

# Movie Theater Software Requirements Specification

Version 1.2

Hanoi, Jan 2020

Prepared By 0.7 1/66

### **Approval Page**

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### **Revision History**

Date	Version	Author	Change Description
21/06/2018	1.0		Create new
15/01/2021	1.2		Update

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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.

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- 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

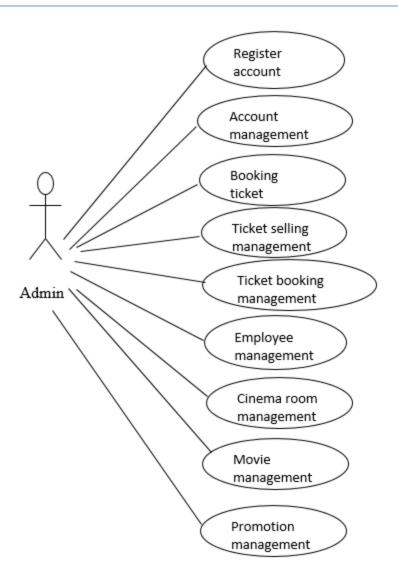
The following table describes actors of the movie theatre management system.

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

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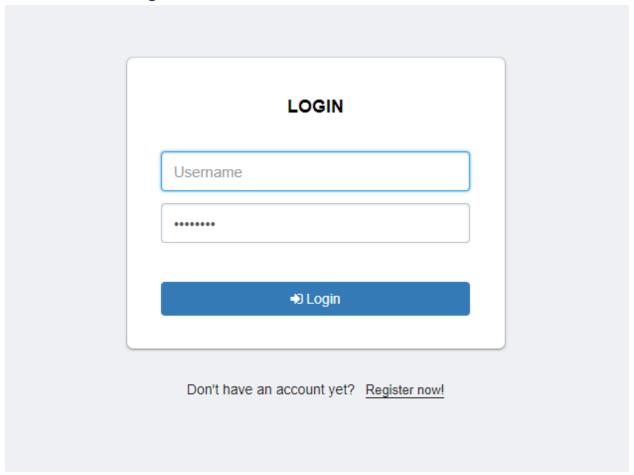


### 3. Functional Description

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#### 3.1. Functional Requirements

#### 3.1.1 Log in



## 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.

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### 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	

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### 3.1.2.1 Register account

RE	GISTER ACCOUNT	
Account		
Password		
Confirm passwor	rd	
Full name		
Date of birth		
Nam Nữ		
Identity card		
Email		
Address		
Phone number		
	Register	

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Screen	Pagister acco	unt		
		Register account		
Description		Register user information		
Screen	The user click	ks Register account		
Access				
<b>Screen Conte</b>	nt			
Item	Type	Data	Description	
Account	Textbox-	N/A		
	String			
Password	TextBox -	N/A		
	String			
Confirm	Textbox -	N/A		
password	String			
Full name	Textbox -	N/A		
	String			
Date of birth	Textbox -	N/A		
	String			
Sex	Radiobutton	N/A		
	- String			
Email	Textbox –	N/A		
	String			
Identity card	Texbox -	N/A		
	number			
Phone	Textbox -	N/A		
1	1		1	

### **Screen action**

Number

String

Button

Textbox -

N/A

N/A

number

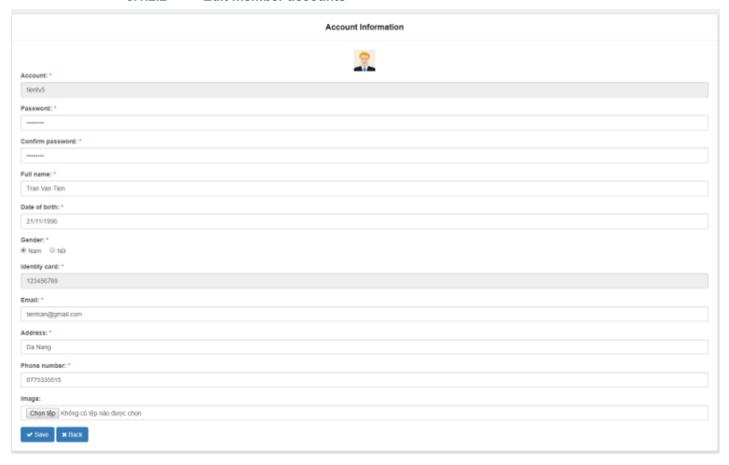
Address

Register

<b>Action name</b>	Description	Success	Failure
Register	Click Register to send data	Forward to login	The required
		page to log in the	fields are null
		main page	

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#### 3.1.2.2 Edit member accounts



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Action name	Description		Success	Failure
Screen action	1	1 1/ 1 1		
Edit	string Button	N/A		
Statistic	Link -	N/A		
management	string	NI/A		
Member	Link -	N/A		
management	string	<b>3</b> 7/A		
Employee	Link -	N/A		
management	string			
Ticket	Link -	N/A		
	string			
Address	Textbox -	N/A		
number	number	V _ <b>_</b>		
Phone	Textbox -	N/A		
Identity card	Textbox - string	N/A		
T.d 4:4 1	string	NT/A		
Email	Textbox -	N/A		
	- string			
Sex	Radiobutton	N/A		
Date of birth	Textbox - date	N/A		
	string			
Password	Textbox -	N/A		
Full name	Textbox – string	N/A		
- 4	string	27/1		
Account	Textbox -	N/A		
Action name	Description	Success	Failure	
Screen Conte	nt			
Access				
Screen	The user clicks Edit at Employee list			
Description	Display infor	Display information of member whose account need editting		
Screen	Edit member	Edit member account		

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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.

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#### 3.1.2.3 View member list

Screen	View member list
Description	Dislay all information of registered member
Screen	The user clicks Member management
Access	

### **Screen Content**

Item	Type	Data	Description
Member ID	Label -	N/A	
	string		
Member	Label -	N/A	
name	string		
Identity card	Label -	N/A	
	string		
Email	Label -	N/A	
	string		
Phone	Label -	N/A	
number	string		
Address	Label -	N/A	
	string		
Ticket	Link -	N/A	
management	string		
Employee	Link -	N/A	
management	string		
Member	Link -	N/A	
management	string		
Statistic	Link -	N/A	
	string		
Edit	Link - img	N/A	

### **Screen Action**

<b>Action name</b>	Description	Success	Failure
Ticket	View ticket booking list of members	Display booked	No event has
booking		ticket list of the	been created for
management		member	ticket booking
			management
			ļ

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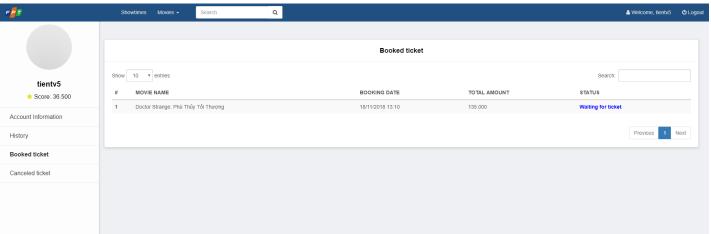
Employee	View active employees	Display list of	No event has
management		active employees	been created for
			Employee
			management
Member	View list of registered member	Display list of	No event has
management		registered members	been created for
			Member
			management
Statistic	View statistic list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

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### 3.1.3 Account management of the user

Use Case	Account management
Name	
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



Screen	Booked ticket management		
Description	Display all	booked member	
Screen	Member cli	cks Account management -	> Booked ticket
Access			
Screen Conte	nt		
TAcres	TOTAL CONTRACTOR OF THE PARTY O		
Item	Type	Data	Description
Movie name	label-	Data N/A	Description
			Description
	label-		Description

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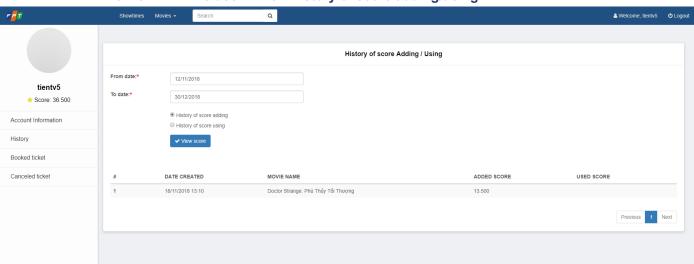
been created for

the logout button

Total amount	Label -	N/A		
	String			
Status	Label -	N/A		
	String			
Account	Link -	N/A		
information	String			
History	Link -	N/A		
	String			
Booked	Link -	N/A		
ticket	String			
Canceled	Link -	N/A		
ticket	String			
Log out	Button	N/A		
Screen Action	l			
Action name	Description	1	Success	Failure
Log out	Click the lo	gout button to exit the	Back to the login	No event has

### 3.1.3.2 The user – View history of score adding/using

current member account



screen

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Screen	View history of score adding/using
Description	Display all history of score adding/using of the current member
Screen	The member clicks account management -> History
Access	

### **Screen Content**

Item	Type	Data	Description
From date	Date - string	N/A	
To date	Date - string	N/A	
History of	Radiobutton-	N/A	
score adding	String		
History of	Radiobutton-	N/A	
score using	String		
Date created	Label -	N/A	
	string		
Movie name	Label -	N/A	
	string		
Added score	Label -	N/A	
	string		
Account	Link - String	N/A	
information			
History	Link - String	N/A	
Booked	Link - String	N/A	
ticket			
Canceled	Link - String	N/A	
ticket			
Log out	Button	N/A	
View score	Button	N/A	

### **Screen Action**

<b>Action name</b>	Description	Success	Failure
Log out	Click the logout button to exit the	Back to the login	No event has
	current member account	screen	been created for
			the logout
			button
View score	Click the View score button to see the	Displays a list of	No event has
	process of using or adding scores	added or used	been created for
		scores	

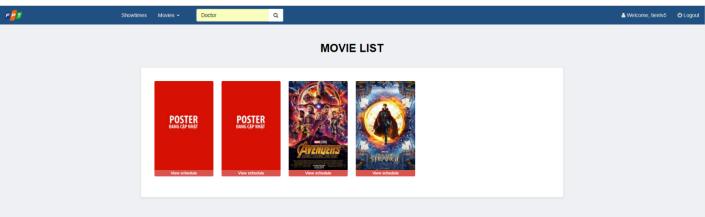
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Screen

	the View score
	button

#### 3.1.3.3 Movie list – Search of the user

Movie list - Search



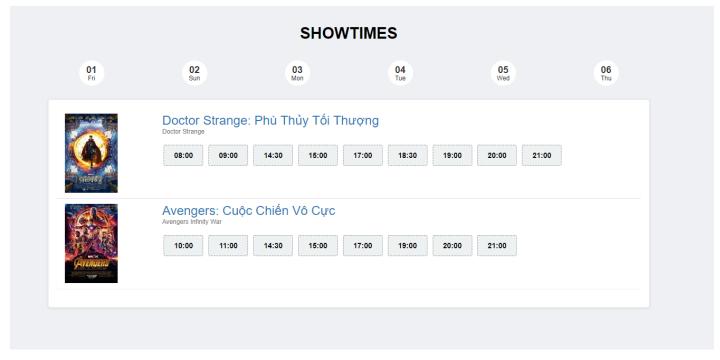
Description	Search for r	Search for movie		
Screen				
Access				
Screen Conte	nt			
Item	Type	Data	Description	
Search list	Table	N/A		
Search	Button	N/A		
Search	Textbox			
Screen Action	l			
Action name	Description	1	Success	Failure
Search	Input data is	nto search box to search	Hide two slides that	No movies has
			are about to appear	found as
			and then display	required
			from top to bottom	
			according to the a-z	
			movie with the	
			same movie names	

Prepared By 0.7 20/66

### 3.1.4 Booking ticket of the user

Use Case	Booking ticket
Name	
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



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Screen	Book ticket – Select movie and showtime	
Description	Display the current movies and showtime	
Screen	The user accesses to book ticket	
Access		

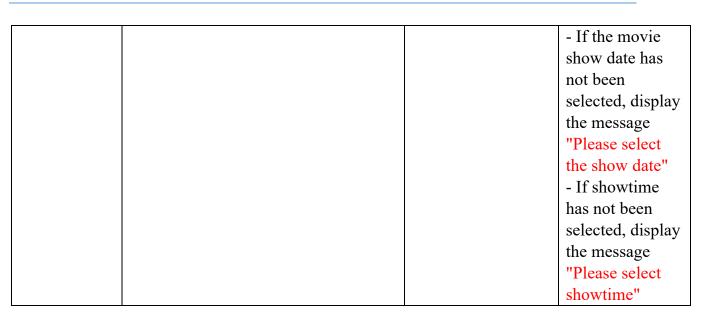
### **Screen Content**

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

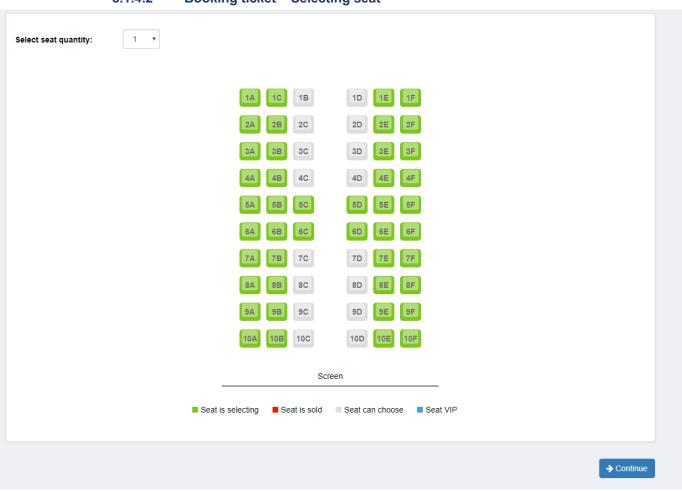
### **Screen action**

Action name	Description	Success	Failure
Select movie	Display all show dates for the selected	Display all the	The list of show
	movie	show date of the	dates is empty
		selected movie in	when no show
		Select movie	date is found
		combobox	
Select date	Display all showtimes of selected	Display all	The list of
	movies	showtimes of	schedules is
		movies according	empty when no
		to the show date	show schedule is
		selected in Select	found during the
		show date	day
		combobox	
Book ticket	Send ticket booking request, send	Display screen of	If you have not
	movie information and showtime	Selecting seat	selected a
			movie, display
			the message
			"Please select a
			movie"

Prepared By 0.7 22/66



#### 3.1.4.2 Booking ticket – Selecting seat



Prepared By 0.7 23/66

Screen	Booking ticket – Selecting seat
Description	Display seat map of the movie and selected showtime
Screen	The user accesses after selecting movie and showtime
Access	

### **Screen Content**

Item	Type	Data	Description
Select seat	Combobox	N/A	Display list of seat quantity for the
quantity			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**

<b>Action name</b>	Description	Success	Failure
Select seat	Display list of seat quantity that	Display list of seat	
quantity	customer needs to select $(0, 1, 2,8)$	quantity	
Select seat	Display seat map for the customer to	When selecting the	If selected seat
	choose according to selected seat	seat number as the	number is less
	quantity	same as selected	than the seat
		seat quantity in	quantity at the
		combobox of Select	combobox,
		seat quantity	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"

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Confirm booking ticket

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

#### 3.1.4.3 Booking ticket – Confirm booking ticket

#### **CONFIRM BOOKING TICKET** Doctor Strange: Phù Thủy Tối Thượng Scrn02 Screen: Date: 01/12/2018 21:00 Time: 1D 1E 1F Seat: Price: 1D: 45000 1E: 45000 1F: 45000 135.000đ Total: Check your booking ticket information Full name: Tran Van Tien Email: tientran@gmail.com Identity card: 123456789 0775335515 Phone number:

 Screen
 Booking ticket – Confirm booking ticket

 Description
 Display all ticket booking informatiom

 Screen
 The user accesses after selecting seat

 Access
 Access

#### **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	

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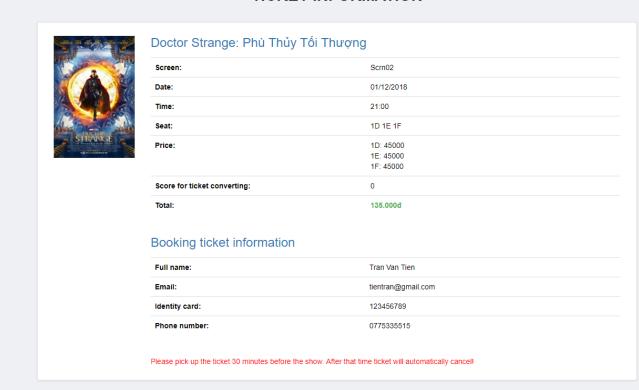
Total	Label	N/A	
Full name	Label	N/A	
Email	Label	N/A	
Identity card	Label	N/A	
Phone	Label	N/A	
number			
Confirm	Button	N/A	
booking			
ticket			
~			

### **Screen Action**

Action name	Description	Success	Failure
Confirm	Select to send all ticket booking	Display screen of	
booking	information	ticket booking	
ticket		information	

#### 3.1.4.4 Booking ticket – Ticket information

#### **TICKET INFORMATION**



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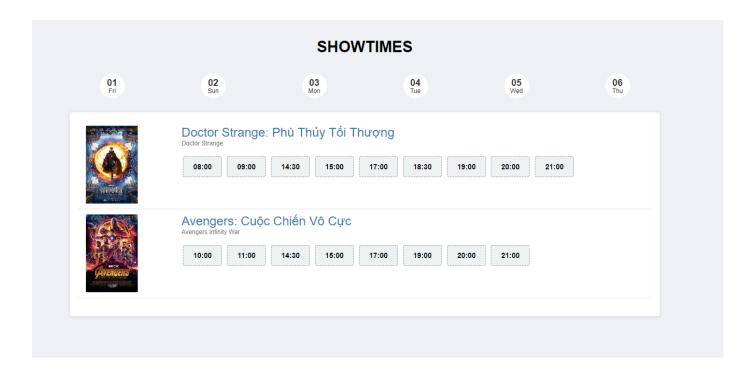
Screen	Booking ticket – Ticket information			
Description	Display all ticket booking information			
Screen	The user ac	ccesses after seleting seat		
Access				
Screen Conte	nt			
Item	Type	Data	Description	
Movie name	Label	N/A		
Booking ID	Label	N/A		
Screen	Label	N/A		
Date	Label	N/A		
Time	Label	N/A		
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	Label	N/A		
number				
Screen Action	Screen Action			
Action name	e Description Success Failure			

### 3.1.5 Ticket selling management

Use Case	Ticket selling management
Name	
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	

Prepared By 0.7 27/66

#### 3.1.5.1 Ticket selling management – Select movie and showtime



Prepared By 0.7 28/66

Screen	Booking ticket – Select movie and showtime
Description	Display current movies and showtime
Screen	The user accesses Booking ticket
Access	

### **Screen Content**

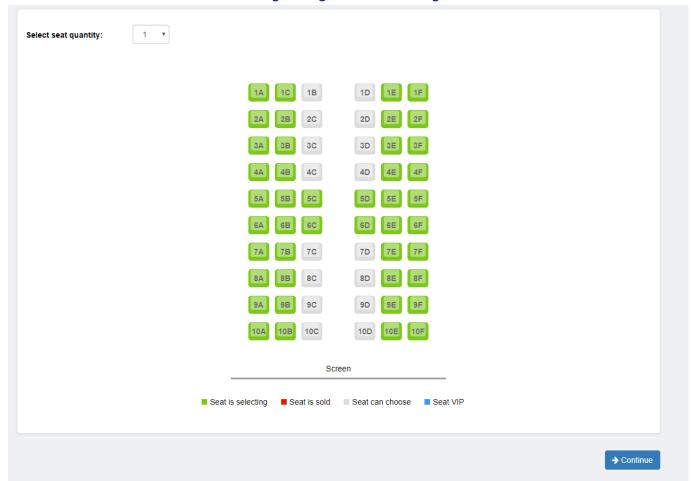
Item	Type	Data	Description
Date	Combobox	N/A	
Showtime	Button	N/A	
Movie name	Label	N/A	
Time	Link	N/A	

### **Screen Action**

<b>Action name</b>	Description	Success	Failure
View	Display list of show dates for the user	Display showtime	If no showtime
showtime	to select	list of current	has been found,
		movies	display
			message: "No
			showtime"
Showtime	Display showtime of each movie	Send information of	
		movies and	
		showtimes, display	
		the Select seat	
		screen	

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#### 3.1.5.2 Ticket selling management – Selecting seat



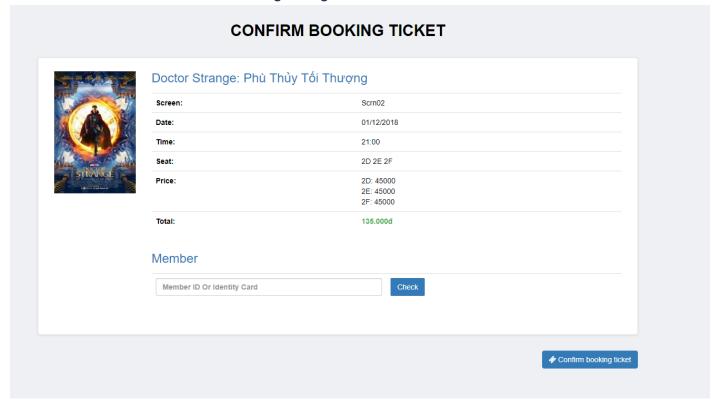
Screen	Booking ticket – Select seat				
Description	Display seat	Display seat map of the movie and selected showtime			
Screen	The user acc	cesses after selecting movie	and showtime		
Access					
Screen Conte	nt				
Item	Type Data Description				
Select seat	Combobox	N/A	Display list of seat qu	uantity for the	
quanity			user to select		
Seat	CheckBox	N/A	Display seat map for	the user to select	
Continue	Dutton				
Continue	Button	N/A	Send information of	C	
	display ticket booking information				
Screen Action	Screen Action				
<b>Action name</b>	Description		Success	Failure	
TIOUIDII IIMIIIO	2 Colliption	Success Fanure			

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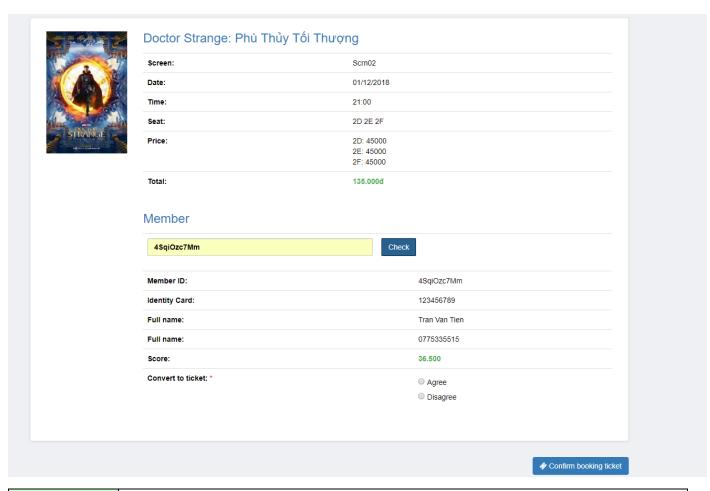
Select seat quantity	Display list of seat quantity that customer needs $(0, 1, 2,8)$	Display list of seat quantity	
Select seat	Display seat map, the employee chooses seat according to selected seat quantity at Combobox of Select seat quantity.	When selecting the seat number as the same as selected seat quantity in combobox of Select seat quantity	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	Display Confirm	
	selection information and display booking information screen	booking ticket screen	

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#### 3.1.5.3 Ticket selling management – Confirm ticket



Prepared By 0.7 32/66



Screen	Ticket selling management – Confirm ticket				
Description	Display all	Display all ticket selling information			
Screen	The user ac	cesses after selecting seat			
Access					
Screen Conte	nt				
Item	Type	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			

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Identity card	Label	N/A	
Full name	Label		
Member	Label	N/A	
score			
Convert to	Radio	N/A	
ticket			
Phone	Label	N/A	
number			
Confirm	Button	N/A	
booking			
ticket			

### **Screen Action**

Action name	Description	Success	Failure
Confirm	Select Confirm booking ticket to send	Send information	If the member
booking	all ticket booking information	of ticket selling,	converts score
ticket		display screen of	into ticket, while
		ticket booking	score is not
		information	enough to
			convert, display
			message:
			"Member score
			is not enough to
			convert into
			ticket"
Check	Input member ID or identity card	Display information	Display the
member	number to get information of member	of member	message: "No
			member has
			found!"
Convert to	Select number of tickets that the	When number of	
ticket	member wants to conver into	converted tickets	
		matches with	
		enough member	
		score	

Prepared By 0.7 34/66

#### 3.1.5.4 **Ticket selling management – Ticket information**

### **TICKET INFORMATION**



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 ID:	4SqiOzc7Mm
Identity Card:	123456789
Full name:	Tran Van Tien
Phone number:	0775335515

Screen	Ticket selling management – Ticket information
Description	Display all ticket information
Screen	The user accesses after selecting seat
Access	

### **Screen Content**

Item	Type	Data	Description
Movie name	Label	N/A	
Ticket	Label	N/A	
booking ID			
Screen	Label	N/A	
Date	Label	N/A	
Time	Label	N/A	
Seat	Label	N/A	
Price	Label	N/A	
Convert to	Label	N/A	
ticket			

Prepared By 0.7 35/66

Score for	Label	N/A			
ticket					
converting					
Total	Label	N/A			
Member ID	Label	N/A			
Email	Label	N/A			
Identity card	Label	N/A			
Phone	Label	N/A			
number					
Screen Action					
<b>Action name</b>	Descripti	on	Success	Failure	

### 3.1.6 Ticket booking management

Use Case	Ticket booking management
Name	
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

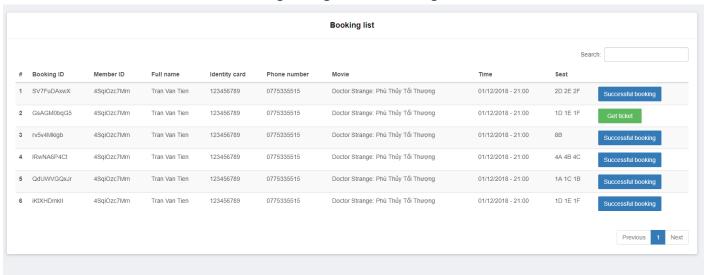
Search:		

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

Prepared By 0.7 36/66

Screen Content				
Item	Type	Data	Description	
Search	Textbox	N/A	Input the keywords to Booking ID, account number or identity can booking account	ID, phone
Search	Button	N/A	Select Search button	
Screen Action				
<b>Action name</b>	Description	1	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

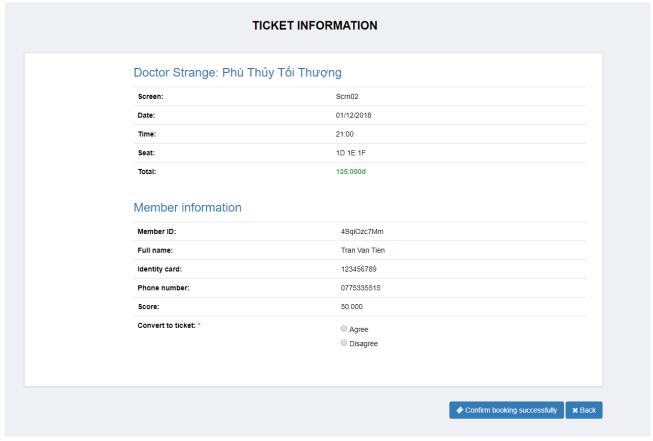


Screen	Ticket booking management – Booking list		
Description	Display current movies and showtime		
Screen	The user accesses Booking ticket		
Access			

Prepared By 0.7 37/66

Screen Conte	nt			
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	Button	N/A		
booking				
Screen Action	l			
<b>Action name</b>	Description	)n	Success	Failure
Confirm	Click Con	firm booking to view	Display information	
booking	booking ir	nformation	of booking detail of member	

### 3.1.6.3 Ticket booking management – Confirm booking



Prepared By 0.7 38/66

Screen	Booking management – Confirm booking	
Description	Display all booking information	
Screen	The user accesses after selecting booking ticket at booking list	
Access		
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	Label	N/A	
score			
Identity card	Label	N/A	
Convert to	Radio	N/A	
ticket			
Phone	Label	N/A	
number			
Confirm	Button	N/A	
booking			

<b>Action name</b>	Description	Success	Failure
Member	Click to convert member score into	Display screen	Display
score	ticket	Information of	message: "Not
		converting score	enough score to
		into ticket	convert into
			ticket"
Confirm	Click to send request to confirm	Confirm converting	
booking	converting score into ticket	into ticket, display	
		ticket booking	
		management	

Prepared By 0.7 39/66

### 3.1.6.4 Ticket booking management – Information of converting into ticket

Scrn02 01/12/2018 21:00 1D 1E 1F 135.000
01/12/2018 21:00 1D 1E 1F 135.000
21:00 1D 1E 1F 135.000
1D 1E 1F 135.000
135.000
135.000đ
4SqiOzc7Mm
Tran Van Tien
123456789
0775335515

Screen	Booking m	Booking management – Confirm booking successfully		
Description	Display all	Display all booking information		
Screen	The user ac	ccesses after selecting Book	ring ticket at booking list	
Access				
Screen Conte	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	Label	N/A		
ticket				
Score for	Label	N/A		
ticket				
converting				

Prepared By 0.7 40/66

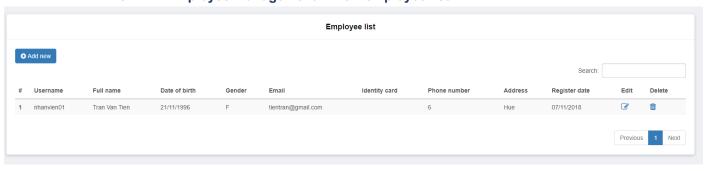
Last modified on 18/01/2021

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

### 3.1.7 Employee management

Use Case Name	Employee management
Use Case ID	
High Level	
Requirement	Admin/Manager
Ref	
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



Screen	Screen to display employee list		
Description	Function of viewing information of movie theater employee		
	Allows to se	earch, add, edit, delete emp	loyees
Screen			
Access			
Screen Content			
Item	Type	Data	Description

Prepared By 0.7 41/66

Last modified on 18/01/2021

Employee ID	Label	
Employee	Label	
name		
Identity card	Label	
Email	Label	
Phone	Label	
number		
Address	Label	
Edit	Button	N/A
Delete	Button	N/A
Add	Button	N/A
Search	TextBox -	N/A
	nvarchar	
	(28)	
Search	Button	N/A

<b>Action name</b>	Description	Success	Failure
Add	Click Add employee button to add an	Forward to Add	N/A
	employee	employee function	
Edit	Click Edit employee button to edit	Forward to Edit	N/A
	information of an employee	employee function	
Delete	Click Delete employee button to delete	Forward to Delete	N/A
	information of an employee	employee function	
Search	1.Input keyword into Input_Text	Updated Cinema	N/A
	Search	room list is list of	
	2.Click Search button	cinema room	
		according to search	
		keyword.	

Prepared By 0.7 42/66

### 3.1.7.2 Employee management – Add employee

Account: *
Account
Password: *
Password
Confirm password: *
Confirm password
Full name: *
Full name
Date of birth: *
Date of birth
Gender: *
® Nam © Nữ
Identity card: *
Identity card
Email: *
Email
Address:*
Address
Phone number: *
Phone number
Image:
Chon tệp Không có tệp nào được chọn
✓ Add X Back

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	

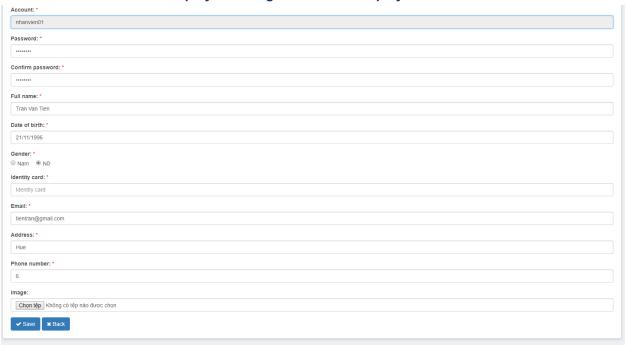
Prepared By 0.7 43/66

Email	TextBox -	N/A	
	nvarchar (28)		
Phone	TextBox -	N/A	
number	nvarchar (28)		
Address	TextBox -	N/A	
	nvarchar (28)		
Add	Button	N/A	
Back	Button		

<b>Action name</b>	Description	Success	Failure
Add	Add employee	Add inputted	Display the
		employee	message: "The
		information into	inputted account
		database.	is already
		Forward to	existed, please
		Employee	choose another
		management screen	account name"
		<ul><li>View employee</li></ul>	
		list	
Back	Back to previous screen	Back to previous	N/A
		screen	

Prepared By 0.7 44/66

#### 3.1.7.3 Employee management – Edit employee



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 -	Display account	
	nvarchar (28)	name of selected	
		employee to edit	
Password	TextBox -	N/A	
	nvarchar (28)		
Confirm	TextBox -	N/A	
password	nvarchar (28)		
Full name	TextBox -	Display full name	
	nvarchar (28)	of selected	
		employee to edit	

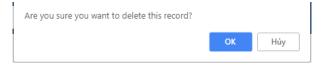
Prepared By 0.7 45/66

Date of birth	DataDatetime	Display date of	
		birth of selected	
		employee to edit	
Sex	chechbox	Display sex of	
		selected employee	
		to edit	
Email	TextBox -	Display email of	
	nvarchar (28)	selected employee	
		to edit	
Identity card	TextBox -	Display identity	
	nvarchar (28)	card number of	
		selected employee	
		to edit	
Phone	TextBox -	Display phone	
number	nvarchar (28)	number of	
		selected employee	
		to edit	
Address	TextBox -	Display address of	
	nvarchar (28)	selected employee	
		to edit.	
Edit	Button	N/A	Click to edit employee
Back	Button		Back to the previous screen
~		·	

<b>Action name</b>	Description	Success	Failure
Edit	Edit information of an employee	Edit successfully	N/A
		information of an	
		employee. Edit	
		information of	
		employee in	
		database. Forward	
		to screen of	
		employee	
		management –	
		View employee list	
Back	Back to the previous screen	Back to the	N/A
		previous screen	

Prepared By 0.7 46/66

### 3.1.7.4 Employee management – Delete employee



Screen	Employee management – Delete movie			
Description	Delete m	novie informati	ion	
Screen Access	Admin c	licks menu Mo	ovie management -> Delete	
<b>Screen Content</b>				
Item	Type Data			
Yes	Button			
No	Button	n		
<b>Screen Actions</b>				
<b>Action Name</b>	Description		Success	
Confirm	Agree to	delete movie	Movie is deleted from database and display screen	
	of movie list		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	Tyne	Data	Description

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

Prepared By 0.7 47/66

Full name	TextBox -	Display full name	
	nvarchar (28)	of selected	
		employee to edit	
Date of birth	DataDatetime	Display Date of	
		birth of selected	
		employee to edit	
Sex	chechbox	Display sex of	
		selected employee	
		to edit	
Email	TextBox -	Display email of	
	nvarchar (28)	selected employee	
		to edit.	
Identity card	TextBox -	Display identity	
	nvarchar (28)	card number of	
		selected employee	
		to edit	
Phone	TextBox -	Display phone	
number	nvarchar (28)	number of	
		selected employee	
		to edit	
Address	TextBox -	Display address of	
	nvarchar (28)	selected employee	
		to edit.	
Delete	Button	N/A	Click to Delete employee
Back	Button		Back to the previous screen

Action name	Description	Success	Failure
Delete	Delete an employee	Successfully	N/A
		deleting an	
		employee is	
		changing status of	
		the employee into	
		Disable(2) in	
		database. Forward	
		to screen:	
		Employee	
		management –	
		View employee list.	

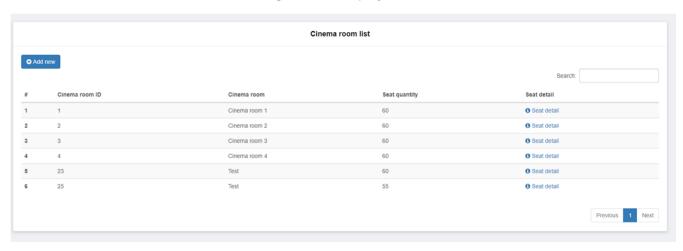
Prepared By 0.7 48/66

Back	Back to the previous screen	Back to the	N/A
		previous screen	

### 3.1.8 Cinema room management

Use Case Name	Cinema room management
Use Case ID	
High Level	
Requirement	Admin, user
Ref	
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



Screen	Screen to display cinema room list			
Description	Function to v	view list of cinema room in	formation and search for keyword	
	Allows to ad	d, edit cinema room seat ty	pes	
Screen				
Access				
Screen Conte	Screen Content			
Item	Type	Data	Description	
Cinema room	Label			
ID				

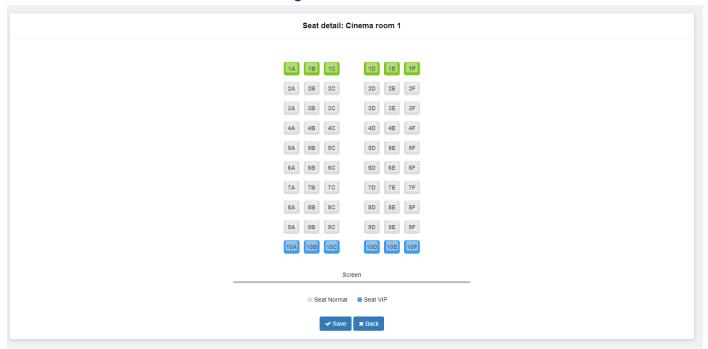
Prepared By 0.7 49/66

Cinema room	Label	
Seat quantity	Label	
Seat detail	Button	N/A
Add cinema	Button	N/A
room		
Search	TextBox -	N/A
	nvarchar	
	(28)	
Search	Button	N/A

Action name	Description	Success	Failure
Seat detail	Click Seat detail button of each cinema	Forward to Cinema	N/A
	room to view detail, edit seat type in	room detail screen	
	that cinema room.	and implement	
		functions of cinema	
		room details.	
Search	1.Input keyword into Input_Text	Updated Cinema	N/A
	Search	room list is list of	
	2.Click Search button	cinema room	
		according to search	
		keyword.	
Back	Back to previous screen	Back to previous	N/A
		screen	

Prepared By 0.7 50/66

#### 3.1.8.2 Cinema room management – Cinema room detail



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**

<b>Action name</b>	Description	Success	Failure
Select seat	Select seat to change status of the seat	Selected seat color	N/a
	from this status into another status	is changed into	
	(Normal seat – VIP seat)	green color	
Save	Click to save change in database	Edit successfully in	•
		database. Change	Re-display the
		status of selected	screen of this
		seats. Return screen	function.

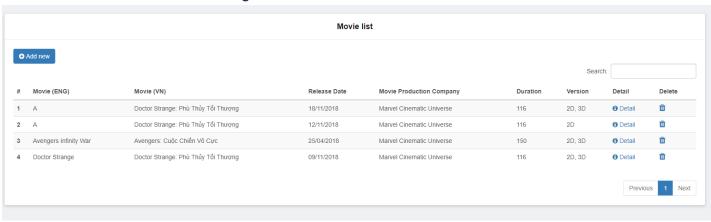
Prepared By 0.7 51/66

	of cinema room	
	management	

### 3.1.9 Movie management

Use Case	Movie management
Name	
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



Screen	View movi	e list		
Description	Display mo	Display movie list		
Screen Access	The user cl	icks Movie management		
<b>Screen Content</b>				
Item	Type	Data	Description	
Item Movie	<b>Type</b> Lable –	Data N/A	Description	
			Description	
	Lable –		Description	

Prepared By 0.7 52/66

Movie	Lable –	N/A	
production	String		
company			
Movie running	Lable –	N/A	
time	Number		
Version	Lable –	N/A	
	String		
Edit	Button	N/A	
Add movie	Button	N/A	

<b>Action name</b>	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	

Prepared By 0.7 53/66

### 3.1.9.2 Movie management – Add movie

Movie name (ENG): *			
Movie name (ENG)			
Movie name (VN): *			
Movie name (VN)			
From date: *			
dd/mm/yyyy			
To date: *			
dd/mm/yyyy			
Actor: *			
Actor			
Movie Production Company: *			
Movie Production Company			
Director: *			
Director			
Duration: *			
Duration			
Version: *			
Version			
Type: *			
☐ Hành động	Viễn tưởng	Kinh dị	
☐ Hài hước	Chiến tranh	Phiêu lưu	
Lãng mạn	☐ Kiếm hiệp	☐ Tâm lý 18+	
Tình cảm	☐ Âm nhạc	☐ Hoạt hình	
Cinema room: *			
Cinema room 1			Y
Schedule: *			
□ 08:00	□ 13:30	<b>18:30</b>	
09:00	<b>1</b> 4:30	<b>1</b> 9:00	
<b>1</b> 0:00	<b>15:00</b>	20:00	
□ 11:00	<b>17:00</b>	□ 21:00	
Content: *			
Content			
Image			- l
Image:  Chọn tệp   Không có tệp nào đu	roc chon		
Save Back	<del></del>		

Screen	Add movie
Description	Add 1 movie into database
<b>Screen Access</b>	The user clicks Movie management -> Add movie
0 0 4 4	

#### **Screen Content**

Item	Type	Data	Description
Movie name	TextBox -	N/A	
	String		
From date	Date	N/A	
To date	Date	N/A	

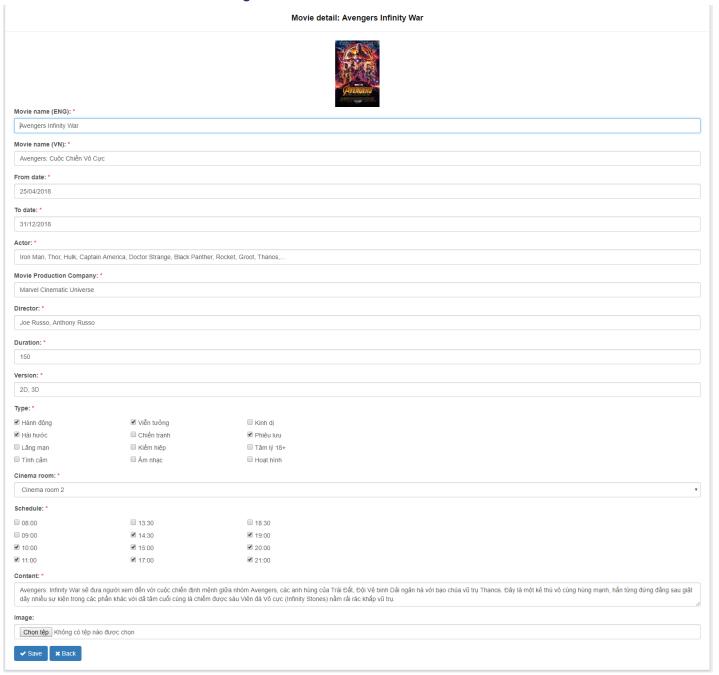
Prepared By 0.7 54/66

TextBox –	N/A
TextBox –	N/A
String	
TextBox -	N/A
String	
TextBox -	N/A
Number	
RadioBox	N/A
TextBox -	N/A
Number	
CheckBox	N/A
ComboBox	N/A
TextBox -	N/A
String	
TextBox -	N/A
String	
Button	N/A
Button	N/A
Button	N/A
	String TextBox – String TextBox – String TextBox – Number RadioBox TextBox – Number CheckBox ComboBox TextBox – String TextBox – String Button Button

<b>Action name</b>	Description	Success	Failure
Add movie	Add movie into database, after admin	Back to page of	Display the
	inputs all information, then click Add movie to add movie.	Movie management	error message
	movie to add movie.		

Prepared By 0.7 55/66

#### 3.1.9.3 Movie management – Edit movie information



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

Prepared By 0.7 56/66

TextBox -	N/A
String	
Date	N/A
Date	N/A
TextBox -	N/A
String	
TextBox -	N/A
String	
TextBox -	N/A
String	
TextBox -	N/A
Number	
RadioBox	N/A
TextBox -	N/A
String	
CheckBox	N/A
ComboBox	N/A
TextBox -	N/A
String	
TextBox -	N/A
String	
Button	N/A
	String Date Date TextBox - String TextBox - String TextBox - String TextBox - Number RadioBox TextBox - String CheckBox ComboBox TextBox - String CheckBox ExtBox - String String CheckBox DeckBox Dec

<b>Action name</b>	Description	Success	Failure
Edit	Edit information of movie. After	Back to movie	Display error
	admin edits information, then click	management	messages
	Submit to update all information of the		
	movie.		

Prepared By 0.7 57/66

#### 3.1.9.4 Movie management – Delete movie



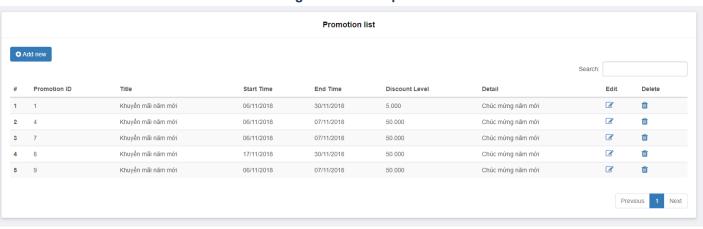
Screen	Movie management – Delete movie			
Description	Delete in	Delete information of the movie		
Screen Access	Admin c	Admin clicks menu Movie management -> Delete		
<b>Screen Content</b>				
Item	Type	Data		
Yes	Button			
No	Button	Button		
Screen Actions				
<b>Action Name</b>	<b>Description</b> Success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

### 3.1.10 Promotion management

Use Case	Promotion management
Name	
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	

Prepared By 0.7 58/66

#### 3.1.10.1 Promotion management – View promotion list



Screen	View prome	View promotion list of system		
Description	Allows to s	Allows to search, add, edit, delete promotions		
Screen	Admin clic	Admin clicks menu Promotion management		
Access				
<b>Screen Conte</b>	nt			
Item	Type	Data	Description	
Title	Lable –	N/A		
	String			
Start time	Lable –	N/A		
	String			
End time	Lable –	N/A		
	String			
Promotion	Lable –	N/A		
	String			
Detail	Lable –	N/A		
	String			
Edit	Button	N/A		
Add	Button	N/A		
Delete	Button	N/A		
Search	TextBox -	N/A		
	nvarchar			
	(28)			
Search	Button	N/A		
Screen Action	1			
<b>Action name</b>	Description	1	Success	Failure

Prepared By 0.7 59/66

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

### 3.1.10.2 Promotion management – Add promotion

Add new Promotion
Title:
Title
Start Time:
Start Time
End Time:
End Time
Discount Level:
Discount Level
Detail:
Detail
Image:
Chọn tệp Khóng có tệp nào được chọn
✓ Add X Back

Screen	Add promot	Add promotion		
Description	Add promot	Add promotion		
Screen Access	Admin click	Admin clicks menu <b>Promotion management -&gt; Add promotion</b>		
<b>Screen Content</b>	Screen Content			
_				
Item	Type	Data	Description	
Image	Button	N/A		
Title	TextBox -	N/A		
	String			
Start time	ComboBox	N/A		
End time	ComboBox	N/A		

Prepared By 0.7 60/66

Promotion	TextBox -	N/A	
	Number		
Detail	TextBox -	N/A	
	String		
Add	Button	N/A	
Back	Button		

<b>Action name</b>	Description	Success	Failure
Add	After admin inputs and selects all	Add inputted	Display the
	information, then click Add, the	promotion	message:
	system will add a promotion into	information into	"Unsuccessfully
	database	database.	add". Display
		Back to Promotion	Add promotion
		management screen	screen.
		<ul> <li>View promotion</li> </ul>	
		list	
Back	Back to previous screen	Back to previous	N/A
		screen	

### 3.1.10.3 Promotion management – Edit promotion

Prepared By 0.7 61/66

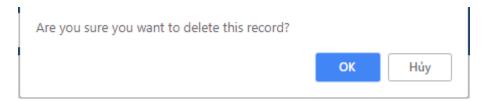


Screen	Edit promotion				
Description	Edit information of promotion				
Screen Access	Admin clicks	Admin clicks menu Promotion management -> Edit			
<b>Screen Content</b>					
<b>T</b> .	TD.	D.	D		
Item	Type	Data	Description		
Image	Button	Display image of the			
		selected promotion to			
		edit			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

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Detail	TextBox -	Display detail of the		
	String	selected promotion to		
		edit		
Edit	Button	N/A		
Screen Action	l			
<b>Action name</b>	Description		Success	Failure
Edit	Edit the informat	ion that needs	Display the	Display the
	updating of the pr	romotion	message	message:
			"Successfully add".	"Unsuccessfully
			Edit information of	add". Display
			promotion in	Edit promotion
			database. Forward	screen.
			to screen of	
			Promotion	
			management –	
			View promotion	
			list	
Back	Back to previous	screen	Back to previous	N/A
			screen	

### 3.1.10.4 Promotion management – Delete promotion



Screen	Delete p	Delete promotion		
Description	Delete in	nformation of t	the promotion	
Screen Access	Admin c	Admin clicks menu <b>Promotion management -&gt; Delete</b>		
<b>Screen Content</b>				
Item	Type	Type Data		
Yes	Button	Dutu		
No	Button			
Screen Actions				
<b>Action Name</b>	Descrip	tion	Success	

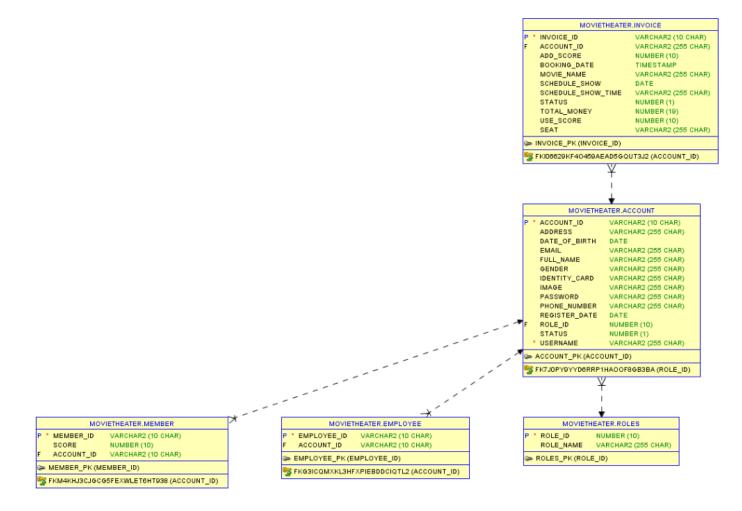
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Confirm	Agree to delete	Promotion is deleted from database and display
	promotion	screen of promotion list
No	Close confirm screen	Display screen promotion list

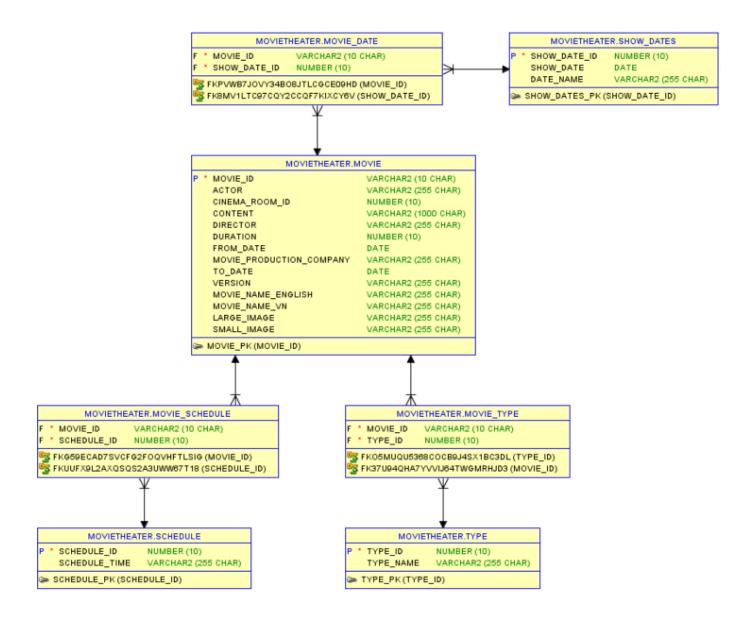
### 3.2. Detailed Non-Functional Requirements

#### 3.2.1 Logical Structure of the Data

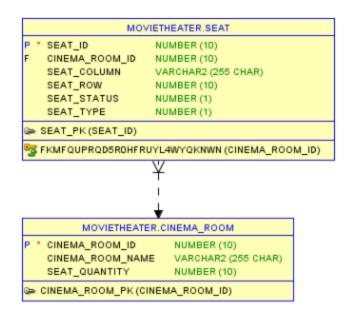
The logical structure of the data to be stored on the system is given below



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MOVIETHEATER.PROMOTION		
P * PROMOTION_ID	NUMBER (10)	
DETAIL	VARCHAR2 (255 CHAR)	
DISCOUNT_LEVEL	NUMBER (10)	
END_TIME	TIMESTAMP	
IMAGE	VARCHAR2 (255 CHAR)	
START_TIME	TIMESTAMP	
TITLE	VARCHAR2 (255 CHAR)	
PROMOTION_PK (PROMOTION_ID)		

MOVIETHEATER.SCHEDULE_SEAT		
Р *	SCHEDULE_SEAT_ID	VARCHAR2 (10 CHAR)
	MOVIE_ID	VARCHAR2 (255 CHAR)
	SCHEDULE_ID	NUMBER (10)
	SEAT_ID	NUMBER (10)
	SEAT_COLUMN	VARCHAR2 (255 CHAR)
	SEAT_ROW	NUMBER (10)
	SEAT_STATUS	NUMBER (1)
	SEAT_TYPE	NUMBER (1)

MOVIETHEATER.TICKET

P \* TICKET\_ID NUMBER (10)
PRICE NUMBER (19)
TICKET\_TYPE NUMBER (1)

TICKET\_PK (TICKET\_ID)

3.2.2 Security

**TBD** 

3.2.3 Performance

TBD

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