



Movie Theater

Software Requirements Specification

Version 1.2

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Approval Page

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1. INTRODUCTION

1.1. Purpose

The management system allows to easily perform the functions of the movie theater operation management, especially ticket selling of employees and ticket booking of the users. The biggest goal of the system is to improve the performance of employees, minimize the time to conduct ticket selling with each customer, facilitate booking, increase sales, minimize manpower and make the movie theater more competitive compared with other movie theaters.

The system has user authorization function, so that:

- For users who are customers - not members: can view movie list, view promotions, view ticket prices, view showtimes, register an account, log in.
- For users who are customers - members: the same as customers who are not members, besides, they can book tickets, manage accounts ...
- For users who are employees: view and search members, manage movies, ticket selling, ticket booking, and promotion.
- For users who are shop owners or managers: in addition to the functions of management employee, they can use statistical functions, manage employees, members, cinema rooms...

1.2. In scope

In the movie theatre scope, for learning Mock project, create basic premise for next projects.

2. OVERVIEW

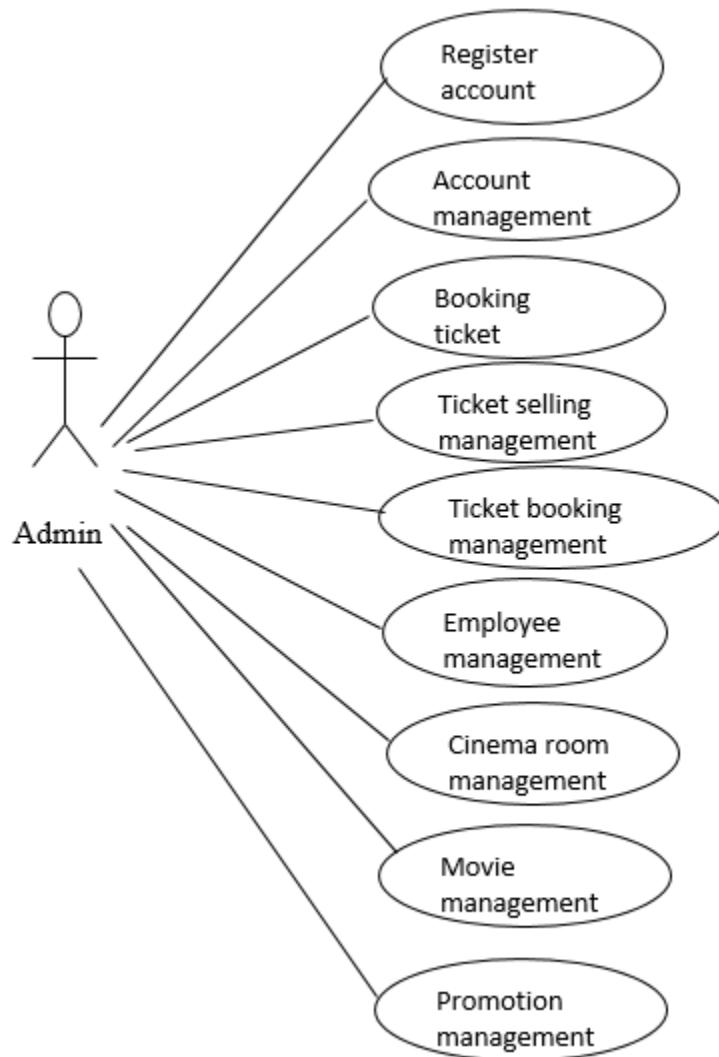
2.1. Actors

The following table describes actors of the movie theatre management system.

Actor		Description
Admin		Actor has the highest right in the system, admin can add, edit, delete all modules in the system.
Employee		Employees who operate directly in the system can manage ticket selling, booking and search for members.
Customer	Not member	Operate directly in the user system, with functions: view movie list, view promotions, view ticket price, showtime, and register accounts
	Member	Operate functions of customers – not members, besides, member customers can book tickets, manage accounts and manage ticket booking.

2.2. USE CASE DIAGRAM

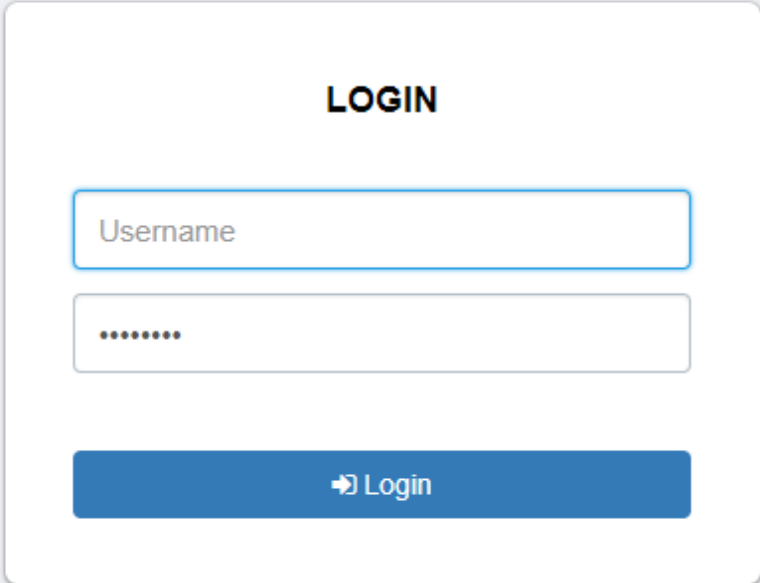
The diagram below provides an overview of the function as well as actors of the users



3. Functional Description

3.1. Functional Requirements

3.1.1 Log in



The image shows a login interface. At the top, the word "LOGIN" is centered in bold. Below it are two input fields: the first is labeled "Username" and the second is for a password, indicated by a series of dots. A blue button with a right-pointing arrow and the text "Login" is positioned below the password field. At the bottom of the form area, there is a text link: "Don't have an account yet? [Register now!](#)".

Users must be authenticated with the provided account and password to access the system.

The system provides a login page for users to enter their username and password. The system will verify the entered user information with the user database of the system.

If the account is not found in the system or an account has been found but the entered password does not match the system password, the system will report an error to the user. "User / password is invalid. Please try again!".

If the account is valid but it has been locked, the system will report an error:

"Account has been locked!"

If login successfully, the system will check the assigned roles and bring users to the main screen of the application.

3.1.2 Register account

Use Case Name	Register account
Use Case ID	
High Level Requirement Ref	
Actor	User
Description	This is use case which allows the user to register accounts
Trigger	NA
Pre-condition	The user registers account information
Post-processing	

3.1.2.1 Register account

REGISTER ACCOUNT

☒ Nam ☐ Nữ


Register

Have an account already? [Login](#)

Screen	Register account		
Description	Register user information		
Screen Access	The user clicks Register account		
Screen Content			
Item	Type	Data	Description
Account	Textbox-String	N/A	
Password	TextBox - String	N/A	
Confirm password	Textbox - String	N/A	
Full name	Textbox - String	N/A	
Date of birth	Textbox - String	N/A	
Sex	Radiobutton - String	N/A	
Email	Textbox – String	N/A	
Identity card	Texbox - number	N/A	
Phone number	Textbox - Number	N/A	
Address	Textbox - String	N/A	
Register	Button	N/A	
Screen action			
Action name	Description	Success	Failure
Register	Click Register to send data	Forward to login page to log in the main page	The required fields are null

3.1.2.2 Edit member accounts

Account Information



Account: *

Password: *

Confirm password: *

Full name: *

Date of birth: *

Gender: *
☒ Nam ☐ Nữ

Identity card: *

Email: *

Address: *

Phone number: *

Image:
 không có tệp nào được chọn

Screen	Edit member account		
Description	Display information of member whose account need editting		
Screen Access	The user clicks Edit at Employee list		
Screen Content			
Action name	Description	Success	Failure
Account	Textbox - string	N/A	
Full name	Textbox – string	N/A	
Password	Textbox - string	N/A	
Date of birth	Textbox - date	N/A	
Sex	Radiobutton - string	N/A	
Email	Textbox - string	N/A	
Identity card	Textbox - string	N/A	
Phone number	Textbox - number	N/A	
Address	Textbox - string	N/A	
Ticket management	Link - string	N/A	
Employee management	Link - string	N/A	
Member management	Link - string	N/A	
Statistic	Link - string	N/A	
Edit	Button	N/A	
Screen action			
Action name	Description	Success	Failure

Ticket booking management	View ticket booking list of members	Display booked ticket list of the member	No event has been created for ticket booking management
Employee management	View active employees	Display list of active employees	No event has been created for Employee management
Member management	View list of registered member	Display list of registered members	No event has been created for Member management
Statistic	View statistic list of the shop	Display statistic list of the shop	No event has been created for Statistic
Edit	Update member information if necessary	Display message: "Update information successfully"	The required fields are null Edit Button not yet creates event.

3.1.2.3 View member list

Screen	View member list		
Description	Dislay all information of registered member		
Screen Access	The user clicks Member management		
Screen Content			
Item	Type	Data	Description
Member ID	Label - string	N/A	
Member name	Label - string	N/A	
Identity card	Label - string	N/A	
Email	Label - string	N/A	
Phone number	Label - string	N/A	
Address	Label - string	N/A	
Ticket management	Link - string	N/A	
Employee management	Link - string	N/A	
Member management	Link - string	N/A	
Statistic	Link - string	N/A	
Edit	Link - img	N/A	
Screen Action			
Action name	Description	Success	Failure
Ticket booking management	View ticket booking list of members	Display booked ticket list of the member	No event has been created for ticket booking management

Employee management	View active employees	Display list of active employees	No event has been created for Employee management
Member management	View list of registered member	Display list of registered members	No event has been created for Member management
Statistic	View statistic list of the shop	Display statistic list of the shop	No event has been created for Statistic
Edit	Edit member information if necessary	Display screen of Edit member information	No event has been created for Edit button

3.1.3 Account management of the user

Use Case Name	Account management
Use Case ID	
Actor	Member
Description	This is a use case which allows the users to update information, change password, manage ticket booking, view detail of score adding and use the score.
Trigger	NA
Pre-condition	The user with registered account
Post-processing	

3.1.3.1 The user – Booked ticket management

The screenshot shows a web application interface for 'Booked ticket' management. On the left is a sidebar with a user profile for 'tientv5' (Score: 36.500) and links for Account Information, History, Booked ticket, and Canceled ticket. The main area displays a table of booked tickets. The table has columns: #, MOVIE NAME, BOOKING DATE, TOTAL AMOUNT, and STATUS. A single ticket is shown: #1, Doctor Strange: Phù Thủy Tối Thượng, 18/11/2018 13:10, 135.000, with a status of 'Waiting for ticket'. Navigation controls (Previous, 1, Next) are visible at the bottom right of the table.

Screen	Booked ticket management		
Description	Display all booked member		
Screen Access	Member clicks Account management -> Booked ticket		
Screen Content			
Item	Type	Data	Description
Movie name	label-string	N/A	
Booking date	label-string	N/A	

Total amount	Label - String	N/A	
Status	Label - String	N/A	
Account information	Link - String	N/A	
History	Link - String	N/A	
Booked ticket	Link - String	N/A	
Canceled ticket	Link - String	N/A	
Log out	Button	N/A	
Screen Action			
Action name	Description	Success	Failure
Log out	Click the logout button to exit the current member account	Back to the login screen	No event has been created for the logout button

3.1.3.2 The user – View history of score adding/using

History of score Adding / Using

From date: 12/11/2018
To date: 30/12/2018

☒ History of score adding
☐ History of score using

[View score](#)

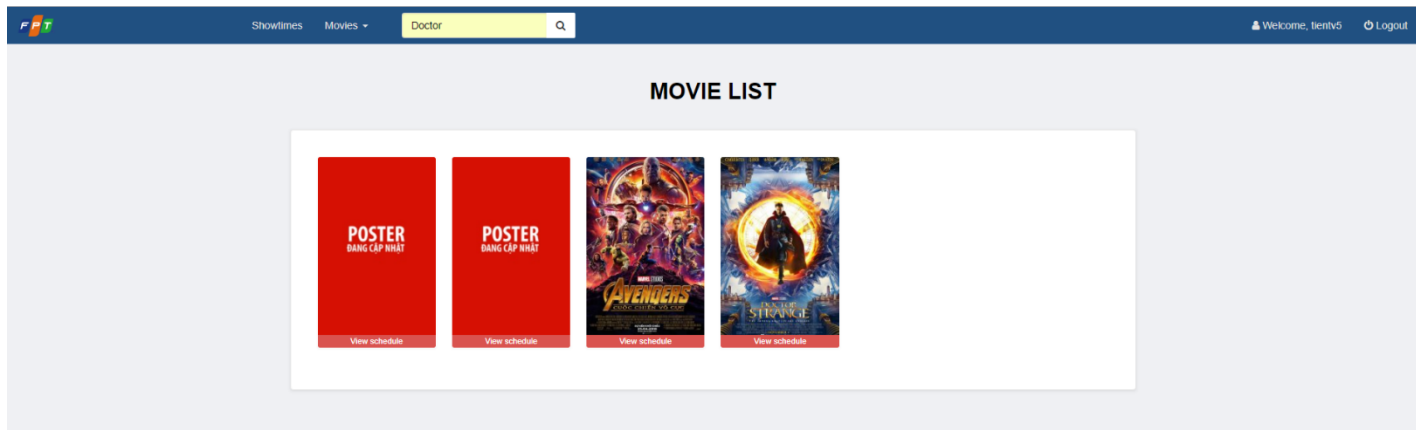
#	DATE CREATED	MOVIE NAME	ADDED SCORE	USED SCORE
1	18/11/2018 13:10	Doctor Strange: Phù Thủy Tối Thượng	13.500	

Previous 1 Next

Screen	View history of score adding/using		
Description	Display all history of score adding/using of the current member		
Screen Access	The member clicks account management -> History		
Screen Content			
Item	Type	Data	Description
From date	Date - string	N/A	
To date	Date - string	N/A	
History of score adding	Radiobutton-String	N/A	
History of score using	Radiobutton-String	N/A	
Date created	Label - string	N/A	
Movie name	Label - string	N/A	
Added score	Label - string	N/A	
Account information	Link - String	N/A	
History	Link - String	N/A	
Booked ticket	Link - String	N/A	
Canceled ticket	Link - String	N/A	
Log out	Button	N/A	
View score	Button	N/A	
Screen Action			
Action name	Description	Success	Failure
Log out	Click the logout button to exit the current member account	Back to the login screen	No event has been created for the logout button
View score	Click the View score button to see the process of using or adding scores	Displays a list of added or used scores	No event has been created for

			the View score button
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3.1.3.3 Movie list – Search of the user



Screen	Movie list - Search		
Description	Search for movie		
Screen Access			
Screen Content			
Item	Type	Data	Description
Search list	Table	N/A	
Search	Button	N/A	
Search	Textbox		
Screen Action			
Action name	Description	Success	Failure
Search	Input data into search box to search	Hide two slides that are about to appear and then display from top to bottom according to the a-z movie with the same movie names	No movies has found as required

3.1.4 Booking ticket of the user

Use Case Name	Booking ticket
Use Case ID	
Actor	Member
Description	This is the use case which allows users to book ticket
Trigger	NA
Pre-condition	The user must login account
Post-processing	

3.1.4.1 Book ticket – Select movie and showtime

SHOWTIMES

01
Fri


02
Sun

03
Mon

04
Tue

05
Wed

06
Thu



Doctor Strange: Phù Thủy Tối Thượng

Doctor Strange

08:00

09:00

14:30

15:00


17:00

18:30

19:00

20:00

21:00



Avengers: Cuộc Chiến Vô Cực

Avengers Infinity War

10:00

11:00

14:30

15:00

17:00

19:00

20:00

21:00

Screen	Book ticket – Select movie and showtime		
Description	Display the current movies and showtime		
Screen Access	The user accesses to book ticket		
Screen Content			
Item	Type	Data	Description
Select movie	Combobox	N/A	Display current movies for users to select
Select date	Combobox	N/A	Display the show date of each selected movie in Select movie combobox for users to select
Select time	Combobox	N/A	Display the showtime of each movie according to the movie and the show date for the user to select
Book ticket	Button	N/A	Send movie information and showtime, display the screen of selecting seat
Screen action			
Action name	Description	Success	Failure
Select movie	Display all show dates for the selected movie	Display all the show date of the selected movie in Select movie combobox	The list of show dates is empty when no show date is found
Select date	Display all showtimes of selected movies	Display all showtimes of movies according to the show date selected in Select show date combobox	The list of schedules is empty when no show schedule is found during the day
Book ticket	Send ticket booking request, send movie information and showtime	Display screen of Selecting seat	If you have not selected a movie, display the message "Please select a movie"

			<ul style="list-style-type: none"> - If the movie show date has not been selected, display the message "Please select the show date" - If showtime has not been selected, display the message "Please select showtime"
--	--	--	--

3.1.4.2 Booking ticket – Selecting seat

Select seat quantity:

1A	1C	1B	1D	1E	1F
2A	2B	2C	2D	2E	2F
3A	3B	3C	3D	3E	3F
4A	4B	4C	4D	4E	4F
5A	5B	5C	5D	5E	5F
6A	6B	6C	6D	6E	6F
7A	7B	7C	7D	7E	7F
8A	8B	8C	8D	8E	8F
9A	9B	9C	9D	9E	9F
10A	10B	10C	10D	10E	10F

Screen

■ Seat is selecting
 ■ Seat is sold
 ■ Seat can choose
 ■ Seat VIP


Continue

Screen	Booking ticket – Selecting seat		
Description	Display seat map of the movie and selected showtime		
Screen Access	The user accesses after selecting movie and showtime		
Screen Content			
Item	Type	Data	Description
Select seat quantity	Combobox	N/A	Display list of seat quantity for the user to select
Seat	CheckBox	N/A	Display seat map for the user to choose
Continue	Button	N/A	Send information of seat selection and display the screen of ticket booking information
Screen Action			
Action name	Description	Success	Failure
Select seat quantity	Display list of seat quantity that customer needs to select (0, 1, 2, ...8)	Display list of seat quantity	
Select seat	Display seat map for the customer to choose according to selected seat quantity	When selecting the seat number as the same as selected seat quantity in combobox of Select seat quantity	If selected seat number is less than the seat quantity at the combobox, display the message "Please selecte x seat more" - If selected seat number is more than the seat quantity at the combobox, display the message "Please select only x seat"

Continue	Send ticket booking request, send seat selection information and display booking information screen	Display Confirm booking ticket screen	
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3.1.4.3 Booking ticket – Confirm booking ticket

CONFIRM BOOKING TICKET



Doctor Strange: Phù Thủy Tối Thượng

Screen:	Scrn02
Date:	01/12/2018
Time:	21:00
Seat:	1D 1E 1F
Price:	1D: 45000 1E: 45000 1F: 45000
Total:	135.000đ

Check your booking ticket information

Full name:	Tran Van Tien
Email:	tientran@gmail.com
Identity card:	123456789
Phone number:	0775335515

[Confirm booking ticket](#)

Screen	Booking ticket – Confirm booking ticket		
Description	Display all ticket booking informatiom		
Screen Access	The user accesses after selecting seat		
Screen Content			
Item	Type	Data	Description
Movie name	Label	N/A	
Screen	Label	N/A	
Date	Label	N/A	
Time	Label	N/A	
Seat	Label	N/A	
Price	Label	N/A	

Total	Label	N/A	
Full name	Label	N/A	
Email	Label	N/A	
Identity card	Label	N/A	
Phone number	Label	N/A	
Confirm booking ticket	Button	N/A	
Screen Action			
Action name	Description	Success	Failure
Confirm booking ticket	Select to send all ticket booking information	Display screen of ticket booking information	

3.1.4.4 Booking ticket – Ticket information

TICKET INFORMATION



Doctor Strange: Phù Thủy Tối Thượng

Screen:	Scrn02
Date:	01/12/2018
Time:	21:00
Seat:	1D 1E 1F
Price:	1D: 45000 1E: 45000 1F: 45000
Score for ticket converting:	0
Total:	135.000đ

Booking ticket information

Full name:	Tran Van Tien
Email:	tientran@gmail.com
Identity card:	123456789
Phone number:	0775335515

Please pick up the ticket 30 minutes before the show. After that time ticket will automatically cancel!

Screen	Booking ticket – Ticket information		
Description	Display all ticket booking information		
Screen Access	The user accesses after seleting seat		
Screen Content			
Item	Type	Data	Description
Movie name	Label	N/A	
Booking ID	Label	N/A	
Screen	Label	N/A	
Date	Label	N/A	
Time	Label	N/A	
Seat	Label	N/A	
Price	Label	N/A	
Total	Label	N/A	
Full name	Label	N/A	
Email	Label	N/A	
Identity card	Label	N/A	
Phone number	Label	N/A	
Screen Action			
Action name	Description	Success	Failure

3.1.5 Ticket selling management

Use Case Name	Ticket selling management
Use Case ID	
High Level Requirement Ref	
Actor	Admin/Manager/Admin
Description	Allows the user to manage selling ticket
Trigger	N/A
Pre-condition	The user must log in the system
Post-processing	

3.1.5.1 Ticket selling management – Select movie and showtime

SHOWTIMES

01
Fri


02
Sun

03
Mon

04
Tue


05
Wed

06
Thu



Doctor Strange: Phù Thủy Tối Thượng
Doctor Strange

08:0009:0014:3015:0017:0018:3019:0020:0021:00



Avengers: Cuộc Chiến Vô Cực
Avengers Infinity War

10:0011:0014:3015:0017:0019:0020:0021:00

Screen	Booking ticket – Select movie and showtime			
Description	Display current movies and showtime			
Screen Access	The user accesses Booking ticket			
Screen Content				
Item	Type	Data	Description	
Date	Combobox	N/A		
Showtime	Button	N/A		
Movie name	Label	N/A		
Time	Link	N/A		
Screen Action				
Action name	Description		Success	Failure
View showtime	Display list of show dates for the user to select		Display showtime list of current movies	If no showtime has been found, display message: “No showtime”
Showtime	Display showtime of each movie		Send information of movies and showtimes, display the Select seat screen	

3.1.5.2 Ticket selling management – Selecting seat

Select seat quantity:

1 ▾

1A

1C

1B

1D

1E

1F

2A

2B

2C

2D

2E

2F

3A

3B

3C

3D

3E

3F

4A

4B

4C

4D

4E

4F

5A

5B

5C

5D

5E

5F

6A

6B

6C

6D

6E

6F

7A

7B

7C

7D

7E

7F

8A

8B

8C

8D

8E

8F

9A

9B

9C

9D

9E

9F

10A

10B

10C

10D

10E

10F

Screen

Seat is selecting

Seat is sold

Seat can choose

Seat VIP

Continue

Screen	Booking ticket – Select seat		
Description	Display seat map of the movie and selected showtime		
Screen Access	The user accesses after selecting movie and showtime		
Screen Content			
Item	Type	Data	Description
Select seat quantity	Combobox	N/A	Display list of seat quantity for the user to select
Seat	CheckBox	N/A	Display seat map for the user to select
Continue	Button	N/A	Send information of selecting seat and display ticket booking information
Screen Action			
Action name	Description		Success
			Failure

Select seat quantity	Display list of seat quantity that customer needs (0, 1, 2, ...8)	Display list of seat quantity	
Select seat	Display seat map, the employee chooses seat according to selected seat quantity at Combobox of Select seat quantity.	When selecting the seat number as the same as selected seat quantity in combobox of Select seat quantity	<p>If selected seat number is less than the seat quantity at the combobox, display the message "Please selecte x seat more"</p> <p>- If selected seat number is more than the seat quantity at the combobox, display the message "Please select only x seat"</p>
Continue	Send ticket booking request, send seat selection information and display booking information screen	Display Confirm booking ticket screen	

3.1.5.3 Ticket selling management – Confirm ticket


CONFIRM BOOKING TICKET



Doctor Strange: Phù Thủy Tối Thượng

Screen:	Scrn02
Date:	01/12/2018
Time:	21:00
Seat:	2D 2E 2F
Price:	2D: 45000 2E: 45000 2F: 45000
Total:	135.000đ

Member



Doctor Strange: Phù Thủy Tối Thượng

Screen:	Scrn02
Date:	01/12/2018
Time:	21:00
Seat:	2D 2E 2F
Price:	2D: 45000 2E: 45000 2F: 45000
Total:	135.000đ

Member

Member ID:	4SqIOzc7Mm
Identity Card:	123456789
Full name:	Tran Van Tien
Full name:	0775335515
Score:	36.500
Convert to ticket: *	<input type="radio"/> Agree <input type="radio"/> Disagree

Screen	Ticket selling management – Confirm ticket		
Description	Display all ticket selling information		
Screen Access	The user accesses after selecting seat		
Screen Content			
Item	Type	Data	Description
Movie name	Label	N/A	
Screen	Label	N/A	
Date	Label	N/A	
Time	Label	N/A	
Seat	Label	N/A	
Price	Label	N/A	
Total	Label	N/A	
Member	Textbox	N/A	
Check	Button	N/A	
Member ID	Label	N/A	

Identity card	Label	N/A	
Full name	Label		
Member score	Label	N/A	
Convert to ticket	Radio	N/A	
Phone number	Label	N/A	
Confirm booking ticket	Button	N/A	
Screen Action			
Action name	Description	Success	Failure
Confirm booking ticket	Select Confirm booking ticket to send all ticket booking information	Send information of ticket selling, display screen of ticket booking information	If the member converts score into ticket, while score is not enough to convert, display message: “Member score is not enough to convert into ticket”
Check member	Input member ID or identity card number to get information of member	Display information of member	Display the message: “No member has found!”
Convert to ticket	Select number of tickets that the member wants to convert into	When number of converted tickets matches with enough member score	

3.1.5.4 Ticket selling management – Ticket information

TICKET INFORMATION



Doctor Strange: Phù Thủy Tối Thượng

Screen:	Scrn02
Date:	01/12/2018
Time:	21:00
Seat:	2D 2E 2F
Price:	2D: 45000 2E: 45000 2F: 45000
Score for ticket converting:	0
Total:	135.000đ

Member

Member ID:	4SqjOzc7Mm
Identity Card:	123456789
Full name:	Tran Van Tien
Phone number:	0775335515

Screen	Ticket selling management – Ticket information		
Description	Display all ticket information		
Screen Access	The user accesses after selecting seat		
Screen Content			
Item	Type	Data	Description
Movie name	Label	N/A	
Ticket booking ID	Label	N/A	
Screen	Label	N/A	
Date	Label	N/A	
Time	Label	N/A	
Seat	Label	N/A	
Price	Label	N/A	
Convert to ticket	Label	N/A	

Score for ticket converting	Label	N/A	
Total	Label	N/A	
Member ID	Label	N/A	
Email	Label	N/A	
Identity card	Label	N/A	
Phone number	Label	N/A	
Screen Action			
Action name	Description	Success	Failure

3.1.6 Ticket booking management

Use Case Name	Ticket booking management
Use Case ID	
High Level Requirement Ref	
Actor	Admin/Manager/Employee
Description	Allows the users to manage ticket booking of members
Trigger	NA
Pre-condition	The user must log in the system
Post-processing	

3.1.6.1 Ticket booking management – Search

Search:

Screen	Ticket booking management - Search
Description	Display current movies and showtime
Screen Access	The user accesses Ticket booking management

Screen Content			
Item	Type	Data	Description
Search	Textbox	N/A	Input the keywords to search including Booking ID, account ID, phone number or identity card number of booking account
Search	Button	N/A	Select Search button
Screen Action			
Action name	Description	Success	Failure
Search	Click the search button, the booking list will filter the data Filtering data by keyword entered in the search textbox matches with the booking code, account code, phone number or identity card number of the booking account, then display on the list	Display the booking list of the account	Show the message "No booking found!"

3.1.6.2 Ticket booking management – Booking list

Booking list								
								Search: <input type="text"/>
#	Booking ID	Member ID	Full name	Identity card	Phone number	Movie	Time	Seat
1	SV7FuDAxwX	4SqIOzc7Mm	Tran Van Tien	123456789	0775335515	Doctor Strange: Phù Thủy Tối Thượng	01/12/2018 - 21:00	2D 2E 2F Successful booking
2	GsAGIM0bqG5	4SqIOzc7Mm	Tran Van Tien	123456789	0775335515	Doctor Strange: Phù Thủy Tối Thượng	01/12/2018 - 21:00	1D 1E 1F Get ticket
3	rv5v4Mkigb	4SqIOzc7Mm	Tran Van Tien	123456789	0775335515	Doctor Strange: Phù Thủy Tối Thượng	01/12/2018 - 21:00	8B Successful booking
4	IRwNA6P4Ct	4SqIOzc7Mm	Tran Van Tien	123456789	0775335515	Doctor Strange: Phù Thủy Tối Thượng	01/12/2018 - 21:00	4A 4B 4C Successful booking
5	QdUWVGQxJr	4SqIOzc7Mm	Tran Van Tien	123456789	0775335515	Doctor Strange: Phù Thủy Tối Thượng	01/12/2018 - 21:00	1A 1C 1B Successful booking
6	iKXHDmkl	4SqIOzc7Mm	Tran Van Tien	123456789	0775335515	Doctor Strange: Phù Thủy Tối Thượng	01/12/2018 - 21:00	1D 1E 1F Successful booking
								Previous 1 Next

Screen	Ticket booking management – Booking list
Description	Display current movies and showtime
Screen Access	The user accesses Booking ticket

Screen Content			
Item	Type	Data	Description
Booking ID	Label	N/A	
Identity card	Label	N/A	
Phone number	Label	N/A	
Movie	Label	N/A	
Time	Label	N/A	
Successful booking	Button	N/A	
Screen Action			
Action name	Description	Success	Failure
Confirm booking	Click Confirm booking to view booking information	Display information of booking detail of member	

3.1.6.3 Ticket booking management – Confirm booking

TICKET INFORMATION

Doctor Strange: Phù Thủy Tối Thượng

Screen:	Scrn02
Date:	01/12/2018
Time:	21:00
Seat:	1D 1E 1F
Total:	135.000đ

Member information

Member ID:	4SqIOzc7Mm
Full name:	Tran Van Tien
Identity card:	123456789
Phone number:	0775335515
Score:	50.000
Convert to ticket: *	<input type="radio"/> Agree <input type="radio"/> Disagree

Confirm booking successfully
Back

Screen	Booking management – Confirm booking		
Description	Display all booking information		
Screen Access	The user accesses after selecting booking ticket at booking list		
Screen Content			
Item	Type	Data	Description
Movie name	Label	N/A	
Booking ID	Label	N/A	
Screen	Label	N/A	
Date	Label	N/A	
Time	Label	N/A	
Seat	Label	N/A	
Price	Label	N/A	
Total	Label	N/A	
Member ID	Label	N/A	
Full name	Label	N/A	
Member score	Label	N/A	
Identity card	Label	N/A	
Convert to ticket	Radio	N/A	
Phone number	Label	N/A	
Confirm booking	Button	N/A	
Screen Action			
Action name	Description	Success	Failure
Member score	Click to convert member score into ticket	Display screen Information of converting score into ticket	Display message: “Not enough score to convert into ticket”
Confirm booking	Click to send request to confirm converting score into ticket	Confirm converting into ticket, display ticket booking management	

3.1.6.4 Ticket booking management – Information of converting into ticket

TICKET INFORMATION

Doctor Strange: Phù Thủy Tối Thượng

Screen:	Scrn02
Date:	01/12/2018
Time:	21:00
Seat:	1D 1E 1F
Score for ticket converting:	135.000
Total:	135.000d

Member information

Member ID:	4SqlOzc7Mm
Full name:	Tran Van Tien
Identity card:	123456789
Phone number:	0775335515

[✕ Back](#)

Screen	Booking management – Confirm booking successfully		
Description	Display all booking information		
Screen Access	The user accesses after selecting Booking ticket at booking list		
Screen Content			
Item	Type	Data	Description
Movie name	Label	N/A	
Booking ID	Label	N/A	
Screen	Label	N/A	
Date	Label	N/A	
Time	Label	N/A	
Seat	Label	N/A	
Price	Label	N/A	
Convert to ticket	Label	N/A	
Score for ticket converting	Label	N/A	

Total	Label	N/A	
Member ID	Label	N/A	
Full name	Label	N/A	
Identity card	Label	N/A	
Phone number	Label	N/A	
Action name	Description	Success	Failure

3.1.7 Employee management

Use Case Name	Employee management
Use Case ID	
High Level Requirement Ref	Admin/Manager
Actor	The function allows to add, edit, delete, change password of employee.
Description	N/A
Trigger	Only admin has right to implement functions
Pre-condition	Admin must login the system
Post-processing	

3.1.7.1 Employee management – View employee list

Employee list										
<div> <div>Add new</div> <div>Search: <input type="text"/></div> </div>										
#	Username	Full name	Date of birth	Gender	Email	Identity card	Phone number	Address	Register date	Edit Delete
1	nhanvien01	Tran Van Tien	21/11/1996	F	tientran@gmail.com		6	Hue	07/11/2018	Edit Delete
<div> <div>Previous</div> <div>1</div> <div>Next</div> </div>										

Screen	Screen to display employee list		
Description	Function of viewing information of movie theater employee Allows to search, add, edit, delete employees		
Screen Access			
Screen Content			
Item	Type	Data	Description

Employee ID	Label		
Employee name	Label		
Identity card	Label		
Email	Label		
Phone number	Label		
Address	Label		
Edit	Button	N/A	
Delete	Button	N/A	
Add	Button	N/A	
Search	TextBox - nvarchar (28)	N/A	
Search	Button	N/A	
Screen Action			
Action name	Description	Success	Failure
Add	Click Add employee button to add an employee	Forward to Add employee function	N/A
Edit	Click Edit employee button to edit information of an employee	Forward to Edit employee function	N/A
Delete	Click Delete employee button to delete information of an employee	Forward to Delete employee function	N/A
Search	1.Input keyword into Input_Text Search 2.Click Search button	Updated Cinema room list is list of cinema room according to search keyword.	N/A

3.1.7.2 Employee management – Add employee

Account: *

Password: *

Confirm password: *

Full name: *

Date of birth: *

Gender: *

☒ Nam ☐ Nữ

Identity card: *

Email: *

Address: *

Phone number: *

Image:

Không có tệp nào được chọn

Screen	Screen to add employee		
Description	Function to add employee		
Screen Access			
Screen Content			
Item	Type	Data	Description
Image	Button	N/A	
Account	TextBox - nvarchar (28)	N/A	
Password	TextBox - nvarchar (28)	N/A	
Confirm password	TextBox - nvarchar (28)	N/A	
Date of birth	DataDatetime	N/A	
Sex	checkbox	N/A	
Employee name	TextBox - nvarchar (28)	N/A	
Identity card	TextBox - nvarchar (28)	N/A	

Email	TextBox - nvarchar (28)	N/A	
Phone number	TextBox - nvarchar (28)	N/A	
Address	TextBox - nvarchar (28)	N/A	
Add	Button	N/A	
Back	Button		
Screen Action			
Action name	Description	Success	Failure
Add	Add employee	Add inputted employee information into database. Forward to Employee management screen – View employee list	Display the message: “ The inputted account is already existed, please choose another account name ”
Back	Back to previous screen	Back to previous screen	N/A

3.1.7.3 Employee management – Edit employee

Account: *

Password: *

Confirm password: *

Full name: *

Date of birth: *

Gender: *
☐ Nam ☒ Nữ

Identity card: *

Email: *

Address: *

Phone number: *

Image:
 Không có tệp nào được chọn

Screen	Screen to edit employee		
Description	Function to edit employee information		
Screen Access			
Screen Content			
Item	Type	Data	Description
Image	Button	Display image of the selected employee to edit	
Account	TextBox - nvarchar (28)	Display account name of selected employee to edit	
Password	TextBox - nvarchar (28)	N/A	
Confirm password	TextBox - nvarchar (28)	N/A	
Full name	TextBox - nvarchar (28)	Display full name of selected employee to edit	

Date of birth	DataDatetime	Display date of birth of selected employee to edit	
Sex	checkbox	Display sex of selected employee to edit	
Email	TextBox - nvarchar (28)	Display email of selected employee to edit	
Identity card	TextBox - nvarchar (28)	Display identity card number of selected employee to edit	
Phone number	TextBox - nvarchar (28)	Display phone number of selected employee to edit	
Address	TextBox - nvarchar (28)	Display address of selected employee to edit.	
Edit	Button	N/A	Click to edit employee
Back	Button		Back to the previous screen
Screen Action			
Action name	Description	Success	Failure
Edit	Edit information of an employee	Edit successfully information of an employee. Edit information of employee in database. Forward to screen of employee management – View employee list	N/A
Back	Back to the previous screen	Back to the previous screen	N/A

3.1.7.4 Employee management – Delete employee

Are you sure you want to delete this record?

OK
Hủy

Screen	Employee management – Delete movie	
Description	Delete movie information	
Screen Access	Admin clicks menu Movie management -> Delete	
Screen Content		
Item	Type	Data
Yes	Button	
No	Button	
Screen Actions		
Action Name	Description	Success
Confirm	Agree to delete movie	Movie is deleted from database and display screen of movie list
No	Close confirm screen	Display screen of movie list

Screen	Screen to delete employee		
Description	Function to delete employee information		
Screen Access			
Screen Content			
Item	Type	Data	Description
Image	FormFile	Display image of selected employee to edit	
Account	TextBox - nvarchar (28)	Display account of selected employee to edit	
Password	TextBox - nvarchar (28)	N/A	
Confirm password	TextBox - nvarchar (28)	N/A	

Full name	TextBox - nvarchar (28)	Display full name of selected employee to edit	
Date of birth	DataDatetime	Display Date of birth of selected employee to edit	
Sex	checkbox	Display sex of selected employee to edit	
Email	TextBox - nvarchar (28)	Display email of selected employee to edit.	
Identity card	TextBox - nvarchar (28)	Display identity card number of selected employee to edit	
Phone number	TextBox - nvarchar (28)	Display phone number of selected employee to edit	
Address	TextBox - nvarchar (28)	Display address of selected employee to edit.	
Delete	Button	N/A	Click to Delete employee
Back	Button		Back to the previous screen
Screen Action			
Action name	Description	Success	Failure
Delete	Delete an employee	Successfully deleting an employee is changing status of the employee into Disable(2) in database. Forward to screen: Employee management – View employee list.	N/A

Back	Back to the previous screen	Back to the previous screen	N/A
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3.1.8 Cinema room management

Use Case Name	Cinema room management
Use Case ID	
High Level Requirement Ref	Admin, user
Actor	Allows to add cinema room
Description	NA
Trigger	Only admin has right to implement functions
Pre-condition	Admin must login the system

3.1.8.1 Cinema room management – Display list of cinema rooms

#	Cinema room ID	Cinema room	Seat quantity	Seat detail
1	1	Cinema room 1	60	Seat detail
2	2	Cinema room 2	60	Seat detail
3	3	Cinema room 3	60	Seat detail
4	4	Cinema room 4	60	Seat detail
5	23	Test	60	Seat detail
6	25	Test	55	Seat detail

Screen	Screen to display cinema room list		
Description	Function to view list of cinema room information and search for keyword Allows to add, edit cinema room seat types		
Screen Access			
Screen Content			
Item	Type	Data	Description
Cinema room ID	Label		

Cinema room	Label		
Seat quantity	Label		
Seat detail	Button	N/A	
Add cinema room	Button	N/A	
Search	TextBox - nvarchar (28)	N/A	
Search	Button	N/A	
Screen Actions			
Action name	Description	Success	Failure
Seat detail	Click Seat detail button of each cinema room to view detail, edit seat type in that cinema room.	Forward to Cinema room detail screen and implement functions of cinema room details.	N/A
Search	1.Input keyword into Input_Text Search 2.Click Search button	Updated Cinema room list is list of cinema room according to search keyword.	N/A
Back	Back to previous screen	Back to previous screen	N/A

3.1.8.2 Cinema room management – Cinema room detail

Seat detail: Cinema room 1

Screen

☐ Seat Normal ☒ Seat VIP

Screen	Detail screen of cinema room		
Description	Function to view information and edit seat type in selected cinema room		
Screen Access			
Screen Content			
Item	Type	Data	Description
Cinema room	Label		
Seat	Checkbox		
Save	Button	N/A	
Back	Button	N/A	
Screen Action			
Action name	Description	Success	Failure
Select seat	Select seat to change status of the seat from this status into another status (Normal seat – VIP seat)	Selected seat color is changed into green color	N/a
Save	Click to save change in database	Edit successfully in database. Change status of selected seats. Return screen	. Re-display the screen of this function.

		of cinema room management	
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3.1.9 Movie management

Use Case Name	Movie management
Use Case ID	
High Level Requirement Ref	
Actor	Admin/Manager
Description	Allows admin to view, add, edit movie information
Trigger	The user must log in the system as admin right
Pre-condition	

3.1.9.1 Movie management – View movie list

Movie list								
Add new		Search: <input type="text"/>						
#	Movie (ENG)	Movie (VN)	Release Date	Movie Production Company	Duration	Version	Detail	Delete
1	A	Doctor Strange: Phù Thủy Tối Thượng	18/11/2018	Marvel Cinematic Universe	116	2D, 3D	Detail	Delete
2	A	Doctor Strange: Phù Thủy Tối Thượng	12/11/2018	Marvel Cinematic Universe	116	2D	Detail	Delete
3	Avengers Infinity War	Avengers: Cuộc Chiến Vô Cực	25/04/2018	Marvel Cinematic Universe	150	2D, 3D	Detail	Delete
4	Doctor Strange	Doctor Strange: Phù Thủy Tối Thượng	09/11/2018	Marvel Cinematic Universe	116	2D, 3D	Detail	Delete
		Previous 1 Next						

Screen	View movie list		
Description	Display movie list		
Screen Access	The user clicks Movie management		
Screen Content			
Item	Type	Data	Description
Movie	Lable – String	N/A	
Release date	Lable – String	N/A	

Movie production company	Lable – String	N/A	
Movie running time	Lable – Number	N/A	
Version	Lable – String	N/A	
Edit	Button	N/A	
Add movie	Button	N/A	
Screen Action			
Action name	Description	Success	Failure
Add movie	Forward to page of adding movie	Display page of adding movie	
Edit	Forward to page of editing movie	Display page of editing movie	

3.1.9.2 Movie management – Add movie

Movie name (ENG): *

Movie name (VN): *

From date: *

To date: *

Actor: *

Movie Production Company: *

Director: *

Duration: *

Version: *

Type: *

☐ Hành động
 ☐ Viễn tưởng
 ☐ Kinh dị

☐ Hải hước
 ☐ Chiến tranh
 ☐ Phiêu lưu

☐ Lãng mạn
 ☐ Kiểm hiệp
 ☐ Tâm lý 18+

☐ Tình cảm
 ☐ Âm nhạc
 ☐ Hoạt hình

Cinema room: *

Schedule: *

☐ 08:00
 ☐ 13:30
 ☐ 18:30

☐ 09:00
 ☐ 14:30
 ☐ 19:00

☐ 10:00
 ☐ 15:00
 ☐ 20:00

☐ 11:00
 ☐ 17:00
 ☐ 21:00

Content: *

Image:


Không có tệp nào được chọn

Screen	Add movie		
Description	Add 1 movie into database		
Screen Access	The user clicks Movie management -> Add movie		
Screen Content			
Item	Type	Data	Description
Movie name	TextBox – String	N/A	
From date	Date	N/A	
To date	Date	N/A	

Actor	TextBox – String	N/A	
Movie production company	TextBox – String	N/A	
Director	TextBox – String	N/A	
Running time	TextBox – Number	N/A	
Version	RadioBox	N/A	
Trailer	TextBox – Number	N/A	
Type	CheckBox	N/A	
Cinema room	ComboBox	N/A	
Showtime	TextBox – String	N/A	
Content	TextBox – String	N/A	
Add cinema time	Button	N/A	
Choose file	Button	N/A	
Submit	Button	N/A	
Screen Action			
Action name	Description	Success	Failure
Add movie	Add movie into database, after admin inputs all information, then click Add movie to add movie.	Back to page of Movie management	Display the error message

3.1.9.3 Movie management – Edit movie information

Movie detail: Avengers Infinity War



Movie name (ENG): *

Movie name (VN): *

From date: *

To date: *

Actor: *

Movie Production Company: *

Director: *

Duration: *

Version: *

Type: *

☒ Hành động
☒ Hải hước
☐ Lãng mạn
☐ Tình cảm

☒ Viễn tưởng
☐ Chiến tranh
☐ Kiếm hiệp
☐ Âm nhạc

☐ Kinh dị
☒ Phiêu lưu
☐ Tâm lý 18+
☐ Hoạt hình

Cinema room: *

Schedule: *

☐ 08:00
☐ 09:00
☒ 10:00
☒ 11:00

☐ 13:30
☒ 14:30
☒ 15:00
☒ 17:00

☐ 18:30
☒ 19:00
☒ 20:00
☒ 21:00

Content: *

Avengers: Infinity War sẽ đưa người xem đến với cuộc chiến định mệnh giữa nhóm Avengers, các anh hùng của Trái Đất, Đội Vệ binh Dải ngân hà với bạo chúa vũ trụ Thanos. Đây là một kẻ thù vô cùng hùng mạnh, hắn từng đứng đằng sau giết đầy nhiều sự kiện trong các phần khác với đã tâm cuối cùng là chiếm được sáu Viên đá Vô cực (Infinity Stones) nằm rải rác khắp vũ trụ.

Image:

Không có tệp nào được chọn

Screen	Update movie information		
Description	Update information of the movie		
Screen Access	The user clicks Movie management -> Edit		
Screen Content			
Item	Type	Data	Description

Movie name	TextBox – String	N/A	
From date	Date	N/A	
To date	Date	N/A	
Actor	TextBox – String	N/A	
Movie production company	TextBox – String	N/A	
Director	TextBox – String	N/A	
Running time	TextBox – Number	N/A	
Version	RadioBox	N/A	
Trailer	TextBox - String	N/A	
Type	CheckBox	N/A	
Ciname room	ComboBox	N/A	
Showtime	TextBox – String	N/A	
Content	TextBox – String	N/A	
Add movie time	Button	N/A	
Choose file	Button	N/A	
Submit	Button	N/A	
Back	Button	N/A	
Screen Action			
Action name	Description	Success	Failure
Edit	Edit information of movie. After admin edits information, then click Submit to update all information of the movie.	Back to movie management	Display error messages

3.1.9.4 Movie management – Delete movie

Are you sure you want to delete this record?

OK Hủy

Screen	Movie management – Delete movie	
Description	Delete information of the movie	
Screen Access	Admin clicks menu Movie management -> Delete	
Screen Content		
Item	Type	Data
Yes	Button	
No	Button	
Screen Actions		
Action Name	Description	Success
Confirm	Agree to delete movies	The movie is deleted from database and display Movie list screen
No	Close confirm screen	Display Movie list screen

3.1.10 Promotion management

Use Case Name	Promotion management
Use Case ID	
High Level Requirement Ref	
Actor	Admin
Description	Allows users to manage promotion programs of the movie theater
Trigger	
Pre-condition	The user must log in the system
Post-processing	

3.1.10.1 Promotion management – View promotion list

Promotion list

[+ Add new](#)

Search:

#	Promotion ID	Title	Start Time	End Time	Discount Level	Detail	Edit	Delete
1	1	Khuyến mãi năm mới	06/11/2018	30/11/2018	5.000	Chúc mừng năm mới	✎	✖
2	4	Khuyến mãi năm mới	06/11/2018	07/11/2018	50.000	Chúc mừng năm mới	✎	✖
3	7	Khuyến mãi năm mới	06/11/2018	07/11/2018	50.000	Chúc mừng năm mới	✎	✖
4	8	Khuyến mãi năm mới	17/11/2018	30/11/2018	50.000	Chúc mừng năm mới	✎	✖
5	9	Khuyến mãi năm mới	06/11/2018	07/11/2018	50.000	Chúc mừng năm mới	✎	✖

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[1](#)
[Next](#)

Screen	View promotion list of system		
Description	Allows to search, add, edit, delete promotions		
Screen Access	Admin clicks menu Promotion management		
Screen Content			
Item	Type	Data	Description
Title	Lable – String	N/A	
Start time	Lable – String	N/A	
End time	Lable – String	N/A	
Promotion	Lable – String	N/A	
Detail	Lable – String	N/A	
Edit	Button	N/A	
Add	Button	N/A	
Delete	Button	N/A	
Search	TextBox - nvarchar (28)	N/A	
Search	Button	N/A	
Screen Action			
Action name	Description	Success	Failure

Add	Click Add promotion button to add a promotion	Forward to Add promotion function	N/A
Edit	Click Edit promotion button to edit information of a promotion	Forward to Edit promotion function	N/A
Delete	Click Delete promotion button to delete information of a promotion	Forward to Delete promotion function	N/A
Search	1.Input keyword into Input_Text 2.Click Search button	Updated promotion list is list of promotion according to search keyword.	N/A

3.1.10.2 Promotion management – Add promotion

Add new Promotion

Title:

Start Time:

End Time:

Discount Level:


Detail:

Image:
 Chọn tệp | Không có tệp nào được chọn

Screen	Add promotion		
Description	Add promotion		
Screen Access	Admin clicks menu Promotion management -> Add promotion		
Screen Content			
Item	Type	Data	Description
Image	Button	N/A	
Title	TextBox – String	N/A	
Start time	ComboBox	N/A	
End time	ComboBox	N/A	

Promotion	TextBox – Number	N/A	
Detail	TextBox – String	N/A	
Add	Button	N/A	
Back	Button		
Screen action			
Action name	Description	Success	Failure
Add	After admin inputs and selects all information, then click Add, the system will add a promotion into database	Add inputted promotion information into database. Back to Promotion management screen – View promotion list	Display the message: “ Unsuccessfully add ”. Display Add promotion screen.
Back	Back to previous screen	Back to previous screen	N/A

3.1.10.3 Promotion management – Edit promotion



Title:
Khuyến mãi năm mới

Start Time:
06/11/2018

End Time:
30/11/2018

Discount Level:
5.000

Detail:
Chúc mừng năm mới

Image:
Chọn tệp Không có tệp nào được chọn

✓ Save ✕ Back

Screen	Edit promotion		
Description	Edit information of promotion		
Screen Access	Admin clicks menu Promotion management -> Edit		
Screen Content			
Item	Type	Data	Description
Image	Button	Display image of the selected promotion to edit	
Title	TextBox – String	Display title of the selected promotion to edit	
Start time	ComboBox	Display start time of the selected promotion to edit	
End time	ComboBox	Display end time of the selected promotion to edit	
Promotion	TextBox – Number	Display sales off detail of the selected promotion to edit	

Detail	TextBox – String	Display detail of the selected promotion to edit	
Edit	Button	N/A	
Screen Action			
Action name	Description	Success	Failure
Edit	Edit the information that needs updating of the promotion	Display the message “ Successfully add ”. Edit information of promotion in database. Forward to screen of Promotion management – View promotion list	Display the message: “ Unsuccessfully add ”. Display Edit promotion screen.
Back	Back to previous screen	Back to previous screen	N/A

3.1.10.4 Promotion management – Delete promotion

Are you sure you want to delete this record?

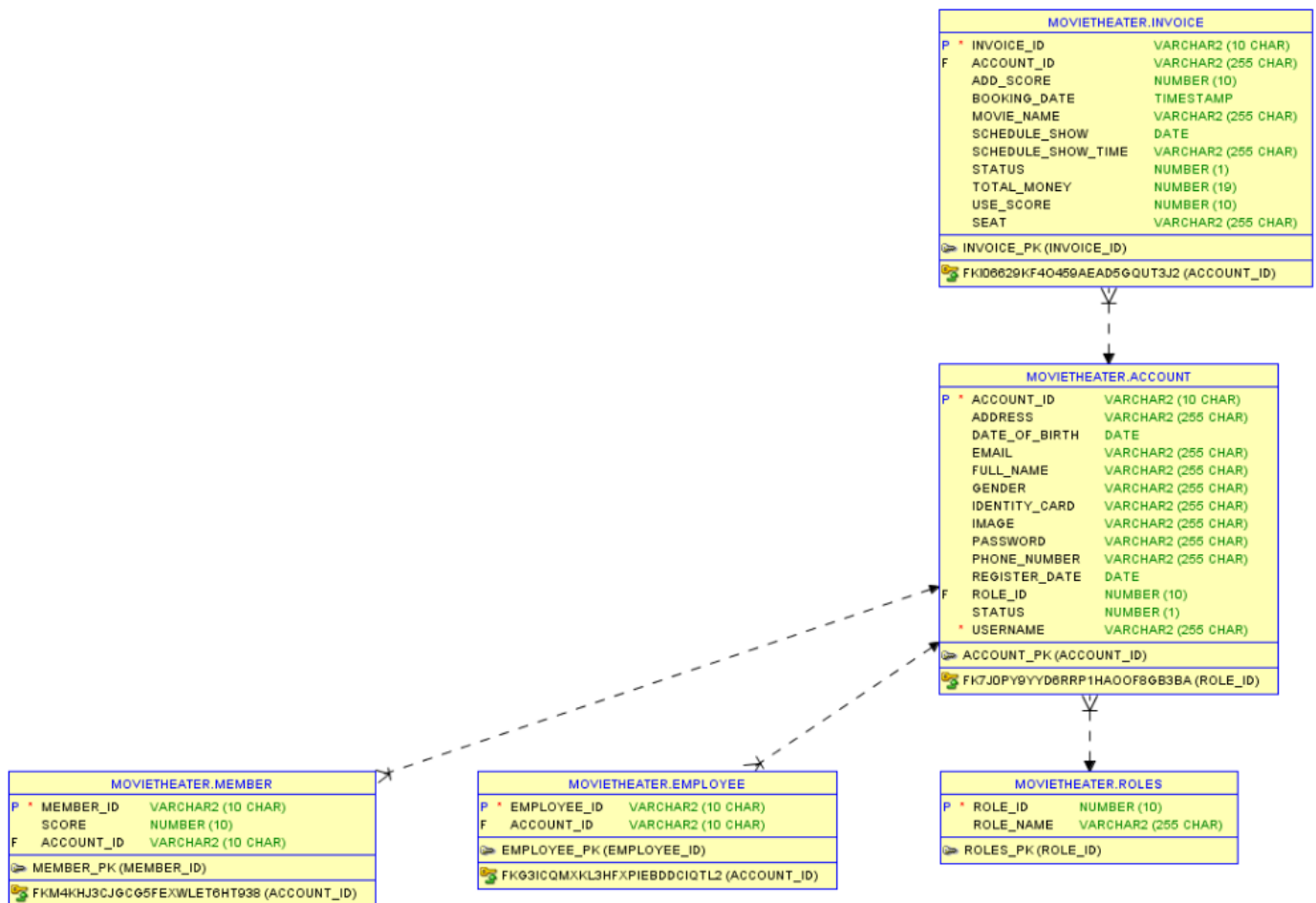
Screen	Delete promotion	
Description	Delete information of the promotion	
Screen Access	Admin clicks menu Promotion management -> Delete	
Screen Content		
Item	Type	Data
Yes	Button	
No	Button	
Screen Actions		
Action Name	Description	Success

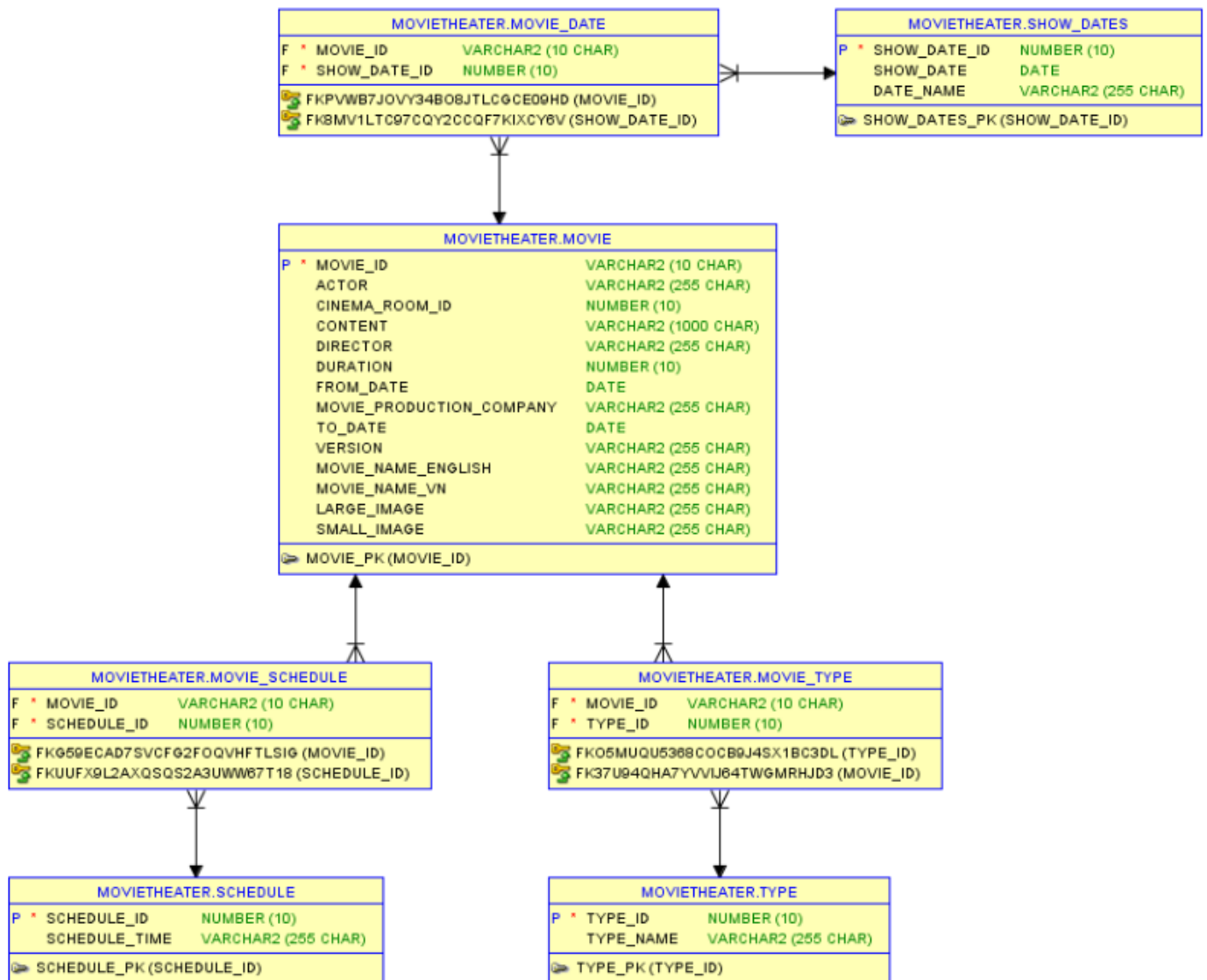
Confirm	Agree to delete promotion	Promotion is deleted from database and display screen of promotion list
No	Close confirm screen	Display screen promotion list

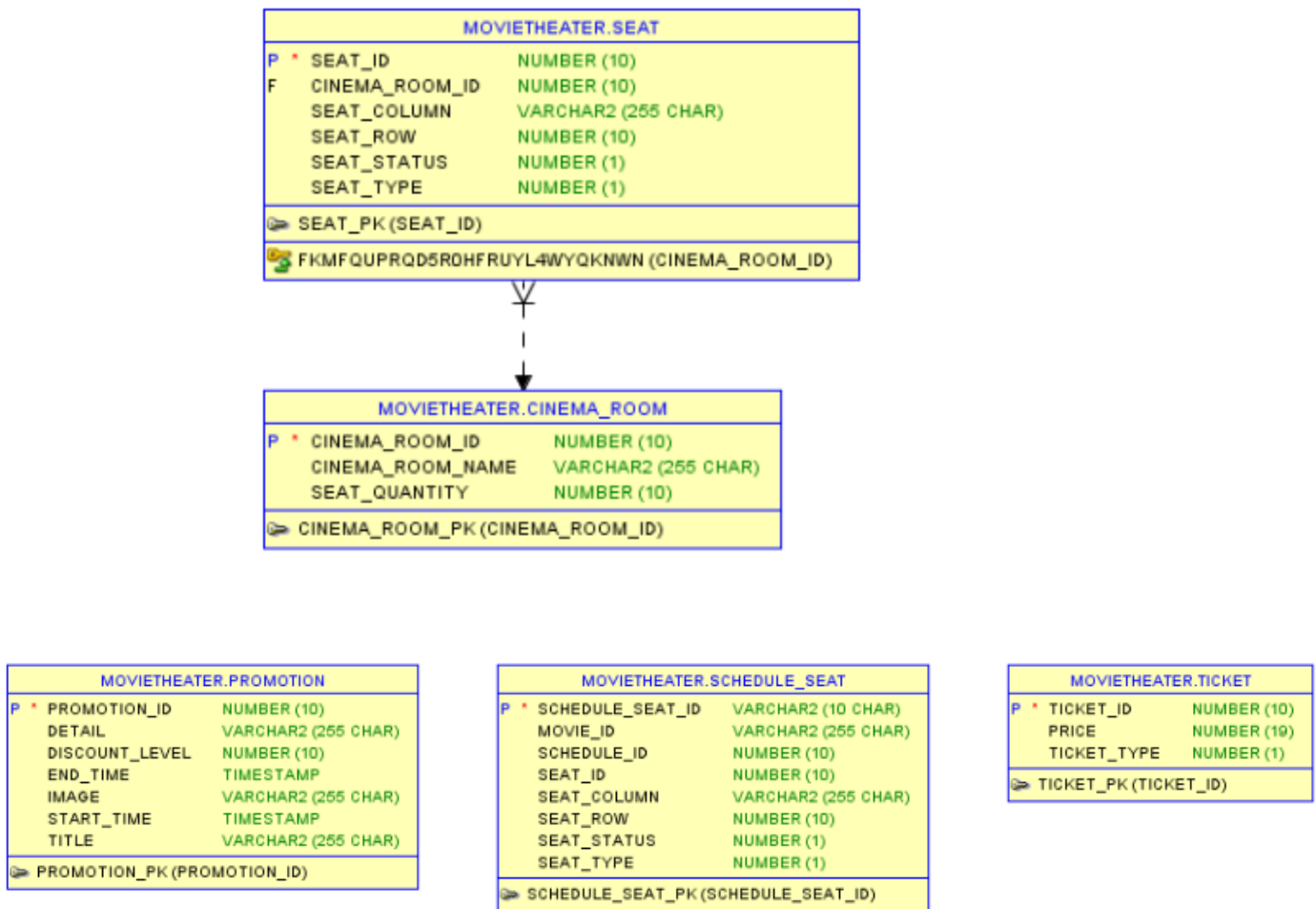
3.2. Detailed Non-Functional Requirements

3.2.1 Logical Structure of the Data

The logical structure of the data to be stored on the system is given below







3.2.2 Security

TBD

3.2.3 Performance

TBD