | | | |
| **Date** | 16/01/2024 | **Priority** | High | |
| **Actor:**  *User*  **Summary:**  - *This use case outlines the process for a user can check their profile on the timeshare exchange platform.*  **Goal:**  - *To enable the user to successfully view their profile details.*  **Triggers**  - *User selects the "View Profile" option within the account settings.*  **Preconditions:**  - *Users must be currently logged into their account on the timeshare exchange platform.*  - *The user has previously provided profile information that they want to view.*  **Post Conditions:**  - *The user's profile information is displayed.*  **Main Success Scenario:**   | **Step** | **Actor Action** | **System Response** | | --- | --- | --- | | 1 | User navigates to account settings. | Platform displays account settings page. | | 2 | User clicks the "Edit View" option. | Platform displays the user’s profile details. |   **Alternative Scenario:**   | **Step** | **Actor Action** | **System Response** | | --- | --- | --- | | 1 | User navigates to account settings. | Platform displays the account setting page. | | 2 | User clicks the "View Profile" button. | Platform identifies an outdated session, asks for re-login, and then shows the user’s profile. |   **Exceptions:**   | **Step** | **Actor Action** | **System Response** | | --- | --- | --- | | 1 | User clicks the "View Profile" button. | Platform displays an error message if the user isn’t authorized and suggests logging in. |     **Relationships:**  - Each user's profile is unique and linked directly to that user.  - Edit Profile is considered an extension of View Profile.  **Business Rules:**  - *Only logged in users can view and edit their profiles.* | | | | |

## 

# NON-FUNCTIONAL REQUIREMENTS

*[This section describes the non-functional requirements of the system. Some examples are listed as below]*

## Usability thắng

*[This section includes all those requirements that affect usability. For example,*

*specify the required training time for a normal users and a power user to become productive at particular operations*

*specify measurable task times for typical tasks or base the new system’s usability requirements on other systems that the users know and like*

*specify requirement to conform to common usability standards, such as IBM’s CUA standards Microsoft’s GUI standards]*

<Usability Requirement One>

*[The requirement description goes here.]*

## Reliability thắng

*[Requirements for reliability of the system should be specified here. Some suggestions follow:*

*Availability—specify the percentage of time available ( xx.xx%), hours of use, maintenance access, degraded mode operations, and so on.*

*Mean Time Between Failures (MTBF) — this is usually specified in hours, but it could also be specified in terms of days, months or years.*

*Mean Time To Repair (MTTR)—how long is the system allowed to be out of operation after it has failed?*

*Accuracy—specifies precision (resolution) and accuracy (by some known standard) that is required in the system’s output.*

*Maximum Bugs or Defect Rate—usually expressed in terms of bugs per thousand lines of code (bugs/KLOC) or bugs per function-point( bugs/function-point).*

*Bugs or Defect Rate—categorized in terms of minor, significant, and critical bugs: the requirement(s) must define what is meant by a “critical” bug; for example, complete loss of data or a complete inability to use certain parts of the system’s functionality.]*

<Reliability Requirement One>

*[The requirement description.]*

## Performance thịnh

*[The system’s performance characteristics are outlined in this section. Include specific response times. Where applicable, reference related Use Cases by name.*

*Response time for a transaction (average, maximum)*

*Throughput, for example, transactions per second*

*Capacity, for example, the number of customers or transactions the system can accommodate*

*Degradation modes (what is the acceptable mode of operation when the system has been degraded in some manner)*

*Resource utilization, such as memory, disk, communications, and so forth.*

<Performance Requirement One>

*[The requirement description goes here.]*

*Interfaces*

## Supportability thịnh

*[This section indicates any requirements that will enhance the supportability or maintainability of the system being built, including coding standards, naming conventions, class libraries, maintenance access, and maintenance utilities.]*

<Supportability Requirement One>

*[The requirement description goes here.]*

## Design Constraints thịnh

*[This section indicates any design constraints on the system being built. Design constraints represent design decisions that have been mandated and must be adhered to. Examples include software languages, software process requirements, prescribed use of developmental tools, architectural and design constraints, purchased components, class libraries, and so on.]*

<Design Constraint One>

*[The requirement description goes here.]*

## On-line User Documentation and Help System Requirements thịnh

*[Describes the requirements, if any, for o-line user documentation, help systems, help about notices, and so forth.]*

## Purchased Components thịnh

*[This section describes any purchased components to be used with the system, any applicable licensing or usage restrictions, and any associated compatibility and interoperability or interface standards.]*

## Interfaces phước

*[This section defines the interfaces that must be supported by the application. It should contain adequate specificity, protocols, ports and logical addresses, and the like, so that the software can be developed and verified against the interface requirements.]*

User Interfaces

*[Describe the user interfaces that are to be implemented by the software.]*

Hardware Interfaces

*[This section defines any hardware interfaces that are to be supported by the software, including logical structure, physical addresses, expected behavior, and so on.]*

Software Interfaces

*[This section describes software interfaces to other components of the software system. These may be purchased components, components reused from another application or components being developed for subsystems outside of the scope of this SRS but with which this software application must interact.]*

Communications Interfaces

[Describe any communications interfaces to other systems or devices such as local area networks, remote serial devices, and so forth.]

## Licensing Requirements phước

*[Defines any licensing enforcement requirements or other usage restriction requirements that are to be exhibited by the software.]*

## Legal, Copyright, and Other Notices phúc

*[This section describes any necessary legal disclaimers, warranties, copyright notices, patent notices, wordmark, trademark, or logo compliance issues for the software.]*

## Applicable Standards phúc

*[This section describes by reference any applicable standard and the specific sections of any such standards which apply to the system being described. For example, this could include legal, quality and regulatory standards, industry standards for usability, interoperability, internationalization, operating system compliance, and so forth.]*

# SUPPORTING INFORMATION phúc

*[The supporting information makes the SRS easier to use. It includes:*

*Table of contents*

*Index*

*Appendices*

*These may include use-case storyboards or user-interface prototypes. When appendices are included, the SRS should explicitly state whether or not the appendices are to be considered part of the requirements.]*

**Table Of Contents**

[**1**](#_heading=h.2iq8gzs) **INTRODUCTION 5**

[1.1](#_heading=h.xvir7l) Purpose 5

[1.2](#_heading=h.3hv69ve) Scope 5

[1.3](#_heading=h.1x0gk37) Definitions, Acronyms, and Abbreviations 5

[1.4](#_heading=h.4h042r0) References 5

[1.5](#_heading=h.2w5ecyt) Overview 6

[**2**](#_heading=h.1baon6m) **OVERALL DESCRIPTIONS 7**

[**3**](#_heading=h.3vac5uf) **FUNCTIONAL REQUIREMENT 8**

[3.1](#_heading=h.2afmg28) Use Cases Diagram 8

[3.2](#_heading=h.pkwqa1) Use Case Edit project 8

[3.3](#_heading=h.39kk8xu) Use Case Post a new timeshare 11

[3.4](#_heading=h.1opuj5n) Use Case Get advice queue requests 14

[3.5](#_heading=h.48pi1tg) Use Case Get advice requests history 17

[3.6](#_heading=h.2nusc19) Use Case Sign up 20

[3.7](#_heading=h.1302m92) Use Case Login 23

[3.8](#_heading=h.3mzq4wv) Use Case Log out 26

[3.9](#_heading=h.2250f4o) Use Case Search building projects 28

[3.10](#_heading=h.haapch) Use Case Get project detail 31

[3.11](#_heading=h.319y80a) Use Case Send advice request 34

[3.12](#_heading=h.1gf8i83) Use Case Calculate estimated price 37

[3.13](#_heading=h.40ew0vw) Use Case Submit a quotation 40

[3.14](#_heading=h.2fk6b3p) Use Case Get User Account list 43

[3.15](#_heading=h.upglbi) Use Case Update role Account 46

[3.16](#_heading=h.3ep43zb) Use Case Get revenue's dashboard 49

[3.17](#_heading=h.1tuee74) Use Case Get projects dashboard 52

[**4**](#_heading=h.4du1wux) **NON-FUNCTIONAL REQUIREMENTS 56**

[4.1](#_heading=h.2szc72q) Usability 56

[<Usability Requirement One> 56](#_heading=h.184mhaj)

[4.2](#_heading=h.3s49zyc) Reliability 56

[<Reliability Requirement One> 56](#_heading=h.279ka65)

[4.3](#_heading=h.meukdy) Performance 57

[<Performance Requirement One> 57](#_heading=h.36ei31r)

[4.4](#_heading=h.1ljsd9k) Supportability 57

[<Supportability Requirement One> 57](#_heading=h.45jfvxd)

[4.5](#_heading=h.2koq656) Design Constraints 57

[<Design Constraint One> 57](#_heading=h.zu0gcz)

[4.6](#_heading=h.3jtnz0s) On-line User Documentation and Help System Requirements 57

[4.7](#_heading=h.1yyy98l) Purchased Components 58

[4.8](#_heading=h.4iylrwe) Interfaces 58

[User Interfaces 58](#_heading=h.2y3w247)

[Hardware Interfaces 58](#_heading=h.1d96cc0)

[Software Interfaces 58](#_heading=h.3x8tuzt)

[Communications Interfaces 58](#_heading=h.2ce457m)

[4.9](#_heading=h.rjefff) Licensing Requirements 58

[4.10](#_heading=h.3bj1y38) Legal, Copyright, and Other Notices 58

[4.11](#_heading=h.1qoc8b1) Applicable Standards 58

[**5**](#_heading=h.4anzqyu) **SUPPORTING INFORMATION 60**

## 1.1 Use Cases Diagram