SOFTWARE REQUIREMENTS SPECIFICATION

Tennis Management System

Group4:

SE151102 - Mai Ngọc Hải Hưng

SE151018 - Huỳnh Bá Quốc

SE151066 - Võ Phước Thành

SE151043 - Mai Hoàng Tâm

SE151078 - Nguyễn Viết Thịnh

SE150629 - Trần Đức Anh

Ho Chi Minh City, July 2022

Table of Contents

I. INTRODUCTION 1

1. Purpose 1

2. System purpose 1

3. Document Conventions 1

4. Product scope 1

II. OVERALL DESCRIPTION 2

1. Product perspective 2

2. User classes and Characteristics 2

3. Operating Environment 2

4. Design and Implementation Constraints 2

5. Assumptions and Dependencies 2

III. SPECIFIC REQUIREMENTS 3

1. Functional Requirements 3
   1.1. Use case diagram – Tennis Staff (Admin) 3
   1.2. Use case diagram – Customer (user) 3
   1.3. Register 3
   1.4. Login 3
   1.5. Update profile user 3
   1.6. View list of court 3
   1.7. Search a court 3
   1.8. View a court detail 3
   1.9. View profile 3
   1.10. Logout 3
   1.11. Add booking 3
   1.12. Get list booking 3
   1.13. Delete booking 3
   1.14. Update booking 3
   1.15. Get information 3
   1.16. Payment 3
   1.17. View a feedback detail 3
   1.18. Write feedback 3
   1.19. Update information court 3
   1.20. Update status of manage court 3

1.21. Delete court 3
1.22. Search user 3
1.23. Update status of manage user 3
1.24. Status of view feedback list 3
1.25. View feedback list 3

IV. NON-FUNCTIONAL REQUIREMENTS 4
1.1 External Interfaces 4
1.1.1. User Interfaces 4
1.1.2 Software Interfaces 4
2.1. Quality Attributes 4
2.1.1. Usability 4
2.1.2. Reliability 4
2.1.3. Performance 4
2.1.4. Security 4

I. INTRODUCTION

1. Purpose

Tennis is a type of sport that is loved by many people in the capital, but they often face problems with the arrangement and use of tennis courts. On average, it takes customers about 20 minutes to get to the tennis court to reserve and choose. Some patrons call to book the pitch, but sometimes they don't always get the options they want. Sometimes customers do not even receive a response from the tennis court. On peak days, the staff at the Tennis court cannot manage all customer requests. Tennis courts lose a number of potential customers and affect the long-term business of tennis court owners.

2. System purpose

Many customers have requested a system that allows users to book tennis courts online. Such a system will save customers time, provide convenience and it will increase their chances of getting the options they want. Knowing in advance which courts are being used or repaired will improve management efficiency for the staff of the Tennis court. Provide the ability to pay online, ensuring the convenience for users and employees of the Tennis court.

3. Document Conventions

- Font family: Arial
- Font weight: Regular
- Font size: 12
- Font weight heading 1: Bold
- Font size heading 1: 16
- Font weight heading 2: Bold
- Font size heading 2: 14

4. Product scope

This website is for everyone who wants to join and experience the sport of tennis. Through the system makes it convenient to book and pay.

II. OVERALL DESCRIPTION

1. Product perspective

For customers who wish to book a tennis court, the Tennis Management System is an Internet-based and smartphone-enabled application that will accept court orders from individuals or groups, process payments and activate Location locations as indicated in the Tennis court. Unlike today's manual and telephonic course booking processes, customers using a Tennis Management System will not have to visit the court to book a course, which will save them time and will increase their profits ask for the choice they want..

2. User classes and Characteristic

Customer	The customer is the person who logs into the system to use the functions. They can use features included in the system such as booking tennis courts, making payments, viewing articles and viewing information about the system's policies and regulations.
Tennis Staff (Amin)	Responsible for yard preparation and customer guidance. Simultaneous system management, user account management. Most Tennis Staff will training on how to use the hardware and software for the TMS.

If the user wants to use the main functions of the system, he must log in to the system. If they are not logged in to the system, they only use some basic functions that are provided to unauthenticated users.

Characteristics: The software requires users to use a personal email account to become a member and use the system.

3.Operating Environment

- Running environment: web browser (Chrome, Firefox, Safari, Opera, …).

4.Design and Implementation Constraints

Developers must be careful about the privacy of users. All user data will be kept on the database system and necessary precautions should be taken to protect user data.

The internet connection is a constraint for the software. Since the software fetches data from database over the Internet, it is crucial that there is the Internet connection for the software to work.

Developers must implement project by programming language, system architecture with the following:

- Client / Server system
- Database: MS SQL Server
- Front-end: HTML5/CSS3/Javascript
- Library: Bootstrap 4, JSTL (to build front-end)
- Language programming: Java, Servlet (to build back-end)
- Runtime environment: Java Runtime Environment

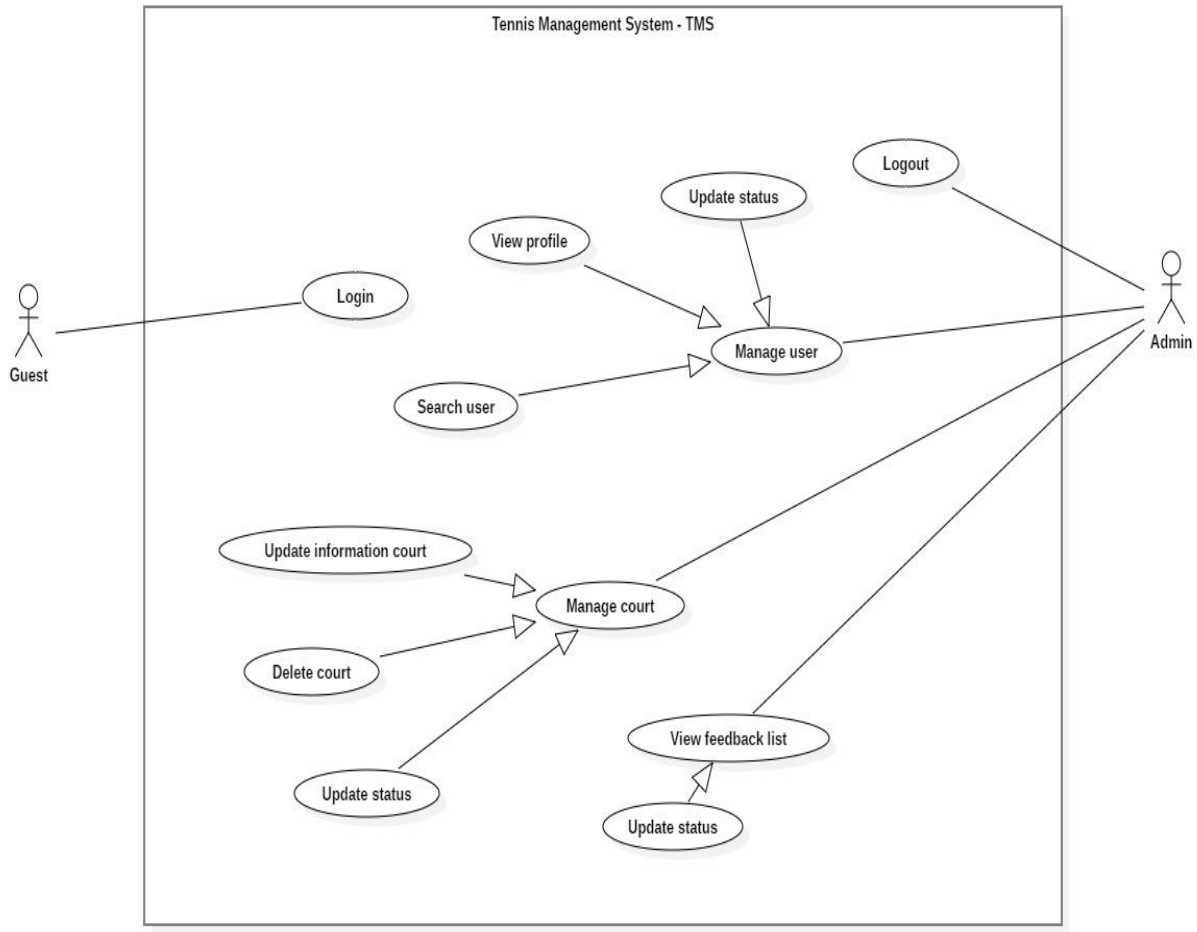
5.Assumptions and Dependencies

Assumption users have an internet connection, a device has web browser and knowledge about using it at minimum level (access, fill in field)

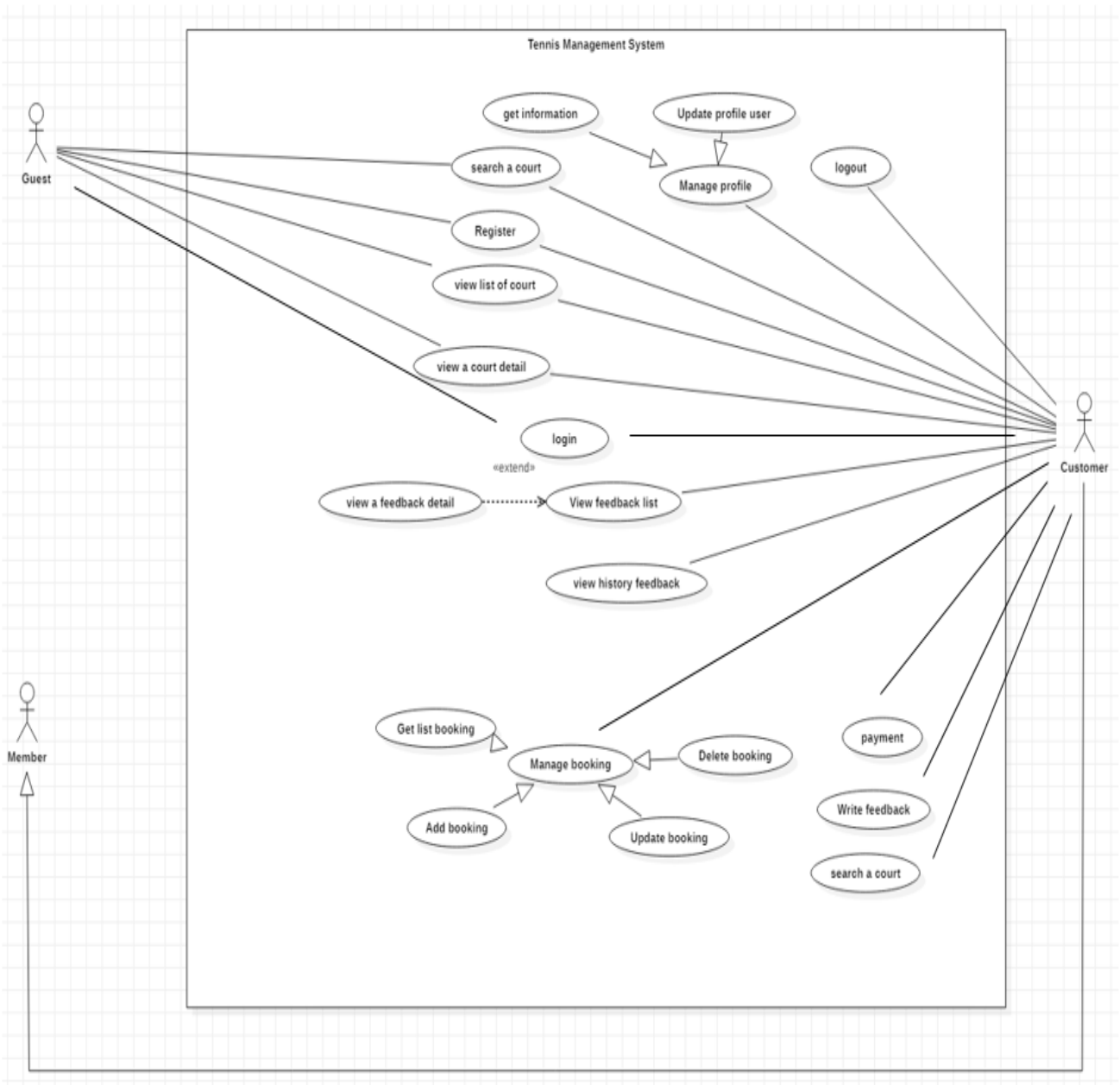
III. SPECIFIC REQUIREMENTS

1. Functional Requirements

1.1. Use case diagram – Tennis Staff (Admin)



1.2. Use case diagram – Customer(user)


Tennis Management System
Guest
Member
Customer
get information
Update profile user
search a court
Manage profile
logout
Register
view list of court
view a court detail
login
«extend»
view a feedback detail
View feedback list
view history feedback
Get list booking
Manage booking
Delete booking
Add booking
Update booking
payment
Write feedback
search a court

1.3 Register

<table>
<tr><td>Use-case No</td><td>UC-35</td><td>Use-case Name</td><td colspan="3">Register</td></tr>
<tr><td>Actor</td><td colspan="5">Customer, guest</td></tr>
<tr><td>Priority</td><td colspan="5">High</td></tr>
<tr><td>Summary</td><td colspan="5">This function allows customers to register their account to use the system.</td></tr>
<tr><td>Trigger</td><td colspan="5">Actor wants to use Tennis Management System</td></tr>
<tr><td>Pre-Conditions</td><td colspan="5">Actor need an email to create an account.</td></tr>
<tr><td>Post-Conditions</td><td colspan="5">Success: System informs “sign up successfully”
Fail: System informs “Error unknown, try again later!”</td></tr>
<tr><td>Normal Flow</td><td colspan="5"><table>
<tr><th>Step</th><th>Actor action</th><th>System response</th></tr>
<tr><td>1</td><td>Click on “Sign up” tab</td><td>System shows fill page</td></tr>
<tr><td>2</td><td>Click the "finish" button when the account is created.</td><td>System show command "Sign up successful"</td></tr>
</table></td></tr>
<tr><td>Alternative Flow</td><td colspan="5">N/A</td></tr>
<tr><td>Exception</td><td colspan="5">N/A</td></tr>
<tr><td>Business Rules</td><td colspan="5">N/A</td></tr>
</table>

1.4 Login

<table>
<tr><td>Use-case No</td><td>UC-01</td><td>Use-case Name</td><td>Login</td></tr>
<tr><td>Actor</td><td colspan="3">Unauthenticated user</td></tr>
<tr><td>Priority</td><td colspan="3">High</td></tr>
<tr><td>Summary</td><td colspan="3">This feature allows an unauthenticated user to login into the system</td></tr>
<tr><td>Trigger</td><td colspan="3">User wants to login Tennis Management System</td></tr>
<tr><td>Pre-Conditions</td><td colspan="3">User has authenticated into Tennis Management System</td></tr>
<tr><td>Post-Conditions</td><td colspan="3">Success: show success message “Login successfully!”
Fail: show error message “Login fail! Please enter the correct Email to log into the system”</td></tr>
<tr><td>Normal Flow</td><td colspan="3">
<table>
<tr><th>Step</th><th>Actor action</th><th>System response</th></tr>
<tr><td>1</td><td>The unauthenticated user type URL into location field of internet browser</td><td>The screen will display the homepage of the system</td></tr>
<tr><td>2</td><td>Click “Continue with Email” button</td><td>System redirects to Login screen of Google</td></tr>
<tr><td>3</td><td>The user chooses Google account</td><td>System redirects to homepage with success alert “Login successfully!”</td></tr>
</table>
</td></tr>
<tr><td>Alternative Flow</td><td colspan="3">N/A</td></tr>
<tr><td>Exception</td><td colspan="3">
<table>
<tr><th>No</th><th>Cause</th><th>System response</th></tr>
<tr><td>1</td><td>The Google account has not been authenticated by the Tennis Management System</td><td>System redirects to homepage with error alert “Is the Email correct?”</td></tr>
<tr><td>2</td><td>Google account has been banned</td><td>System redirects to homepage with error alert “Your account has been banned!”</td></tr>
</table>
</td></tr>
<tr><td>Business Rules</td><td colspan="3">N/A</td></tr>
</table>

1.5 Update profile user

<table>
<tr><td>Use-case No</td><td>UC-35</td><td>Use-case Name</td><td>Update profile user</td></tr>
<tr><td>Actor</td><td colspan="3">Customer</td></tr>
<tr><td>Priority</td><td colspan="3">High</td></tr>
<tr><td>Summary</td><td colspan="3">This feature allows users to edit their profile.</td></tr>
<tr><td>Trigger</td><td colspan="3">Actor wants to update profile</td></tr>
<tr><td>Pre-Conditions</td><td colspan="3">Actor has logged into Tennis Management System</td></tr>
<tr><td>Post-Conditions</td><td colspan="3">Success: System update user profile information
Fail: System informs “Error unknown, try again later!”</td></tr>
<tr><td>Normal Flow</td><td colspan="3"><table>
<tr><th>Step</th><th>Actor action</th><th>System response</th></tr>
<tr><td>1</td><td>Click on “Update profile” tab</td><td>System shows user account list</td></tr>
<tr><td>2</td><td>Click on the name of a specific user and click "Update"</td><td>System show command "update successful"</td></tr>
</table></td></tr>
<tr><td>Alternative Flow</td><td colspan="3">N/A</td></tr>
<tr><td>Exception</td><td colspan="3">N/A</td></tr>
<tr><td>Business Rules</td><td colspan="3">N/A</td></tr>
</table>

1.6 View list of court

Use-case No	UC-10	Use-case Name	View list of court
Actor	Customer, guest		
Priority	High		

Summary	This feature allows to display the court list.
Trigger	The actor wants to show court list.
Pre-Conditions	Actor has go to 's page Tennis Management System
Post-Conditions	**Success:** **Fail**: System informs “Error, try again later!”
Normal Flow	
Alternative Flow	N/A
Exception	N/A
Business Rules	N/A

1.7 Search a court

Use-case No	UC-36	Use-case Name	Search a court
Actor	Customer, guest		
Priority	Medium		
Summary	This function allows customers to search the court		
Trigger	The actor wants to search for a court		
Pre-Conditions	Actor has go to 's page Tennis Management System		
Post-Conditions	**Success**: System redirects court information list **Fail**: System informs “Error, try again later!”		

Normal Flow

Step	Actor action	System response
1	Click on “Search court” tab	System shows court list

	2	Click on the court of your choice.	The system displays that court information.
Alternative Flow	N/A		
Exception	N/A		
Business Rules	N/A		

1.8 View a court detail

Use-case No	UC-10	Use-case Name	View a court detail
Actor	Customer, guest		
Priority	High		
Summary	This feature allows to display detailed information of a court.		
Trigger	The actor wants to show a court detail.		
Pre-Conditions	Actor has go to 's page Tennis Management System		
Post-Conditions	**Success:** **Fail**: System informs “Error, try again later!”		
Normal Flow			
Alternative Flow	N/A		
Exception	N/A		
Business Rules	N/A		

1.9 View profile

<table>
<tr><td>Use-case No</td><td>UC-02</td><td>Use-case Name</td><td>View profile</td></tr>
<tr><td>Actor</td><td colspan="3">Unauthenticated users, authenticated users (Admin, customer)</td></tr>
<tr><td>Priority</td><td colspan="3">Medium</td></tr>
<tr><td>Summary</td><td colspan="3">This feature allows the user to view the Tennis Management System usage record</td></tr>
<tr><td>Trigger</td><td colspan="3">The actor wants to see the terms of use of the system</td></tr>
<tr><td>Pre-Conditions</td><td colspan="3">N/A</td></tr>
<tr><td>Post-Conditions</td><td colspan="3">Success: Redirect to the profile pages
Fail: System informs “Error unknown, try again later!”</td></tr>
<tr><td>Normal Flow</td><td colspan="3"><table>
<tr><th>Step</th><th>Actor action</th><th>System response</th></tr>
<tr><td>1</td><td>The unauthenticated user type URL into location field of internet browser</td><td>The screen will display the homepage of the system</td></tr>
<tr><td>2</td><td>Click “Profile of use” at the footer of homepage</td><td>The system will redirect to the profile page</td></tr>
</table></td></tr>
<tr><td>Alternative Flow</td><td colspan="3">N/A</td></tr>
<tr><td>Exception</td><td colspan="3">N/A</td></tr>
<tr><td>Business Rules</td><td colspan="3">The platform must be clear about privacy profile</td></tr>
</table>

1.10 Logout

Use-case No	UC-46	Use-case Name	Logout
Actor	Authenticated users (User, Admin)		
Priority	Medium		

<table>
<tr><td>Summary</td><td>This feature allows user logout to the system</td></tr>
<tr><td>Trigger</td><td>Actor wants to logout</td></tr>
<tr><td>Pre-Conditions</td><td>Actor has logged into Tennis Management System</td></tr>
<tr><td>Post-Conditions</td><td>Success: System redirects to homepage and informs “Logout successfully!”
Fail: System informs “Error unknown, try again later!”</td></tr>
<tr><td>Normal Flow</td><td>
<table>
<tr><th>Step</th><th>Actor action</th><th>System response</th></tr>
<tr><td>1</td><td>Click on “Account” tab</td><td></td></tr>
<tr><td>2</td><td>Click on “Logout”</td><td>System redirects to homepage and inform “Logout successfully!”</td></tr>
</table>
</td></tr>
<tr><td>Alternative Flow</td><td>N/A</td></tr>
<tr><td>Exception</td><td>N/A</td></tr>
<tr><td>Business Rules</td><td>N/A</td></tr>
</table>

1.11 Add booking

Use-case No	UC-36	Use-case Name	Add booking
Actor	Customer		
Priority	Medium		
Summary	This feature allows customers to add a court.		
Trigger	The actor wants to add court.		
Pre-Conditions	Actor has logged into Tennis Management System		
Post-Conditions	**Success**: System redirects add court successfully **Fail**: System informs “Error unknown, try again later!”		

<table>
<tr><td rowspan="4">Normal Flow</td><td colspan="3"><table>
<tr><th>Step</th><th>Actor action</th><th>System response</th></tr>
<tr><td>1</td><td>Click on “Add court” tab</td><td>The system displays a list of courts want to add</td></tr>
<tr><td>2</td><td>Click ”Finish”</td><td>System redirects add court successfully</td></tr>
</table></td></tr>
<tr><td>Alternative Flow</td><td colspan="3">N/A</td></tr>
<tr><td>Exception</td><td colspan="3">N/A</td></tr>
<tr><td>Business Rules</td><td colspan="3">N/A</td></tr>
</table>

1.12 Get list booking

Use-case No	UC-35	Use-case Name	Get list booking
Actor	Customer		
Priority	High		
Summary	This feature allows to get the list of courts placed in the system.		
Trigger	Actor wants to get list court.		
Pre-Conditions	Actor has logged into Tennis Management System		
Post-Conditions	**Success:** The system displays a list of courts. **Fail**: System informs “Error, try again later!”		
Normal Flow			
Alternative Flow	N/A		
Exception	N/A		
Business Rules	N/A		

1.13 Delete booking

<table>
<tr><td>Use-case No</td><td>UC-22</td><td>Use-case Name</td><td>Delete booking</td></tr>
<tr><td>Actor</td><td colspan="3">Customer</td></tr>
<tr><td>Priority</td><td colspan="3">Medium</td></tr>
<tr><td>Summary</td><td colspan="3">This feature allows customer to delete the court booked</td></tr>
<tr><td>Trigger</td><td colspan="3">Actor wants to delete the court booked</td></tr>
<tr><td>Pre-Conditions</td><td colspan="3">Actor has logged into Tennis Management System</td></tr>
<tr><td>Post-Conditions</td><td colspan="3">Success: successfully deleted the court booed
Fail: System informs “Error unknown, try again later!”</td></tr>
<tr><td>Normal Flow</td><td colspan="3"><table>
<tr><th>Step</th><th>Actor action</th><th>System response</th></tr>
<tr><td>1</td><td>Move mouse to “Delete court booked” at header</td><td>The court function will be shown</td></tr>
<tr><td>2</td><td>Click “Delete”</td><td>The system displays "Delete court booked?"</td></tr>
<tr><td>3</td><td>Click “YES”</td><td>System will delete court and show “Delete successfully”</td></tr>
</table></td></tr>
<tr><td>Alternative Flow</td><td colspan="3">N/A</td></tr>
<tr><td>Exception</td><td colspan="3">N/A</td></tr>
<tr><td>Business Rules</td><td colspan="3">N/A</td></tr>
</table>

1.14 Update booking

Use-case No	UC-36	Use-case Name	Update booking
Actor	Customer		
Priority	Medium		
Summary	This feature allows customers to update the courts have booked.		

Trigger	The actor wants to update the courts have booked.
Pre-Conditions	Actor has logged into Tennis Management System
Post-Conditions	**Success**: System redirects update the courts have booked successfully **Fail**: System informs “Error unknown, try again later!”
Normal Flow	

Step	Actor action	System response
1	Click on “Update booking” tab	The system displays a court want to update
2	Click ”Finish”	System redirects update court successfully

Alternative Flow	N/A
Exception	N/A
Business Rules	N/A

1.15 Get information

Use-case No	UC-35	Use-case Name	Get information
Actor	Customer		
Priority	High		
Summary	This feature allows to get user information and save it in the system.		
Trigger	Actor wants to store information.		
Pre-Conditions	Actor has logged into Tennis Management System		
Post-Conditions	**Success**: The system has successfully retrieved the information. **Fail**: System informs “Error, try again later!”		

Normal Flow	
Alternative Flow	N/A
Exception	N/A
Business Rules	N/A

1.16 Payment

Use-case No	UC-34	Use-case Name	Payment
Actor	Customer		
Priority	Medium		
Summary	This feature allows customers to pay for the system when they have booked and used the tennis cou		
Trigger	The actor wants to see the file submission		
Pre-Conditions	Actor has logged into Tennis Management System		
Post-Conditions	**Success**: System redirects to workspace page and informs “Payment successfully” **Fail**: System informs “Error unknown, try again later!”		

Normal Flow

Step	Actor action	System response
1	Click “Payment”	System redirects to popup form payment
2	Input information of card and click “payment”	The system confirms and redirects to the workspace page

Alternative Flow	N/A
Exception	N/A

1.17 View a feedback detail

Use-case No	UC-33	Use-case Name	View a feedback detail
Actor	Customer		

Priority	Medium
Summary	This feature allows detailed display of a feedback on the system
Trigger	Actor wants to see a feedback detailed
Pre-Conditions	Actor has logged into Tennis Management System
Post-Conditions	**Success**: The system displays the feedback. **Fail**: System informs “Error unknown, try again later!”
Normal Flow	

Step	Actor action	System response
1	Choose number of star and type comment	
2	Click on “Feedback”	System redirects to workspace page

Alternative Flow	N/A
Business Rules	N/A
Exception	N/A

1.18 Write feedback

Use-case No	UC-33	Use-case Name	Write feedback
Actor	Customer		
Priority	Medium		
Summary	This feature allows customers to send feedback to the system.		
Trigger	Actor wants feedback about system		
Pre-Conditions	Actor has logged into Tennis Management System		

<table>
<tr><td>Post-Conditions</td><td colspan="3">Success: System redirects to workspace page and informs “Feedback successfully!”
Fail: System informs “Error unknown, try again later!”</td></tr>
<tr><td>Normal Flow</td><td colspan="3"><table>
<tr><th>Step</th><th>Actor action</th><th>System response</th></tr>
<tr><td>1</td><td>Choose number of star and type comment</td><td></td></tr>
<tr><td>2</td><td>Click on “Feedback”</td><td>System redirects to workspace page and informs “Feedback successfully!”</td></tr>
</table></td></tr>
<tr><td>Alternative Flow</td><td colspan="3">N/A</td></tr>
<tr><td>Exception</td><td colspan="3"><table>
<tr><th>No</th><th>Cause</th><th>System response</th></tr>
<tr><td>1</td><td>Actor fills invalid/wrong information</td><td>System informs “Feedback commen is required”</td></tr>
</table></td></tr>
<tr><td>Business Rules</td><td colspan="3">N/A</td></tr>
</table>

1.19 Update information court

Use-case No	UC-27	Use-case Name	Update information court
Actor	Admin		
Priority	Medium		
Summary	This feature allows admin to update information court		
Trigger	Actor wants to update information court		
Pre-Conditions	Actor has logged into Tennis Management System		
Post-Conditions	**Success**: System informs “Update information court successfully!” **Fail**: System informs “Error unknown, try again later!”		

Normal Flow	
Alternative Flow	N/A
Business Rules	N/A

1.20 Update status of manage court

Use-case No	UC-27	Use-case Name	Update status of manage court
Actor	Admin		
Priority	Medium		
Summary	This feature allows admin to update status information		
Trigger	Actor wants to update status information		
Pre-Conditions	Actor has logged into Tennis Management System		
Post-Conditions	**Success**: System informs “Update status successfully!” **Fail**: System informs “Error unknown, try again later!”		

Normal Flow

Step	Actor action	System response
1	Click on “Status court”	System redirects to workspace page
2	Click a specific title court	System displays all of the information of this court
3	Edit new information of this milestone	
4	Click “Update”	System redirects to status and informs “Update status court successfully!”

Alternative Flow	N/A

Exception

No	Cause	System response
1	Actor fills invalid/wrong information	System informs “This field is required”

Business Rules	N/A

1.21 Delete court

<table>
<tr><td>Use-case No</td><td>UC-22</td><td>Use-case Name</td><td>Delete court</td></tr>
<tr><td>Actor</td><td colspan="3">Admin</td></tr>
<tr><td>Priority</td><td colspan="3">Medium</td></tr>
<tr><td>Summary</td><td colspan="3">This feature allows employer to delete court</td></tr>
<tr><td>Trigger</td><td colspan="3">Actor wants to delete court</td></tr>
<tr><td>Pre-Conditions</td><td colspan="3">Actor has logged into Tennis Management System</td></tr>
<tr><td>Post-Conditions</td><td colspan="3">Success: successfully deleted court
Fail: System informs “Error unknown, try again later!”</td></tr>
<tr><td>Normal Flow</td><td colspan="3"><table>
<tr><th>Step</th><th>Actor action</th><th>System response</th></tr>
<tr><td>1</td><td>Move mouse to “Delete court” at header</td><td>The court function will be shown</td></tr>
<tr><td>2</td><td>Click “Delete”</td><td>The system displays "Delete court?"</td></tr>
<tr><td>3</td><td>Click “YES”</td><td>System will delete court and show “Delete successfully”</td></tr>
</table></td></tr>
<tr><td>Alternative Flow</td><td colspan="3">N/A</td></tr>
<tr><td>Exception</td><td colspan="3">N/A</td></tr>
<tr><td>Business Rules</td><td colspan="3">N/A</td></tr>
</table>

1.22 Search user

Use-case No	UC-36	Use-case Name	Search user
Actor	Admin		

<table>
<tr><td>Priority</td><td>Medium</td></tr>
<tr><td>Summary</td><td>This feature allows admin to search user by name</td></tr>
<tr><td>Trigger</td><td>The actor wants to search for a user</td></tr>
<tr><td>Pre-Conditions</td><td>Actor has logged into Tennis Management System</td></tr>
<tr><td>Post-Conditions</td><td>Success: System redirects user profile information list
Fail: System informs “Error unknown, try again later!”</td></tr>
<tr><td>Normal Flow</td><td>
<table>
<tr><th>Step</th><th>Actor action</th><th>System response</th></tr>
<tr><td>1</td><td>Click on “User Management” tab</td><td>System shows user account list</td></tr>
<tr><td>2</td><td>Click the button icon magnifying glass and enter the username you want to find</td><td>System redirects to user profile information list</td></tr>
</table>
</td></tr>
<tr><td>Alternative Flow</td><td>N/A</td></tr>
<tr><td>Exception</td><td>N/A</td></tr>
<tr><td>Business Rules</td><td>N/A</td></tr>
</table>

1.23 Update status of manage user

Use-case No	UC-27	Use-case Name	Update status of manage user
Actor	Admin		
Priority	Medium		
Summary	This feature allows admin to update status information		
Trigger	Actor wants to update status information		
Pre-Conditions	Actor has logged into Tennis Management System		

<table>
<tr><td>Post-Conditions</td><td colspan="3">Success: System informs “Update status successfully!”
Fail: System informs “Error unknown, try again later!”</td></tr>
<tr><td>Normal Flow</td><td colspan="3"><table>
<tr><th>Step</th><th>Actor action</th><th>System response</th></tr>
<tr><td>1</td><td>Click on “Status user” at the header</td><td>System redirects to workspace page</td></tr>
<tr><td>2</td><td>Click a specific title user</td><td>System displays all of the information of this user</td></tr>
<tr><td>3</td><td>Edit new information of this milestone</td><td></td></tr>
<tr><td>4</td><td>Click “Update”</td><td>System redirects to status and informs “Update status of user successfully!”</td></tr>
</table></td></tr>
<tr><td>Alternative Flow</td><td colspan="3">N/A</td></tr>
<tr><td>Exception</td><td colspan="3"><table>
<tr><th>No</th><th>Cause</th><th>System response</th></tr>
<tr><td>1</td><td>Actor fills invalid/wrong information</td><td>System informs “This field is required”</td></tr>
</table></td></tr>
<tr><td>Business Rules</td><td colspan="3">N/A</td></tr>
</table>

1.24 Status of view feedback list

Use-case No	UC-12	Use-case Name	Status of view feedback list
Actor	Admin		
Priority	Medium		
Summary	This feature allows admin can view feedback from users		
Trigger	Actor wants to view all feedback from user		
Pre-Conditions	Actor has logged into Tennis Management System		
Post-Conditions	**Success:** Redirect to feedback list from user **Fail**: System informs “Error unknown, try again later!”		

<table>
<tr><td>Normal Flow</td><td>
<table>
<tr><th>Step</th><th>Actor action</th><th>System response</th></tr>
<tr><td>1</td><td>Move mouse to avatar at header</td><td>The list function will be shown</td></tr>
<tr><td>2</td><td>Click “Profile”</td><td>System redirects to profile of user</td></tr>
<tr><td>3</td><td>Click “View All Feedback”</td><td>System shows all feedback list</td></tr>
</table>
</td></tr>
<tr><td>Alternative Flow</td><td>N/A</td></tr>
<tr><td>Exception</td><td>N/A</td></tr>
<tr><td>Business Rules</td><td>N/A</td></tr>
</table>

1.25 View feedback list

<table>
<tr><td>Use-case No</td><td>UC-33</td><td>Use-case Name</td><td>View feedback list</td></tr>
<tr><td>Actor</td><td colspan="3">Customer, Admin</td></tr>
<tr><td>Priority</td><td colspan="3">Medium</td></tr>
<tr><td>Summary</td><td colspan="3">This feature allows to display a list of feedback from the system</td></tr>
<tr><td>Trigger</td><td colspan="3">Actor wants feedback about system</td></tr>
<tr><td>Pre-Conditions</td><td colspan="3">Actor has logged into Tennis Management System</td></tr>
<tr><td>Post-Conditions</td><td colspan="3">Success: The system displays the feedback list
Fail: System informs “Error unknown, try again later!”</td></tr>
<tr><td>Normal Flow</td><td colspan="3">
<table>
<tr><th>Step</th><th>Actor action</th><th>System response</th></tr>
<tr><td>1</td><td>Choose to see feedback.</td><td></td></tr>
<tr><td>2</td><td>Click on “Show”</td><td>The system displays the feedback list</td></tr>
</table>
</td></tr>
<tr><td>Alternative Flow</td><td colspan="3">N/A</td></tr>
<tr><td>Business Rules</td><td colspan="3">N/A</td></tr>
<tr><td>Exception</td><td colspan="3">N/A</td></tr>
</table>

IV- Non-functional Requirements

1.1 External Interfaces

1.1.1 User Interfaces

- GUI must be sample and friendly
- Icons used must be easy to recognize
- Language is used in the application: English
- Background and font color have a great contrast and main tone include: #f27229, #321fdb, #2eb85c

1.1.2 Software Interfaces

- Web application: browser Google Chrome (version 80 or higher), Firefox (version 68 or higher), Internet Explorer (version 10 or higher), or with any web browser that supports HTML, CSS3, Javascript

2 Quality Attributes

2.1.1 Usability

- All text, label, message should be uniform written by English
- It takes less than an hour to train our user to use the TMS
- Users are not required to have technical knowledge using

2.1.2 Reliability

- The likelihood of system failure is less than 10%
- The availability of the system is over 80%

2.1.3 Performance

- Response time is equal or less than 5 seconds for each request
- Processing time is 3 – 5 seconds for each frame

2.1.4 Security

- Each role can only access their own functions

- All data must be validated before saving to the database system