



# **Interior Construction Quotation System Software Requirement Specification**

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## 1 INTRODUCTION

The introduction of the Software Requirements Specification (SRS) provides an overview of the entire SRS with purpose, scope, definitions, acronyms, abbreviations, references, and overview of the SRS. The aim of this document is to gather and analyze and give an in-depth insight of the complete Interior Construction Quotation System by defining the problem statement in detail. Nevertheless, it also concentrates on the capabilities required by customers and their needs while defining high-level product features. The detailed requirements of the Interior Construction Quotation System are provided in this document.

### 1.1 Purpose

The purpose of this document is to present a detailed description of the Interior Construction Quotation System. It will explain the purpose and features of the system, the interfaces of the system, what the system will do, and the constraints under which it must operate. By leveraging modern technologies, the system aims to address the inherent challenges and complexities associated with the quotation process in the interior and furniture. The ICQS is intended to export, analyze, and manage quotations due to requirements. Optimize communication between customers and employees.

### 1.2 Scope

The interior construction quotation system is built with the goal of being applicable to all interior construction projects. It would be a more efficient and easier way to have a quoting system that everyone can easily access at their own discretion as compared to the traditional workflow. Working time can be minimized not only by automating many actions but also by a system containing many features for communicating and exchanging preliminary construction quotes before actual implementation.

### 1.3 Definitions, Acronyms, and Abbreviations

Terms	Definition
Guest	Individuals who would want an interior construction quote but are restricted from using specific features of the system and lack a login account.
Customer	An account holder, a lay person who needs the system to do his task efficiently and effectively.
Staff	An account that receives the request of the customer, edit request, and exchanges with customer to achieve unification and then creates

	the proposal of quotation for manager.
Manager	A person who receives a staff's proposal has the right to approve. Manage the workspace, and product for customer request.
Admin	An account holder has rights to manage other staff accounts and mission to keep the website working correctly.

## 1.4 References

This web application has been prepared based on discussion with all team members, faculty members and taken information from the following websites.

- [LÀ NHÀ: Thiết Kế Thi Công Nội Thất Trọn Gói, Giá Rẻ \(lanha.vn\)](http://lanha.vn)
- [SLV Việt Nam - Công ty thiết kế thi công nội thất trọn gói uy tín \(slvvietnam.com\)](http://slvvietnam.com)
- [THÁI CÔNG Interior Design - The World of Luxury Interior and Furniture \(thaicong.com\)](http://thaicong.com)

## 1.5 Overview

The ICQS is envisioned to be a user-friendly and efficient solution for managing the quotation process in interior construction projects. It will incorporate features such as project tracking, quotation generation, document management, and reporting functionalities. The system will adhere to industry standards and best practices to ensure reliability, accuracy, and security.

## 2 OVERALL DESCRIPTION

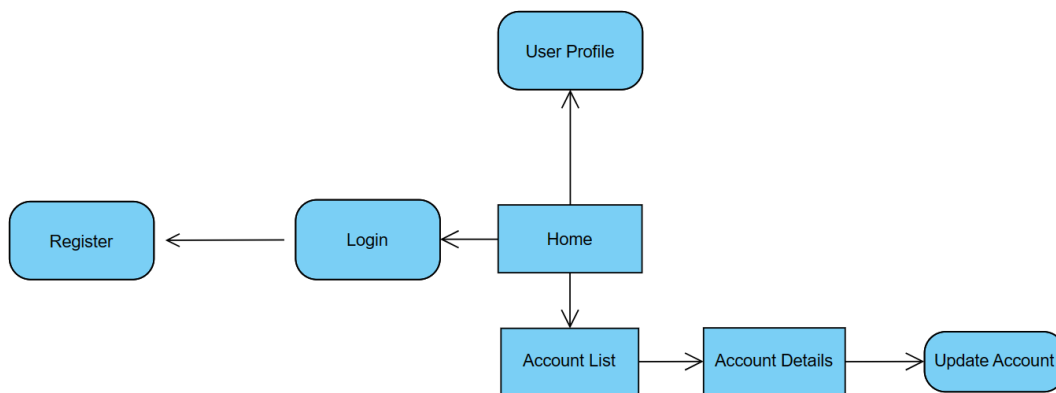
Users understand construction terminology and quotation processes.

A stable internet connection is available for system access. Necessary data on material costs, labor rates, and project specifications is readily accessible.

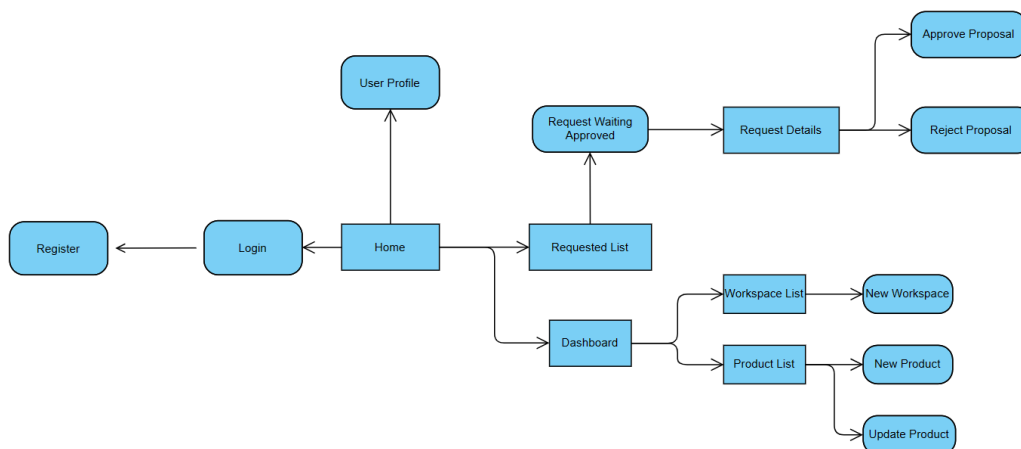
This overall description provides a high-level overview of the CHCQS. The following sections of the SRS will delve into detailed requirements for various functionalities, user interfaces, and technical considerations.

### 2.1 Screen Flow

#### Admin Screen Flow

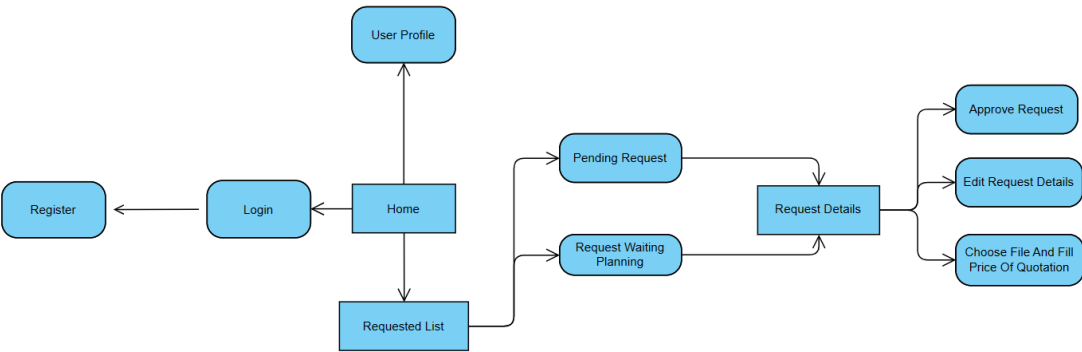


#### Manager Screen Flow

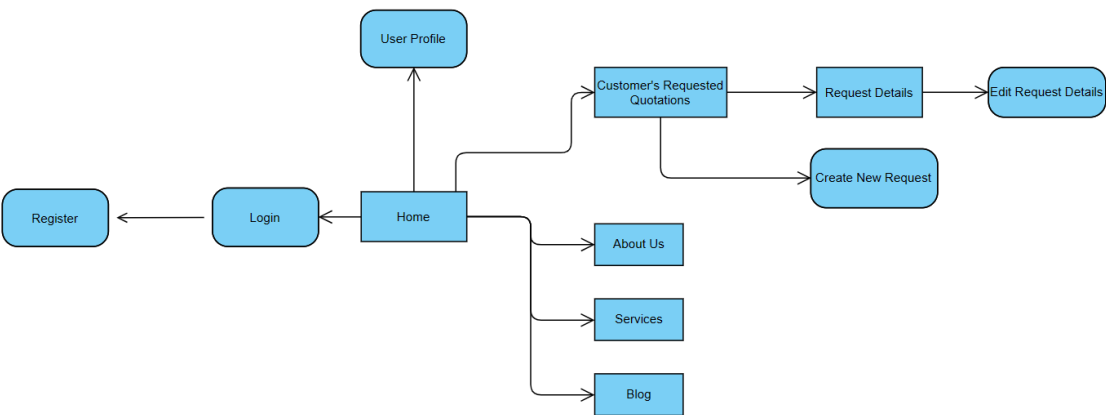




Staff Screen Flow

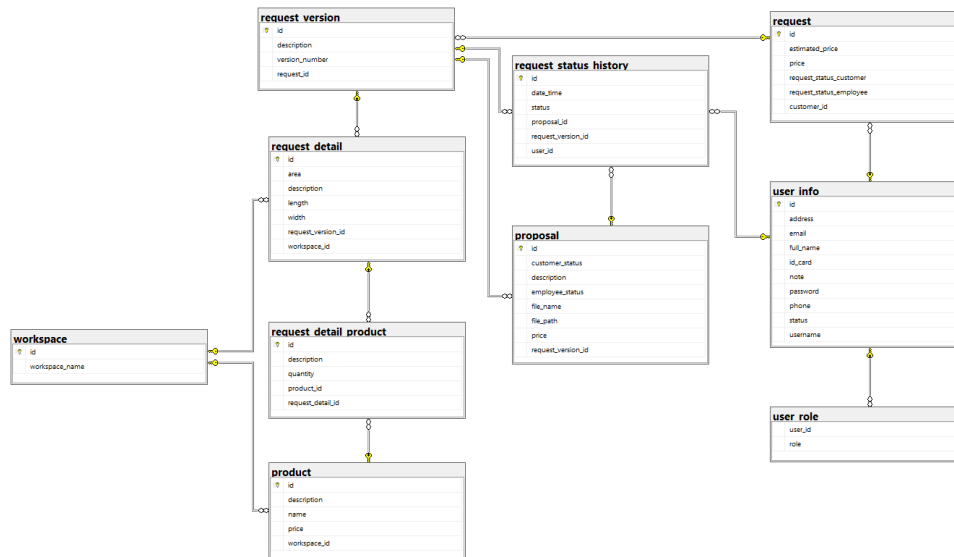


Customer Screen Flow



## 2.2 System High Level Design

### Database Design



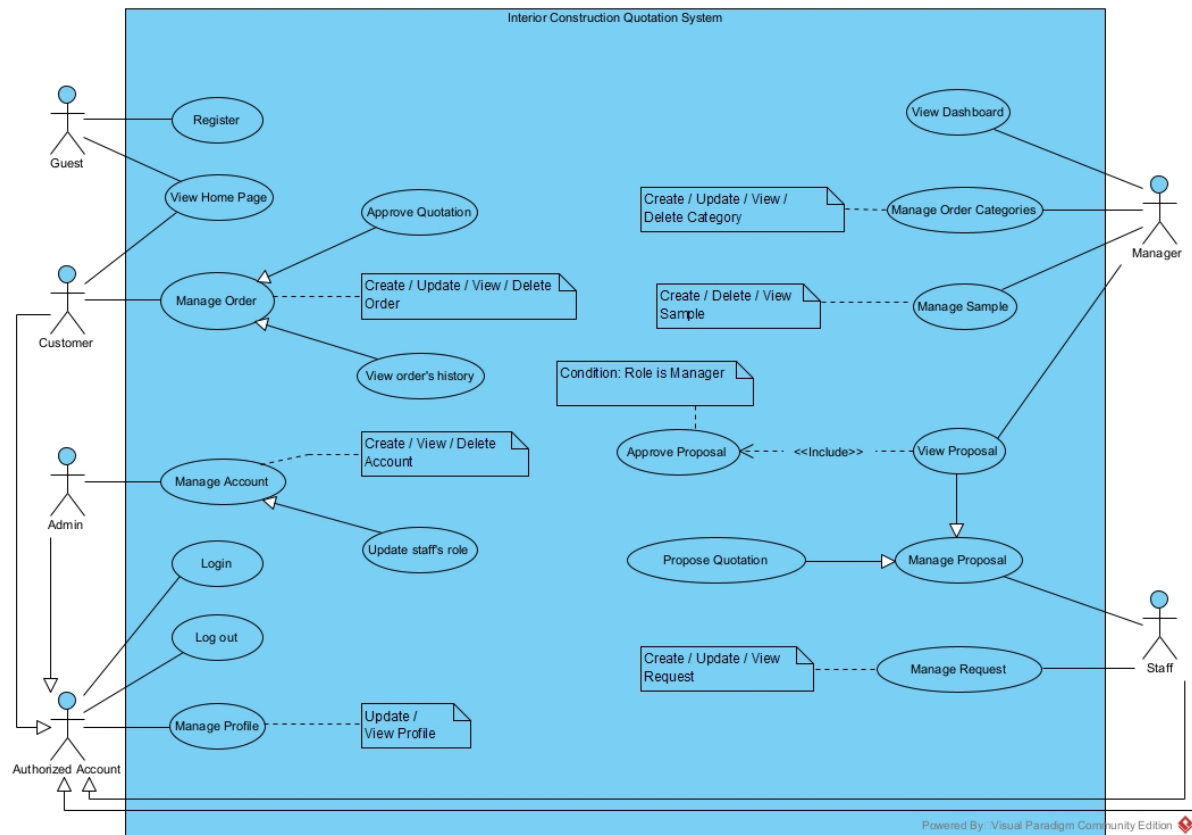
### Code Packages

- ✓ config
  - > modelMapper
  - > security
- > controller
- > exception
- > filter
- ✓ model
  - > dto
  - > entity
  - > enums
- > repository
- > service
- > utils

No	Package	Description
01	<i>config</i>	<i>Package contains configuration for security and model mapper.</i>
02	<i>controller</i>	<i>Package contains controllers for API endpoints.</i>
03	<i>exception</i>	<i>Package for handling exceptions.</i>
04	<i>filter</i>	<i>Package for filter dispatch before logic code.</i>
05	<i>model</i>	<i>Package contains the entity classes, dtos, enums for mapping.</i>
06	<i>repository</i>	<i>Package contains intermediate layer to query data.</i>
07	<i>service</i>	<i>Package contains classes to support some purpose.</i>
08	<i>utils</i>	<i>Package contains classes to support some purpose which is not the part of action.</i>

### 3 FUNCTIONAL REQUIREMENTS

#### 3.1 Use Cases Diagram



#### 3.2 UC-01: Register

USE CASE-01 Register			
Use-case No.	UC-01	Use-case Version	1.0
Use-case Name	Register		
Author	TungNT		
Date	Feb 3rd, 2024	Priority	Medium
Actor: Guest			
Summary:			

This use case allows actors to register into the system, allowing them to create new accounts.

Goal:

The purpose is to provide the Guest with the ability to create a new account within the system.

**Triggers:** The trigger for this use case is the Guest's decision to register and create a new account.

**Preconditions:** There are no specific preconditions for this use case

**Post Conditions:** Upon successful registration, the system will create a new account for the Guest, and the Guest will become a registered user.

Main Success Scenario:

No	Actor's actions	System Responses
1	The Guest selects the Quote button on the system interface.	The system displays a registration form with fields (email, username, password, phone number).
2	The system presents a form to the Guest	A system that displays a registration form with fields (email, username, password, phone number).

Alternative Scenario:

No	Actor's actions	System Responses
1	The Guest selects the "Quotation" button	The system displays a registration form with fields full name, email, phone number.
2	The system presents a registration form to the Guest.	The system notifies the Guest about the issue and requests correction.
3	The system validates.	The system validates the corrected information and proceeds with account creation.

**Exceptions:** There are no specific exceptions defined for this use case.

No	Cause	System Response
1	The actors ignore a field.	Systems send a error message: - The field not be blank

**Relationships:** "UC-00", "UC-0..."

**Business Rules:**

- BR-01: The system must validate the information provided by the Guest during the registration process.
- BR-02: Upon successful registration, the system should provide the Guest with login credentials.

**3.3 UC-02: View Home Page**

USE CASE-02 SPECIFICATION			
Use-case No.	UC-02	Use-case Version	1.0
Use-case Name	View Home Page		
Author	TungNT		
Date	Feb 3rd, 2024	Priority	Medium
<b>Actor:</b> Guest and Customer			
Summary:			
This use case allows both Guests and Customers to view the home page of the system.			
Goal:			
The purpose is to provide both Guests and Customers with access to the home page, allowing them to explore and navigate the system.			
<b>Triggers:</b> The trigger for this use case is the Guest or Customer's decision to access and view the home page.			
<b>Preconditions:</b> There are no specific preconditions for this use case.			
<b>Post Conditions:</b> Upon successful execution of this use case, the system displays the home page to the Guest or Customer.			
Main Success Scenario:			
No	Actor's actions	System Responses	
1	The actors access the system.	The system retrieves and displays the home page content.	
2	The actors select the "View Home Page" option.	The system displays a landing page. - The navbar has fields: Blog, About Me, Quotation button, Services.	

Alternative Scenario: N/A

**Exceptions:** There are no specific exceptions defined for this use case.

No	Cause	System Response
1	The actors access the system.	The system encounters an issue loading the home page content due to a temporary system error.
2	The actor selects the "View Home Page" option.	The system notifies the Guest or Customer about the issue. The Guest or Customer is redirected to a default page or presented with a relevant error message.

**Relationships:** "UC-00", "UC-0..."

Business Rules:

- BR-01: The system should load and display the home page content efficiently.
- BR-02: In case of any errors or issues, the system should provide clear and user-friendly error messages.

### 3.4 UC-03: Approve Quotation

USE CASE-03 SPECIFICATION			
Use-case No.	UC-03	Use-case Version	1.0
Use-case Name	Approve Quotation		
Author	TungNT		
Date	Feb 3rd, 2024	Priority	Medium
<p><b>Actor:</b> Customer</p> <p>Summary:</p> <p>This use case allows actors to approve quotations provided by the system.</p> <p>Goal:</p> <p>The purpose is to enable Customers to review and approve quotations for products or services.</p> <p><b>Triggers:</b> The trigger for this use case is that the actors want to approve 1 application.</p> <p><b>Preconditions:</b> The quotation must be sent by another one.</p>			

**Post Conditions:** Quotation must be approved and stored in the Database.

Main Success Scenario:

No	Actor's actions	System Responses
1	Customer requests to view a pending quotation.	System retrieves and displays the quotation for the customer.
2	System retrieves and displays the quotation for the customer.	The system presents the quotation, including information such as incurred fees, quantity, and the total amount.
3	Customer decides to approve the quotation.	System sends confirmation to the customer.
4	System updates the status of the quotation to approve.	System sends confirmation to the customer.

Alternative Scenario: N/A

Exceptions:

No	Cause	System Response
1	Customer is not logged in.	System prompts the customer to log in before proceeding.
2	Quotation data cannot be retrieved from the Database.	The system displays an error message and logs the issue for investigation.

**Relationships:** "UC-00", "UC-0..."

Business Rules:

- BR-01: The system must validate that the customer is authorized to approve the quotation.
- BR-02: The system should send a notification to the relevant parties upon successful approval or rejection of the quotation.



### 3.5 UC-04: Create Order

USE CASE-04 SPECIFICATION			
Use-case No.	UC-04	Use-case Version	1.0
Use-case Name	Create order		
Author	TungNT		
Date	Feb 3rd, 2024	Priority	Medium
<b>Actor:</b> Customer			
Summary:			
This use case allows customers to create requests for services.			
Goal:			
The purpose is to allow customers to place new orders efficiently.			
<b>Triggers:</b> The trigger for this use case is a customer's decision to purchase products or services.			
Preconditions:			
1. The customer must be logged into the system.			
2. The customer has selected products or services to order.			
Post Conditions:			
1. A new order is created in the system.			
2. The order details are stored in the database.			
Main Success Scenario:			
No	Actor’s actions	System Responses	
1	Customer selects services to order.	System displays the selected items and their details.	
2	Customer confirms the order.	System generates a unique order ID and confirms the order.	
3	System updates inventory based on the order.	System adjusts the stock levels for the ordered items.	
4	System calculates the total cost of the order.	System displays the total cost to the customer.	
Alternative Scenario:			

No	Actor's actions	System Responses
1	The customer decides to modify the order.	The system allows the customer to edit the order details.
2	The customer completes the modified order.	System updates the order with the changes made by the customer.

Exceptions:

No	Cause	System Response
1	Customer is not logged in.	System prompts the customer to log in before creating an order.
2	Error in processing the order due to technical issues.	The system displays an error message and logs the issue for investigation.

**Relationships:** "UC-00", "UC-0..."

Business Rules:

- BR-01: The system must validate that the customer has sufficient funds or credit to place the order.
- BR-02: The system should provide a confirmation email to the customer after successfully creating an order.

### 3.6 UC-05: Update Order

USE CASE-05 SPECIFICATION			
Use-case No.	UC-05	Use-case Version	1.0
Use-case Name	Update order		

Author	TungNT		
Date	Feb 3rd, 2024	Priority	medium

**Actor:** Customer

Summary:

This use case allows customers to update existing orders placed in the system.

Goal:

The purpose is to provide customers with the ability to make changes to their orders.

**Triggers:** The trigger for this use case is when a customer wants to modify an existing order.

Preconditions:

- 1. The customer must be logged into the system.
- 2. The customer has at least one existing order.

Post Conditions:

- 1. The order details are updated in the system.
- 2. The updated order information is stored in the database.

Main Success Scenario:

No	Actor’s actions	System Responses
1	Customer selects the order to be updated.	System displays the details of the selected order.
2	Customer makes the necessary modifications.	System allows the customer to edit the order details.
3	Customer confirms the changes.	System updates the order with the modified information.
4	System recalculates the total cost of the order.	System displays the revised total cost to the customer.

Alternative Scenario:

No	Actor’s actions	System Responses
1	Customer decides not to proceed with the update.	System cancels the update process and maintains the original order.
2	System encounters an error during the update.	System displays an error message and logs the issue for investigation.

Exceptions:

No	Cause	System Response
1	Customer is not logged in.	System prompts the customer to log in before updating the order.
2	The selected order does not exist in the system.	System notifies the customer that the selected order is not found.
3	Error in processing the update due to technical issues.	System displays an error message and logs the issue for investigation.

**Relationships:** "UC-00", "UC-0..."

Business Rules:

- BR-01: The system must validate that the customer is the owner of the order before allowing updates.
- BR-02: The system should send a confirmation email to the customer after successfully updating the order.

### 3.7 UC-06: View Order

USE CASE-06 SPECIFICATION			
Use-case No.	UC-01	Use-case Version	1.0
Use-case Name	View order		
Author	TungNT		
Date	Feb 3rd, 2024	Priority	Medium
<p><b>Actor:</b> Customer</p> <p>Summary:</p> <p>This use case allows customers to view details of their existing orders in the system.</p> <p>Goal:</p> <p>The purpose is to provide customers with the ability to access and review information about their orders.</p> <p><b>Triggers:</b> The trigger for this use case is when a customer wants to check the details of a specific order.</p>			

Preconditions:

1. The customer must be logged into the system.
2. The customer has at least one existing order.

**Post Conditions:** None (This use case is primarily for viewing information, not for making changes).

Main Success Scenario:

No	Actor's actions	System Responses
1	Customer selects the order to view.	System displays detailed information about the selected order.

Alternative Scenario: N/A

Exceptions:

No	Cause	System Response
1	Customer is not logged in.	The system prompts the customer to log in before viewing the order details.
2	The selected order does not exist in the system.	System notifies the customer that the selected order is not found.
3	Error in retrieving order details due to technical issues.	The system displays an error message and logs the issue for investigation.

**Relationships:** "UC-00", "UC-0..."

Business Rules:

- BR-01: The system must ensure that customers can only view their own orders.
- BR-02: The system should display order details in a clear and user-friendly format.

### 3.8 UC-07: Cancel Request

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USE CASE-07 SPECIFICATION			
Use-case No.	UC-07	Use-case Version	1.0
Use-case Name	Cancel request		
Author	DuyenNTP		
Date	31/01/2024	Priority	High
<b>Actor:</b> Customer			
Summary:			
This use case allows the actor to cancel requests when they want.			
Goal:			
The purpose is that the actor can call off their request.			
Triggers:			
The actor wants to cancel the request.			
Preconditions:			
The actor must be logged in.			
Post Conditions:			
The actor clicks on the "Request" button.			
Main Success Scenario:			
No	Actor's actions	System Responses	
1	Actors logged in.	System checks account exist or not? [Exception 1]	
2		System shows the homepage.	
3	Actors click on the "Request" button.	The system shows all options for order: <ul style="list-style-type: none"><li>- View Requests</li><li>- Create Requests</li><li>- Delete Requests</li><li>- Update Requests</li><li>- Cancel Requests</li><li>- View Request's history</li></ul>	
4	Actors chose the "Cancel Request" button.	The system shows all the field information: <ul style="list-style-type: none"><li>- Request's ID</li><li>- Request's Name</li><li>- Request's Actor</li><li>- Request's Date Time</li><li>- Request's Note</li></ul> System requires the actor to provide reasons to	

		cancel. - “Send” button
5	Actors fill in the reasons and click on the “Send” button.	The system saves actors' requests. The system shows the message “Cancel request successfully”.
Alternative Scenario: N/A		
Exceptions:		
No	Cause	System Response
1	Actor fills in invalid information: account	System informs “Account does not exist”. System request actors logged in again.
Relationships: N/A		
Business Rules: N/A		

### 3.9 UC-08: View The Request's History

USE CASE-08 SPECIFICATION			
Use-case No.	UC-08	Use-case Version	1.0
Use-case Name	View the request's history		
Author	DuyenNTP		
Date	31/01/2024	Priority	Medium
<b>Actor:</b> Customer <b>Summary:</b> This use case allows the actor to view the request's history when they want. <b>Goal:</b> The purpose is that the actor can view the history of their request. <b>Triggers:</b> The actor wants to view the request's history. <b>Preconditions:</b> The actor must be logged in. <b>Post Conditions:</b>			

The actor clicks on the "Request" button.

Main Success Scenario:

No	Actor's actions	System Responses
1	Actors logged in.	System checks account exist or not? [Exception 1]
2		System shows the homepage.
3	Actors click on the "Request" button.	System shows all option about schedule: <ul style="list-style-type: none"> <li>- View Requests</li> <li>- Create Requests</li> <li>- Delete Requests</li> <li>- Update Requests</li> <li>- Cancel Requests</li> <li>- View Request's history</li> </ul>
4	Actors chose the "View Request's history" button.	System shows all the fields information: <ul style="list-style-type: none"> <li>- Request's Id</li> <li>- Request's Name</li> <li>- Request's Actor</li> <li>- Request's Date Time</li> <li>- Request's Note</li> <li>- "Come back" button</li> </ul>
5	Actors click on the "Come back" button.	System return homepage.

Alternative Scenario: N/A

Exceptions:

No	Cause	System Response
1	Actor fills in invalid information: account	System informs "Account does not exist". System request actors logged in again.

**Relationships:** "UC-00", "UC-0..."

Business Rules:

- BR-01:
- BR-02:



**3.10 UC-09: Create Account**

USE CASE-09 SPECIFICATION			
Use-case No.	UC-09	Use-case Version	1.0
Use-case Name	Create Account		
Author	DuyenNTP		
Date	31/01/2024	Priority	
<p>Actor: Admin</p> <p>Summary:</p> <p>This use case allows the actor to create an account for lower grades.</p> <p>Goal:</p> <p>The purpose is that the actor can manage all accounts.</p> <p>Triggers:</p> <p>The actor wants to create an account.</p> <p>Preconditions:</p> <p>The actor must be logged in.</p> <p>Post Conditions:</p> <p>The actor clicks on the “Account”.</p> <p>Main Success Scenario:</p>			
No	Actor's actions	System Responses	
1	Actors logged in.	System checks account exist or not?	
		[Exception 1]	
2		System shows the homepage.	
3	Actors click on the “Account” button.	System shows all option about schedule:	

		<ul style="list-style-type: none"> <li>• View Accounts</li> <li>• Create Accounts</li> <li>• Delete Accounts</li> <li>• Update staff's role</li> </ul>
4	Actors choose the "Create accounts" button.	System shows all the fields information: <ul style="list-style-type: none"> <li>• Id</li> <li>• Name</li> <li>• Username</li> <li>• Password</li> <li>• Id_card</li> <li>• Phone</li> <li>• Email</li> <li>• "Create" button</li> </ul>
5	Actors fill in all information and click on the "Create" button.	System creates and save new account.  System shows the message "Create the account successfully".

Alternative Scenario: N/A

Exceptions:

No	Cause	System Response
1	Actor fills in invalid information: account	System informs "Account does not exist".  System request actors logged in again.

**Relationships:** "UC-00", "UC-0..."

Business Rules:

- BR-01:
- BR-02:

**3.11 UC-10: View Account**

USE CASE-10 SPECIFICATION			
Use-case No.	UC-10	Use-case Version	1.0
Use-case Name	View Account		
Author	DuyenNTP		
Date	31/01/2024	Priority	High
<p>Actor: Admin</p> <p>Summary:</p> <p>This use case allows the actor to view again an account for lower grades.</p> <p>Goal:</p> <p>The purpose is that the actor can view all accounts.</p> <p>Triggers:</p> <p>The actor wants to view an account.</p> <p>Preconditions:</p> <p>The actor must be logged in.</p> <p>Post Conditions:</p> <p>The actor clicks on the "Account".</p> <p>Main Success Scenario:</p>			
No	Actor's actions	System Responses	
1	Actors logged in.	System checks account exist or not? [Exception 1]	
2		System shows the homepage.	
3	Actors click on the "Account" button.	System shows all option about schedule: - View Accounts - Create Accounts - Delete Accounts - Update staff's role	
4	Actors choose the "View accounts" button.	System shows all the fields information: - Id - Name - Username - Password	

		<ul style="list-style-type: none"> <li>- Id_card</li> <li>- Phone</li> <li>- Email</li> <li>- “Comeback” button</li> </ul>
5	Actors view information and click on the “Comeback” button.	System return homepage.

Alternative Scenario: N/A

Exceptions:

No	Cause	System Response
1	Actor fills in invalid information: account	System informs “Account does not exist”. System request actors logged in again.

**Relationships:** “UC-00”, “UC-0...”

Business Rules:

- BR-01:
- BR-02:

### 3.12 UC-11: Delete Account

USE CASE-11 SPECIFICATION			
Use-case No.	UC-11	Use-case Version	1.0
Use-case Name	Delete Account		
Author	DuyenNTP		
Date	31/01/2024	Priority	High
<p>Actor: Admin</p> <p>Summary:</p> <p>This use case allows the actor to delete an account for lower grades.</p> <p>Goal:</p> <p>The purpose is that the actor can delete accounts.</p> <p>Triggers:</p> <p>Actor wants to delete an account.</p>			

**Preconditions:**

The actor must be logged in.

**Post Conditions:**

The actor clicks on the "Account".

**Main Success Scenario:**

No	Actor's actions	System Responses
1	Actors logged in.	System checks account exist or not? [Exception 1]
2		System shows the homepage.
3	Actors click on the "Account" button.	System shows all option about schedule: <ul style="list-style-type: none"> <li>- View Accounts</li> <li>- Create Accounts</li> <li>- Delete Accounts</li> <li>- Update staff's role</li> </ul>
4	Actors choose the "Delete accounts" button.	System shows all the fields information: <ul style="list-style-type: none"> <li>- Id</li> <li>- Name</li> <li>- Username</li> <li>- Password</li> <li>- Id_card</li> <li>- Phone</li> <li>- Email</li> <li>- "Delete" button</li> </ul>
5	Actors click on the "Delete" button.	System deletes and saves accounts.  System shows the message "Delete the account successfully".

Alternative Scenario: N/A

**Exceptions:**

No	Cause	System Response
1	Actor fills in invalid information: account	System informs "Account does not exist". System request actors logged in again.

**Relationships:** "UC-00", "UC-0..."

**Business Rules:**

- BR-01:

- BR-02:

### 3.13 UC-12: Update Staff's Role

USE CASE-12 SPECIFICATION			
Use-case No.	UC-12	Use-case Version	1.0
Use-case Name	Delete Account		
Author	DuyenNTP		
Date	31/01/2024	Priority	High
<p>Actor: Admin</p> <p>Summary:</p> <p>This use case allows the actor to update staff's role for lower grades.</p> <p>Goal:</p> <p>The purpose is that the actor can update staff's role accounts.</p> <p>Triggers:</p> <p>The actor wants to update the staff's role.</p> <p>Preconditions:</p> <p>The actor must be logged in.</p> <p>Post Conditions:</p> <p>The actor clicks on the "Account".</p> <p>Main Success Scenario:</p>			
No	Actor's actions	System Responses	
1	Actors logged in.	System checks account exist or not? [Exception 1]	
2		System shows the homepage.	
3	Actors click on the "Account" button.	System shows all option about schedule: <ul style="list-style-type: none"> <li>- View Accounts</li> <li>- Create Accounts</li> <li>- Delete Accounts</li> <li>- Update staff's role</li> </ul>	

4	Actors choose the "Update staff's role" button.	System shows all the fields information: <ul style="list-style-type: none"> <li>- Staff's Id</li> <li>- Staff's Name</li> <li>- Staff's Role</li> <li>- Note</li> <li>- "Update" button</li> </ul>
5	Actors change roles and click on the "Update" button.	System update and save accounts. System shows the message "Update the account successfully".

Alternative Scenario: N/A

Exceptions:

No	Cause	System Response
1	Actor fills in invalid information: account	System informs "Account does not exist". System request actors logged in again.

**Relationships:** "UC-00", "UC-0..."

Business Rules:

- BR-01:
- BR-02:

### 3.14 UC-13: Login

USE CASE-13 SPECIFICATION			
Use-case No.	UC-13	Use-case Version	1.0
Use-case Name	Login		
Author	HaoNT		
Date	01/02/2024	Priority	Normal
<p><b>Actor:</b> Authenticated User</p> <p>Summary:</p> <p>This use case allows the actors to log into the system to access personalized information and functionalities.</p> <p>Goal:</p> <p>The purpose is to provide a generic login mechanism for various types of accounts, including</p>			

Customer, Admin, Manager, and Staff.

**Triggers:** The actor navigates to the login page.

**Preconditions:** The actor has a registered profile in the system.

Post Conditions:

- Success: System redirects actor to home page
- Fail: System informs the message corresponding error code

Main Success Scenario:

No	Actor's actions	System Responses
1	The actor selects tab Login	The system shows a form with these fields: - Username: text input, required - Password: text input, required
2	User enters their username, password and clicks Login button.	The system validates the entered credentials. If correct, redirect to actor's home page.

Alternative Scenario: N/A

Exceptions:

No	Cause	System Response
1	If the credentials are incorrect.	System shows error message corresponding to the fail constrain.

Relationships: N/A

Business Rules: N/A

### 3.15 UC-14: Logout

USE CASE-14 SPECIFICATION			
Use-case No.	UC-14	Use-case Version	1.0
Use-case Name	Logout		
Author	HaoNT		
Date	01/02/2024	Priority	



**Actor:** Authenticated User

Summary:

This use case allows the actor to log out of the system, terminating their current session.

Goal:

The purpose is to provide a mechanism for the user to log out of the system securely.

**Triggers:** The user decides to log out.

**Preconditions:** The user is currently logged into the system.

Post Conditions:

- Success: The user successfully logs out, terminating the current session.
- Fail: System informs “Something wrong with system”.

Main Success Scenario:

No	Actor's actions	System Responses
1	The Actor clicks on the "Logout" option in the user interface.	The system terminates the current session. The system redirects the Account to the login page.

Alternative Scenario: N/A

Exceptions:

No	Cause	System Response
1	System signs out error	System informs “Something happen. Please try later”.

Relationships: N/A

Business Rules: N/A

### 3.16 UC-15: Update Profile

USE CASE-15 SPECIFICATION			
Use-case No.	UC-15	Use-case Version	1.0
Use-case Name	Update Profile		
Author	HaoNT		
Date	01/02/2024	Priority	Normal

**Actor:** Authenticated User

Summary:

This use case allows the actor to update their profile information in the system.

Goal:

The purpose is to enable the actor to modify and maintain accurate and up-to-date profile details.

**Triggers:** The actor decides to update their profile information.

**Preconditions:** The actor is currently logged into the system.

**Post Conditions:** The actor successfully updates their profile information.

Main Success Scenario:

No	Actor's actions	System Responses
1	The actor clicks Edit Profile button.	The system displays the actor's information details.
2	The actor modifies the desired profile details (e.g., name, email, phone, password, address).	The system validates the updated information: <ul style="list-style-type: none"> <li>- Full name: text input, required 1 – 255 characters.</li> <li>- Email: text input required, regex email format.</li> <li>- Phone: number input, length required 10.</li> <li>- Id Card: number input, length 9 – 12.</li> <li>- Address: text input.</li> </ul>
3	The actor click Save button.	The system confirms the successful update and displays a success message.

Alternative Scenario:

No	Actor's actions	System Responses
1	The actor selects the option to change the password.	The system prompts the actor to enter the current password and the new password.
2	The actor provides the required information.	The system validates the entered information.

Exceptions:

No	Cause	System Response
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1	The username is duplicated.	The system shows messages "Username cannot be duplicated".
2	At least one input field does not match the constraint.	The system shows error messages corresponding to fail constraint.

Relationships: N/A

Business Rules:

- BR-01: The actor can update their profile information while logged into the system.
- BR-02: Password changes may require additional authentication steps for security.

### 3.17 UC-16: View Profile

USE CASE-16 SPECIFICATION			
Use-case No.	UC-16	Use-case Version	1.0
Use-case Name	View Profile		
Author	HaoNT		
Date	01/02/2024	Priority	Normal
<p><b>Actor:</b> Authenticated User</p> <p>Summary:</p> <p>This use case allows the actor to view their profile information within the system.</p> <p>Goal:</p> <p>The purpose is to provide the actor with access to their personal profile details for review and verification.</p> <p><b>Triggers:</b> The actor decides to view their profile information.</p> <p><b>Preconditions:</b> The actor is currently logged into the system.</p> <p><b>Post Conditions:</b> The actor successfully views their profile information.</p> <p>Main Success Scenario:</p>			
No	Actor's actions	System Responses	
1	The actor clicks Profile button.	The system displays the actor's profile information details (e.g. Full Name, Email, Phone, Address, Id Card).	

Alternative Scenario: N/A
Exceptions: N/A
Relationships: N/A
Business Rules:
<ul style="list-style-type: none"> <li>- BR-01: Authenticated Users can view their profile information while logged into the system.</li> </ul>

### 3.18 UC-17: View Dashboard

USE CASE-17 SPECIFICATION			
Use-case No.	UC-17	Use-case Version	1.0
Use-case Name	View Dashboard		
Author	HaoNT		
Date	01/02/2024	Priority	Normal
<p><b>Actor:</b> Manager</p> <p>Summary:</p> <p>This use case allows the Manager to view a dashboard containing statistical information about the number of quote requests and the waiting time for customer confirmation, ...</p> <p>Goal:</p> <p>The purpose is to provide the Manager with an overview of key metrics related to quote requests and customer confirmation waiting times, ...</p> <p><b>Triggers:</b> The manager decides to access the system's dashboard for statistical insights.</p> <p><b>Preconditions:</b> The manager is currently logged into the system.</p> <p><b>Post Conditions:</b> The manager successfully views the dashboard with statistical information.</p> <p>Main Success Scenario:</p>			
No	Actor's actions	System Responses	
1	Manager logged into successfully or click Dashboard from side bar.	<p>The system displays a comprehensive dashboard with statistical information.</p> <p>The manager observes the number of quote requests received.</p> <p>The manager observes the average waiting time for customer confirmation.</p>	

		Manager reviews additional relevant statistics, such as the status of ongoing projects, if applicable.
Alternative Scenario: N/A Exceptions: N/A Relationships: N/A Business Rules: - BR-01: The dashboard provides real-time or near-real-time statistical information.		

### 3.19 UC-18: Create Categories

USE CASE-18 SPECIFICATION			
Use-case No.	UC-158	Use-case Version	1.0
Use-case Name	Create Categories		
Author	HaoNT		
Date	01/02/2024	Priority	Normal
<b>Actor:</b> Manager			
Summary:			
This use case allows the Manager to create new categories for construction types, materials, and workspace within the interior construction system.			
Goal:			
The purpose is to enable the Manager to define and organize categories to facilitate efficient management of construction-related aspects.			
<b>Triggers:</b> The manager identifies the need to add new categories to the system.			
<b>Preconditions:</b> The manager is currently logged into the system.			
<b>Post Conditions:</b> The manager successfully creates new categories for construction types, materials, or workspace.			
Main Success Scenario:			
No	Actor’s actions	System Responses	
1	Manager navigates to the "Categories Management" section.	The system presents the existing categories and an option to create new ones.	
2	The Manager selects the type of category to create (construction type, material,	The system validates the entered information.	

	or workspace).	
3	The manager enters the details for the new category (e.g., name, description).	If the information is valid, the system creates a new category.
Alternative Scenario: N/A		
Exceptions:		
No	Cause	System Response
1	Manager enters invalid information for the new category.	The system displays an error message
Relationships: N/A		
Business Rules:		
<ul style="list-style-type: none"> <li>- The manager has the necessary permission to create and manage categories.</li> <li>- Categories must have unique names to avoid duplication.</li> </ul>		

### 3.20 UC-19: Update Categories

USE CASE-19 SPECIFICATION			
Use-case No.	UC-19	Use-case Version	1.0
Use-case Name	Update Category		
Author	TienBH		
Date	01/02/2024	Priority	High
<p><b>Actor:</b> Manager</p> <p><b>Summary:</b></p> <p>This use case allows the Manager to update the information related to categories in the interior construction quotation system, specifically for Workspace, Product, and Material.</p> <p><b>Goal:</b></p> <p>The purpose is to empower the Manager to modify and enhance details within the predefined categories (Workspace, Product, Material) to ensure accurate and up-to-date information for construction projects.</p> <p><b>Triggers:</b></p> <p>The Manager identifies the need to modify or update information within one of the predefined</p>			

categories.

Preconditions:

- The Manager must be logged into the interior construction quotation system.
- At least one item in each category (Workspace, Product, Material) in the system.

Post Conditions:

- The selected category (Workspace, Product, or Material) is updated with the new information provided by the Manager.

Main Success Scenario:

Manager updates Workspace

No	Actor's actions	System Responses
1	The Manager selects "Update Category"	The system displays a list of available categories. - Workspace - Product - Material.
2	The Manager selects "Update Workspace."	The system displays a list of available Workspaces.
3	The Manager chooses Workspace to update the name of Workspace.	The system sends a confirmation message "Are you sure you want to update the new name of this Workspace?"

Manager updates Production

No	Actor's actions	System Responses
1	The Manager selects "Update Category"	The system displays a list of available categories. - Workspace - Product - Material.
2	The Manager selects "Update Product."	The system displays a list of available Workspace.
3	The Manager selects the specified Workspace.	The system displays a list of available Products.
4	The Manager selects the specified Product to update.	The system presents current details information: - Name - Length - Width - Price
5	The Manager selects the specified Product information.	The system validates and updates the Product with the provided modifications.

The manager updates Material

No	Actor's actions	System Responses
1	The Manager selects "Update Category"	System displays a list of available categories. - Workspace - Product - Material.
2	The manager selects "Update Material."	The system displays a list of available Workspace
3	The Manager selects the specified Workspace.	The system displays a list of available Products.
4	The Manager selects the specified Product information.	The system displays a list of available materials.
5	The Manager selects the specified Material to update the name of the materials.	The system validates and updates the name of the material with the provided modifications.

Alternative Scenario: N/A

Exceptions: N/A

Relationships: UC-20, UC-18

Business Rules: N/A

### 3.21 UC-20: View Category

USE CASE-20 SPECIFICATION			
Use-case No.	UC-20	Use-case Version	1.0
Use-case Name	View Category		
Author	TienBH		
Date	01/02/2024	Priority	Normal
<b>Actor:</b> Manager <b>Summary:</b> This use case allows the Manager to view details of categories in the interior construction quotation system, specifically for Workspace, Product, and Material. <b>Goal:</b>			



The purpose is to provide the Manager with the ability to access and review specific information related to predefined categories.

Triggers:

The Manager identifies the need to review details within predefined categories for decision-making or planning purposes.

Preconditions:

- The Manager must be logged into the interior construction quotation system.

Post Conditions:

- The Manager gains access to detailed information about the selected category (Workspace, Product, or Material).

Main Success Scenario:

The Manager views Workspace

No	Actor's actions	System Responses
1	The Manager selects "View Category"	The system displays a list of available categories. - Workspace - Product - Material.
2	The Manager selects "View Workspace."	The system displays a list of available Workspaces.

The Manager views Production

No	Actor's actions	System Responses
1	The Manager selects "View Category"	The system displays a list of available categories. - Workspace - Product - Material.
2	The Manager selects "View Product."	The system displays a list of available Workspace
3	The Manager selects the specified Workspace.	The system displays a list of available Products.
4	The Manager selects the specified Product to update.	The system presents current details information: - Name - Length - Width - Price

The Manager views Material

No	Actor's actions	System Responses
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1	Manager selects "View Category"	System displays a list of available categories. - Workspace - Product - Material.
2	Manager selects "View Material."	The system displays a list of available Workspace
3	Manager selects the specified Workspace.	The system displays a list of available Products.
4	The Manager selects the specified Product information.	The system displays a list of available materials.

Alternative Scenario: N/A

Exceptions: N/A

Relationships: UC-19

Business Rules: N/A

### 3.22 UC-21: Delete Category

USE CASE-21 SPECIFICATION			
Use-case No.	UC-21	Use-case Version	1.0
Use-case Name	Delete Category		
Author	TienBH		
Date	01/02/2024	Priority	High
<p><b>Actor:</b> Manager</p> <p><b>Summary:</b></p> <p>This use case allows the Manager to delete predefined categories in the interior construction quotation system.</p> <p><b>Goal:</b></p> <p>The purpose is to allow the Manager to efficiently remove a category from the system.</p> <p><b>Triggers:</b></p> <p>The Manager identifies the need to remove a specific category, which may no longer be applicable or necessary.</p> <p><b>Preconditions:</b></p> <ul style="list-style-type: none"> <li>- The Manager must be logged into the interior construction quotation system.</li> </ul> <p><b>Post Conditions:</b></p>			

- The specified category (Workspace, Product, or Material) is permanently removed from the system.

Main Success Scenario:

The Manager deletes Workspace.

No	Actor's actions	System Responses
1	The Manager selects "Delete Category"	System displays a list of available categories. - Workspace - Product - Material.
2	The Manager selects "Delete Workspace."	The system displays a list of available Workspaces.
3	The Manager chooses Workspace to delete.	The system sends a confirmation message "Are you sure you want to delete this Workspace?"

The Manager updates Production

No	Actor's actions	System Responses
1	The Manager selects "Delete Category"	System displays a list of available categories. - Workspace - Product - Material.
2	The Manager selects "Delete Product."	The system displays a list of available Workspace.
3	The Manager selects the specified Workspace.	The system displays a list of available Products.
4	The Manager selects the specified Product to delete.	The system sends a confirmation message "Are you sure you want to delete this Product"

The manager deletes Material.

No	Actor's actions	System Responses
1	The Manager selects "Delete Category"	The System displays a list of available categories. - Workspace - Product - Material.
2	The manager selects "Delete Material."	The system displays a list of available Workspace
3	The Manager selects the	The system displays a list of available Products.

	specified Workspace.	
4	The Manager selects the specified Product information.	The system displays a list of available materials.
5	The Manager selects the specified Material to delete the name of the materials.	The system sends a confirmation message "Are you sure you want to delete this Material?".

Alternative Scenario: N/A

Exceptions: N/A

Relationships: UC-19, UC-20

Business Rules: N/A

### 3.23 UC-22: Create Sample

USE CASE-22 SPECIFICATION			
Use-case No.	UC-22	Use-case Version	1.0
Use-case Name	Create Sample		
Author	TienBH		
Date	31/01/2024	Priority	Normal
<p><b>Actor:</b> Manager</p> <p><b>Summary:</b></p> <p>This use case allows the Manager to create a Sample Request, representing a collection of available interior construction projects in the planning stage but has not yet started.</p> <p><b>Goal:</b></p> <p>The purpose is to allow the Manager to initiate a Sample Request for interior construction projects.</p> <p><b>Triggers:</b></p> <p>The trigger for this use case is the need to plan and organize interior construction projects that are in the initial stages.</p> <p><b>Preconditions:</b></p> <ul style="list-style-type: none"> <li>- The Manager must be logged into the interior construction quotation system.</li> <li>- Relevant project details and requirements should be available for inclusion in the Sample Request.</li> </ul> <p><b>Post Conditions:</b></p> <ul style="list-style-type: none"> <li>- A new Sample Request is created and stored in the system.</li> <li>- The Sample Request is associated with the Manager's account.</li> <li>- Relevant project details and requirements are attached to the Sample Request.</li> </ul>			

Main Success Scenario:

No	Actor's actions	System Responses
1	The manager selects "Create Sample Request"	The system presents the Sample Request creation form. <ul style="list-style-type: none"> <li>- Name</li> <li>- Description</li> <li>- Workspace</li> <li>- Product</li> <li>- Materials</li> <li>- Estimated Cost</li> </ul>
2	The manager fills in project details and requirements in the form.	The system validates the information and creates a new Sample Request.
3	The manager clicks on the "submit" button.	The system confirms the successful creation of the Sample Request and associates it with the Manager.

Alternative Scenario: N/A

Exceptions:

No	Cause	System Response
1	The manager submits incomplete information in the Sample Request form.	The system prompts the Manager to provide missing information and prevents submission until complete.

Relationships: UC-28, UC-24

Business Rules: N/A

### **3.24 UC-23: Delete Sample**

USE CASE-23 SPECIFICATION			
Use-case No.	UC-23	Use-case Version	1.0
Use-case Name	Delete Sample		
Author	TienBH		

Date	31/01/2024	Priority	Normal									
<p><b>Actor:</b> Manager</p> <p>Summary:</p> <p>This use case allows the Manager to delete a Sample Request.</p> <p>Goal:</p> <p>The purpose is to allow the Manager to efficiently remove a Sample Request from the system.</p> <p>Triggers:</p> <p>The Manager decides to discard or remove a Sample Request from the system.</p> <p>Preconditions:</p> <ul style="list-style-type: none"><li>- The Manager must be logged into the interior construction quotation system.</li><li>- The interior construction quote system includes at least one sample request project.</li></ul> <p>Post Conditions:</p> <ul style="list-style-type: none"><li>- The specified Sample Request is permanently removed from the system.</li><li>- Any associated data, such as project details and requirements, is deleted.</li></ul> <p>Main Success Scenario:</p> <table><tr><th>No</th><th>Actor’s actions</th><th>System Responses</th></tr><tr><td>1</td><td>Manager clicks on the "Delete Sample Request" button</td><td>System prompts for confirmation. "Are you sure you want to delete this Sample Request?"</td></tr><tr><td>2</td><td>Manager clicks on the "Confirm" button.</td><td>The system removes the Sample Request</td></tr></table> <p>Alternative Scenario: N/A</p> <p>Exceptions: N/A</p> <p>Relationships: UC-24</p> <p>Business Rules: N/A</p>				No	Actor’s actions	System Responses	1	Manager clicks on the "Delete Sample Request" button	System prompts for confirmation. "Are you sure you want to delete this Sample Request?"	2	Manager clicks on the "Confirm" button.	The system removes the Sample Request
No	Actor’s actions	System Responses										
1	Manager clicks on the "Delete Sample Request" button	System prompts for confirmation. "Are you sure you want to delete this Sample Request?"										
2	Manager clicks on the "Confirm" button.	The system removes the Sample Request										

### 3.25 UC-24: View Sample

USE CASE-24 SPECIFICATION			
Use-case No.	UC-24	Use-case Version	1.0
Use-case Name	View Sample		

Author	TienBH											
Date	31/01/2024	Priority	Normal									
<b>Actor:</b> Manager												
Summary:												
This use case allows the Manager to view details of a Sample Request.												
Goal:												
The purpose is to provide the Manager with the ability to access and review specific information related to a Sample Request.												
Triggers:												
The Manager wishes to review the details of a particular Sample Request for decision-making or planning purposes.												
Preconditions:												
<ul style="list-style-type: none"><li>- The Manager must be logged into the interior construction quotation system.</li><li>- The interior construction quote system includes at least one sample request project.</li></ul>												
Post Conditions: N/A												
Main Success Scenario:												
<table><tr><td>No</td><td>Actor’s actions</td><td>System Responses</td></tr><tr><td>1</td><td>Manager selects "View Sample Request"</td><td>System presents a list of available Sample Requests.</td></tr><tr><td>2</td><td>Manager chooses a specific Sample Request to view.</td><td>The system displays detailed information, including:<ul style="list-style-type: none"><li>- Name</li><li>- Description</li><li>- Workspace</li><li>- Product</li><li>- Materials</li><li>- Estimated Cost</li></ul></td></tr></table>				No	Actor’s actions	System Responses	1	Manager selects "View Sample Request"	System presents a list of available Sample Requests.	2	Manager chooses a specific Sample Request to view.	The system displays detailed information, including: <ul style="list-style-type: none"><li>- Name</li><li>- Description</li><li>- Workspace</li><li>- Product</li><li>- Materials</li><li>- Estimated Cost</li></ul>
No	Actor’s actions	System Responses										
1	Manager selects "View Sample Request"	System presents a list of available Sample Requests.										
2	Manager chooses a specific Sample Request to view.	The system displays detailed information, including: <ul style="list-style-type: none"><li>- Name</li><li>- Description</li><li>- Workspace</li><li>- Product</li><li>- Materials</li><li>- Estimated Cost</li></ul>										
Alternative Scenario: N/A												
Exceptions: N/A												
Relationships: UC-22, UC-23												
Business Rules: N/A												

### 3.26 UC-25: View Proposal

USE CASE-25 SPECIFICATION

Use-case No.	UC-25	Use-case Version	1.0
Use-case Name	View Proposal		
Author	TruongNN		
Date	30/1/2024	Priority	Medium
<b>Actor:</b> Manager			
Summary: This use case enables the manager to review proposals for interior design and construction projects.			
Goal: The goal is to facilitate the manager in reviewing proposals and making decisions.			
Triggers: The manager intends to view a proposal.			
Preconditions: <ul style="list-style-type: none"><li>The manager must be logged into the system with valid credentials.</li><li>Proposal must exist.</li></ul>			
Post Conditions: Manager can accept, reject, or request changes to the proposal.			
Main Success Scenario:			
No	Actor’s actions	System Responses	
1	Manager logs into the system.	System authenticates Manager's credentials.	
2	Manager navigates to the proposals section.	System displays a list of available proposals.	
3	Manager selects a specific proposal to view.	System retrieves and displays the details of the selected proposal.	
4	Manager reviews the proposal.	System provides proposal details including cost, timeline, and specifications.	
5	Manager decides whether to accept, reject, or request changes to the proposal.	System records Manager's decision and updates the proposal status accordingly.	
Alternative Scenario: N/A			
Exceptions:			



No	Cause	System Response
1	Manager fails to log in	System prompts Manager to provide valid credentials.
2	Proposal does not exist	System notifies the Manager that the requested proposal is not available.

Relationships:

- UC-03
- UC-26

Business Rules:

- BR-01: Managers must be logged in to access proposals.
- BR-02: Proposals must exist in the system for Managers to view them.

### 3.27 UC-26: Evaluate Proposal

USE CASE-26 SPECIFICATION			
Use-case No.	UC-26	Use-case Version	1.0
Use-case Name	Evaluate Proposal		
Author	TruongNN		
Date	30/1/2024	Priority	Medium
<p><b>Actor:</b> Manager</p> <p><b>Summary:</b></p> <p><i>This use case allows the manager to review proposals for interior design and construction projects and make decisions regarding their approval.</i></p> <p><b>Goal:</b></p> <p>The goal is to facilitate the manager in reviewing proposals and approving them based on satisfaction.</p> <p><b>Triggers:</b></p> <p>Manager views a proposal and decides to approve it.</p> <p><b>Preconditions:</b></p> <ul style="list-style-type: none"> <li>• Manager must be logged in to the system.</li> <li>• A proposal must exist in the system and must be in a state where approval is required.</li> </ul>			

Post Conditions:

Manager approves the proposal, and the status of the proposal is updated accordingly.

Main Success Scenario:

No	Actor's actions	System Responses
1	Manager logs into the system.	System authenticates Manager's credentials.
2	Manager navigates to the proposals section.	System displays a list of available proposals.
3	Manager selects a specific proposal to view.	System retrieves and displays the details of the selected proposal.
4	Manager reviews the proposal.	System provides proposal details including cost, timeline, and specifications.
5	Manager decides whether to accept, reject, or request changes to the proposal.	System records Manager's decision and updates the proposal status accordingly.

Alternative Scenario: N/A

Exceptions:

No	Cause	System Response
1	Manager fails to log in	System prompts Manager to provide valid credentials.
2	Proposal does not exist or is not in a state requiring approval	System notifies Manager that the proposal cannot be approved at this time.

**Relationships:** "UC-00", "UC-0..."

Business Rules:

- BR-01:
- BR-02:

### 3.28 UC-27: Propose Quotation

USE CASE-27 SPECIFICATION

Use-case No.	UC-27	Use-case Version	1.0																					
Use-case Name	Propose Quotation																							
Author	TruongNN																							
Date	30/1/2024	Priority	Medium																					
<p>Actor: Staff</p> <p>Summary:</p> <p>This use case allows staff to propose a quotation for interior design and construction projects to the potential customer.</p> <p>Goal:</p> <p><i>The purpose is</i> for staff to prepare and present quotations to the customer effectively.</p> <p>Triggers:</p> <p>Staff intends to propose a quotation to a potential client.</p> <p>Preconditions:</p> <ul style="list-style-type: none"><li>Staff must be logged in to the system.</li><li>Relevant project details and pricing information must be available.</li></ul> <p>Post Conditions:</p> <p>Quotation proposal is generated and saved in the system for further review and processing.</p> <p>Main Success Scenario:</p> <table><tr><th>No</th><th>Actor's actions</th><th>System Responses</th></tr><tr><td>1</td><td>Staff logs into the system.</td><td>System authenticates staff's credentials.</td></tr><tr><td>2</td><td>Staff navigates to the Quotation Proposal section.</td><td>System displays options for creating a new quotation proposal.</td></tr><tr><td>3</td><td>Staff fills in the details of the quotation proposal including project scope, materials, labor costs, and pricing.</td><td>System saves the entered information.</td></tr><tr><td>4</td><td>Staff submits the quotation proposal to the potential client.</td><td>System notifies staff that the proposal has been successfully submitted.</td></tr></table> <p>Alternative Scenario:</p> <table><tr><th>No</th><th>Actor's actions</th><th>System Responses</th></tr><tr><td>1a</td><td>Staff needs to revise an existing quotation proposal.</td><td>System allows staff to edit and update the existing proposal.</td></tr></table>				No	Actor's actions	System Responses	1	Staff logs into the system.	System authenticates staff's credentials.	2	Staff navigates to the Quotation Proposal section.	System displays options for creating a new quotation proposal.	3	Staff fills in the details of the quotation proposal including project scope, materials, labor costs, and pricing.	System saves the entered information.	4	Staff submits the quotation proposal to the potential client.	System notifies staff that the proposal has been successfully submitted.	No	Actor's actions	System Responses	1a	Staff needs to revise an existing quotation proposal.	System allows staff to edit and update the existing proposal.
No	Actor's actions	System Responses																						
1	Staff logs into the system.	System authenticates staff's credentials.																						
2	Staff navigates to the Quotation Proposal section.	System displays options for creating a new quotation proposal.																						
3	Staff fills in the details of the quotation proposal including project scope, materials, labor costs, and pricing.	System saves the entered information.																						
4	Staff submits the quotation proposal to the potential client.	System notifies staff that the proposal has been successfully submitted.																						
No	Actor's actions	System Responses																						
1a	Staff needs to revise an existing quotation proposal.	System allows staff to edit and update the existing proposal.																						

2a	Staff missing information or errors in the proposal.	System prompts the staff to fill in the missing information or correct errors before submission.
4a	Customer requests changes or adjustments to the proposed quotation.	System notifies the staff of the customer's request and allows for modifications to be made to the proposal.

Exceptions:

No	Cause	System Response
1	The Staff member fails to log in.	System prompts the Staff member to provide valid credentials.
2	Project details and pricing information are not available.	System alerts the Staff member that necessary information is missing and cannot proceed with proposal creation.
4	Technical error occurs during submission.	System notifies the Staff member of the error and advises on the next steps to resolve it.

**Relationships:** "UC-00", "UC-0..."

Business Rules:

- BR-01: In case of account-related issues arising, the staff must contact the administrator for resolution.
- BR-02: If a staff member forgets their account credentials, they should also contact the administrator for account recovery or reset.

### 3.29 UC-28: Create Request

USE CASE-28 SPECIFICATION			
Use-case No.	UC-28	Use-case Version	1.0
Use-case Name	Create Request		
Author	TruongNN		

Date	30/1/2024	Priority	Medium															
<b>Actor:</b> Staff																		
Summary:																		
This use case allows staff to create a new request for interior design and construction projects.																		
Goal:																		
The purpose is "Enable staff to initiate new requests for projects."																		
Triggers:																		
Staff decides to create a new request.																		
Preconditions:																		
<ul style="list-style-type: none"><li>Staff must be authenticated and logged into the system.</li><li>Relevant project details and requirements must be available.</li></ul>																		
Post Conditions:																		
A new request is created and stored in the system for further processing.																		
Main Success Scenario:																		
<table><tr><td>No</td><td>Actor's actions</td><td>System Responses</td></tr><tr><td>1</td><td>Staff logs into the system.</td><td>System authenticates staff's credentials.</td></tr><tr><td>2</td><td>Staff navigates to the request creation section.</td><td>System displays options for creating a new request.</td></tr><tr><td>3</td><td>Staff fills in the details of the new request including project scope, requirements, timeline, and contact information.</td><td>System saves the entered information.</td></tr><tr><td>4</td><td>Staff submits the new request.</td><td>System notifies staff that the request has been successfully submitted.</td></tr></table>				No	Actor's actions	System Responses	1	Staff logs into the system.	System authenticates staff's credentials.	2	Staff navigates to the request creation section.	System displays options for creating a new request.	3	Staff fills in the details of the new request including project scope, requirements, timeline, and contact information.	System saves the entered information.	4	Staff submits the new request.	System notifies staff that the request has been successfully submitted.
No	Actor's actions	System Responses																
1	Staff logs into the system.	System authenticates staff's credentials.																
2	Staff navigates to the request creation section.	System displays options for creating a new request.																
3	Staff fills in the details of the new request including project scope, requirements, timeline, and contact information.	System saves the entered information.																
4	Staff submits the new request.	System notifies staff that the request has been successfully submitted.																
Alternative Scenario:																		
<table><tr><td>No</td><td>Actor's actions</td><td>System Responses</td></tr><tr><td>1a</td><td>Staff needs to revise an existing request</td><td>System allows staff to edit and update the existing request.</td></tr><tr><td>2</td><td>Staff encounters missing information or errors in the request.</td><td>System prompts staff to fill in the missing information or correct errors before submission.</td></tr></table>				No	Actor's actions	System Responses	1a	Staff needs to revise an existing request	System allows staff to edit and update the existing request.	2	Staff encounters missing information or errors in the request.	System prompts staff to fill in the missing information or correct errors before submission.						
No	Actor's actions	System Responses																
1a	Staff needs to revise an existing request	System allows staff to edit and update the existing request.																
2	Staff encounters missing information or errors in the request.	System prompts staff to fill in the missing information or correct errors before submission.																

Exceptions:

No	Cause	System Response
1	Staff fails to log in.	System prompts staff to provide valid credentials.
2	Relevant project details are not available.	System alerts staff that necessary information is missing and request creation cannot proceed.
4	Technical error occurs during submission.	System notifies staff of the error and advises on the next steps to resolve it.

Relationships:

- UC-04
- UC-30

Business Rules:

- BR-01: In case of account-related issues arising, staff must contact the administrator for resolution.
- BR-02: If a staff member forgets their account credentials, they should also contact the administrator for account recovery or reset.

### 3.30 UC-29: Update Request

USE CASE-29 SPECIFICATION			
Use-case No.	UC-29	Use-case Version	1.0
Use-case Name	Update Request		
Author	TruongNN		
Date	30/1/2024	Priority	Medium
<p>Actor: Staff</p> <p>Summary:</p> <p>This use case allows staff members to update existing requests for interior design and construction projects.</p> <p>Goal:</p>			

The purpose is to enable staff to modify and revise details of already submitted project requests.

Triggers:

Staff decides to update an existing request.

Preconditions:

Staff must be authenticated and logged into the system.

The request to be updated must already exist in the system.

Post Conditions:

The request is successfully updated with the new information.

Main Success Scenario:

No	Actor's actions	System Responses
1	Staff logs into the system.	System authenticates staff's credentials.
2	Staff navigates to the request update section.	System displays options for updating existing requests.
3	Staff selects the request to be updated.	System retrieves and displays the details of the selected request.
4	Staff modifies the necessary details of the request.	System updates the request with the new information.
5	Staff submits the updated request.	System notifies staff that the request has been successfully updated.

Alternative Scenario:

No	Actor's actions	System Responses
1a	Staff encounters errors while updating the request.	System prompts staff to correct errors before submission.
2	Staff decides to cancel the request update.	System cancels the update process and returns to the previous screen.

Exceptions:

No	Cause	System Response
1	Staff fails to log in.	System prompts staff to provide valid

		credentials.
2	The request to be updated does not exist.	System alerts staff that the request cannot be found.
5	Technical error occurs during submission.	System notifies staff of the error and advises on the next steps to resolve it.

Relationships:

- UC-05

Business Rules:

- BR-01: In case of errors or issues encountered during the update process, staff should review and correct them before submission.
- BR-02: Staff should ensure that all modifications made to the request are accurately reflected before submitting the update.

### 3.31 UC-30: View Request

USE CASE-30 SPECIFICATION			
Use-case No.	UC-30	Use-case Version	1.0
Use-case Name	View Request		
Author	TruongNN		
Date	30/1/2024	Priority	Medium
<p>Actor: Staff</p> <p>Summary:</p> <p>This use case allows staff members to view details of existing project requests for interior design and construction.</p> <p>Goal:</p> <p>The purpose is to provide staff members with access to information about project requests for reference and decision-making purposes.</p> <p>Triggers:</p> <p>Staff decides to view details of a specific project request.</p> <p>Preconditions:</p> <p>Staff must be authenticated and logged into the system.</p>			



Project requests must already exist in the system.

Post Conditions:

Staff successfully view the details of the requested project.

Main Success Scenario:

No	Actor's actions	System Responses
1	Staff logs into the system.	System authenticates staff's credentials.
2	Staff navigates to the request view section.	System displays a list of existing project requests.
3	Staff selects a specific project request to view.	System retrieves and displays detailed information about the selected request.
4	Staff reviews the details of the project request.	System presents project details including scope, requirements, timeline, and contact information.

Alternative Scenario:

No	Actor's actions	System Responses
3a	Staff searches for a specific project request.	System retrieves and displays detailed information about the requested project.
2	Staff decides to cancel the request view.	System closes the request view and returns to the previous screen.

Exceptions:

No	Cause	System Response
1	Staff fails to log in.	System prompts staff to provide valid credentials.
2	No project requests available.	System alerts staff that no project requests are available for viewing.
3	The requested project request does not exist.	System notifies staff that the requested project cannot be found.

**Relationships:** "UC-00", "UC-0..."

## Business Rules:

- BR-01: Staff should ensure they have appropriate authorization to view project requests.
- BR-02: System should provide a clear and organized presentation of project details for easy understanding.

## 4 NON-FUNCTIONAL REQUIREMENTS

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

### 4.1 Usability

*[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.]*

### 4.2 Reliability

*[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.]*

### 4.3 Performance

*[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*

### 4.4 Supportability

*[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.]*

#### Coding Convention

The system must adhere to standardized coding practices, naming conventions, and class libraries of JAVA coding convention [codeconventions.pdf \(oracle.com\)](#).

#### Maintenance Utilities:

Development tool: IntelliJ Idea, Visual Studio Code.

Database management system: Microsoft SQL Server.

Version control tool: Git.

### 4.5 Design Constraints

*[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.]*

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

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

## 4.7 Purchased Components

*[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.]*

## 4.8 Interfaces

*[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.]*

Since the application must run over the internet, all the hardware shall require connecting internet will be hardware interface for the system. As for e.g. Modem, WAN – LAN, Ethernet Cross-Cable.

### 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.]

## 4.9 Licensing Requirements

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

## 4.10 Legal, Copyright, and Other Notices

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

#### **4.11 Applicable Standards**

*[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.]*

## 5 SUPPORTING INFORMATION

*[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.]*