

FPT ACADEMY INTERNATIONAL FPT – APTECH COMPUTER EDUCATION

Cinema-Booking

Supervisor: $L\hat{E} THANH NH\hat{A}N$

Semester: II

Batch No: *T1.2206.E1*

Group No: 2

Order:	Full name	Roll No.
1.	Lê Viết Đông	Student1390589
2.	Huỳnh Tấn Phước	Student1387826
3.	Nguyễn Nhật Minh	Student1390586
4.	Trần Thụ Huy	Student1387816

Month:3 **Year**:2023

Marie -	
D. Pre	er?
This is	s to certify that
Mr.	Lê Viết Đông
Mr.	Huỳnh Tấn Phước
Mr.	Nguyễn Nhật Minh
Mr	Trần Thụ Huy
Have suc	cessfully Designed & Developed
	Cinema-Booking
Submitted	d by:
	Mr. LE THANH NHAN
Date Of 3	Issue:
Authorize	ed Signature:

Content

Content	
Acknowledge	
Synposis	
Review1	(điền số trang theo thực tế)
Review2	(điền số trang theo thực tế)
Review3	(điền số trang theo thực tế)
Testting Document	(điền số trang theo thực tế)
Final Checklist	(điền số trang theo thực tế)

Acknowledge

We understand that the Project is a step-by-step learning environment that closely simulates a classroom and lab-based learning experience, bringing it to life in actual implementation. It's a project at your fingertips! An electronic, live junction on the machine that allows you to:

- ✓ Practice a laddered approach to step-by-step learning
- ✓ Build a larger, more robust application
- ✓ Use certain utilities in applications designed by the user
- ✓ Develop a single program into a unified code that leads to a complete application
- ✓ Learn the implementation of concepts in a phased manner
- ✓ Enhance skills and add value
- ✓ Work on real-life projects
- ✓ Provide a real-life scenario and help to create more complicated and useful applications
- ✓ Receive mentoring through email support

We'd like to express our heartfelt thanks to our professor, Mr. Le Thanh Nhan, and the other students for their invaluable support during the project. Despite the several mistakes we made, we hope to have more opportunities to broaden our knowledge in the web development world. We also thank you for sharing your information and the "demo" project from India APTECH, which helped us gain more practical experience in this project. With the experience gained from this project, we won't stop learning anything that can make us more successful in the future.

Sincerely yours,

Team Group 02.

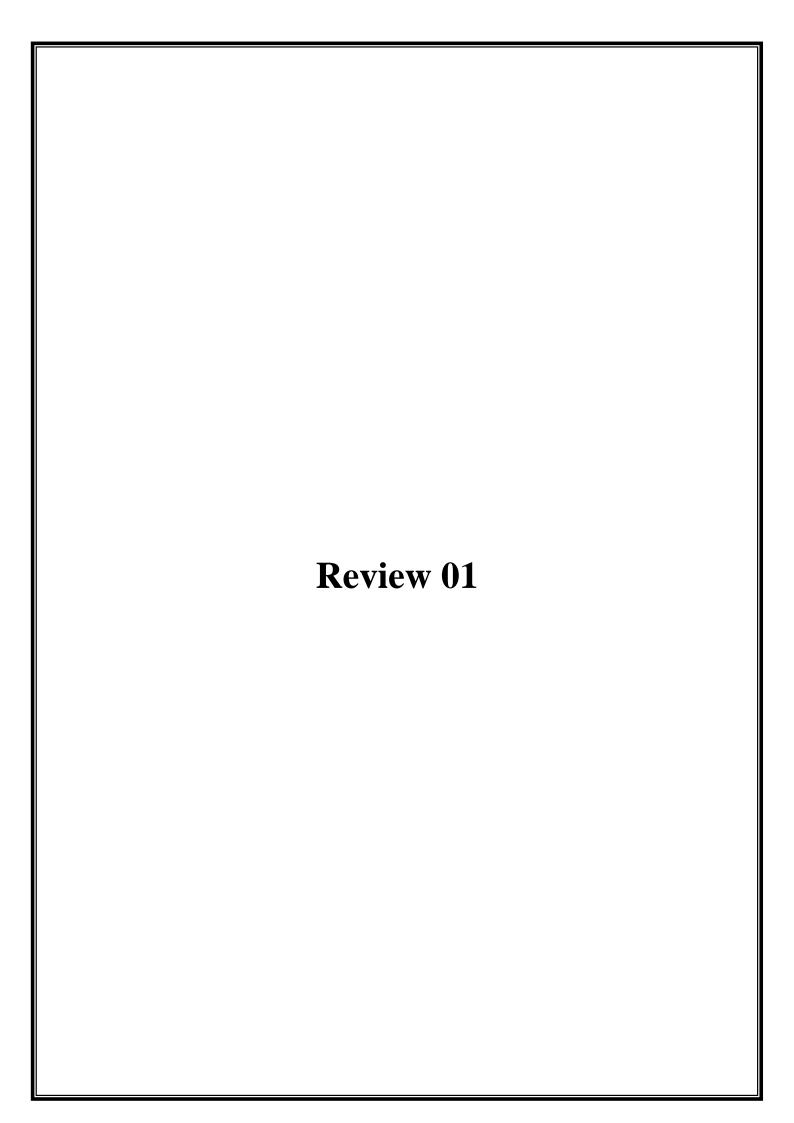
Synposis

The objective of our program is to provide a desktop application for managing bookings, purchasing products, and data entry, specifically designed for use by counter employees and administrators. Our aim is to create a real-world scenario where we can apply our knowledge and skills, in order to build a larger, more robust application.

While the primary objective is not to teach us front-end or back-end technology, the project will provide an opportunity to work with various tools and gain practical experience. This project is meant for students like us who have completed the necessary coursework and have a foundational understanding of Java programming.

In order to complete the project successfully, we will work in a lab setting with the assistance of our faculty as needed. The application we develop will serve as a comprehensive solution for managing bookings, purchasing products, and data entry, tailored to meet the needs of our target users.

Through this project, we will learn how to apply the concepts we've studied in a real-world context, enhancing our skills and adding value to our educational experience. We will also gain experience working on a real-life project, which will help us in our future



Design Plan:	Document Name: Problem Definition	SWD/Form No.01/PD/Ver1.0
Cinema-Booking		
Effective Date:21/3/2023	Version 1.0	Page No: 1 of 31

Problem Definition

The current booking and product management process at our organization is manual and time-consuming, requiring significant effort from counter employees and administrators. There are several issues with the existing process, including:

- Lack of real-time information;
- Inefficiencies in the booking process;
- No centralized system for product management;
- Limited reporting and analysis capabilities.

To address these issues, we propose the development of a desktop application that will streamline the booking and product management process, providing a centralized database for storing information and automating many of the manual processes currently in place. The application will be designed to be user-friendly and intuitive, allowing counter employees and administrators to easily perform their duties and access relevant information. Additionally, the application will include reporting and analysis capabilities, providing valuable insights into the performance of the organization over time. Overall, this application will help our organization to operate more efficiently and effectively, improving the customer experience and increasing revenue.

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	Project Group No:2	LE THANH NHAN
Signature		
Date		

Design Plan:	Document Name:	SWD/Form No.02/CRS/Ver1.0
Cinema-Booking	Customer Requirements Specifications	
Effective Date:3/21/2023	Version 1.0	Page No: 2 of 31

Customer Requirements Specifications

> Admin:

- <u>Input Data</u>:
 - ✓ Employee
 - ✓ Actor,Film
 - ✓ Room, Seat and Price
 - ✓ Schedule
- Process:
 - ✓ Add / edit / delete all of input's infomation
 - ✓ Change account's information
 - ✓ Export report for working session of employee, statistical of Film, Product, Ticket
- Output:
 - ✓ Notification to add / edit / delete items success / failure
 - ✓ Excel file
- Employee:
 - Inpu Data
 - ✓ Customer information
 - ✓ Order information of customer

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Design Plan:	Document Name:	SWD/Form No.02/CRS/Ver1.0
Cinema-Booking	Customer Requirements Specifications	
Effective Date: 3/21/2023	Version 1.0	Page No: 3 of 31

• Process

- ✓ Customer registration information
- ✓ Search the information of Film, Ticket, Customer, Product and then,

Booking for customer

✓ Manage order infomation

• Ouput

- ✓ Notification of booking process
- ✓ Bill for customer

Hardware / software requirement

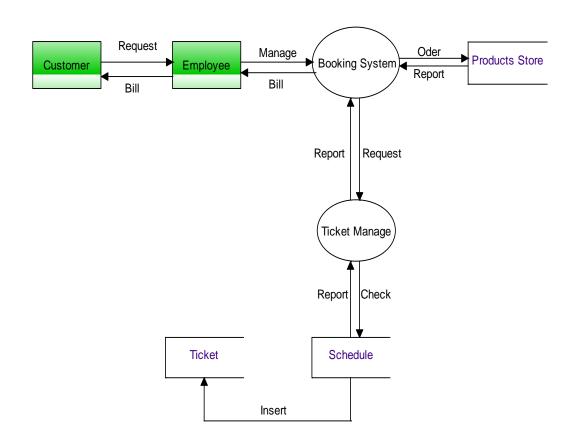
Sr.	Item	Description
1.	Operating system	Windows 7, 8, or higher
2.	Hardware	CPU Cores or better with 2 Gigabytes of RAM or better
3.	Fonts	Standard font Unicode: Arial, Tahoma, Lucida Console, Times New Roman, etc

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Design Plan:	Document Name: Data Flow Diagram	SWD/Form No.03/DFD/Ver1.0
Cinema-Booking		
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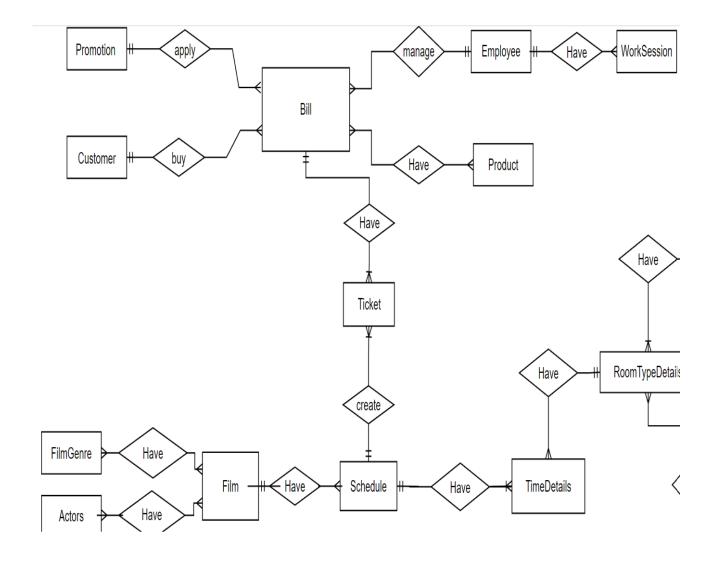
Data Flow Diagram



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Date		

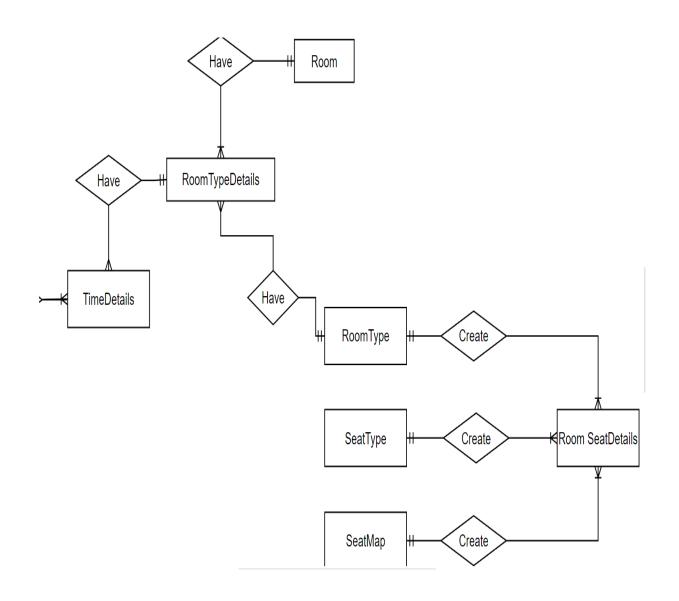
Design Plan:	Document Name:	SWD/Form No.04/ERD/Ver1.0
Cinema-Booking	Entity Relationship Diagram	
Effective Date:3/21/2023	Version 1.0	Page No: 6 of 31

A. Entity Relationship Diagram



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Date		

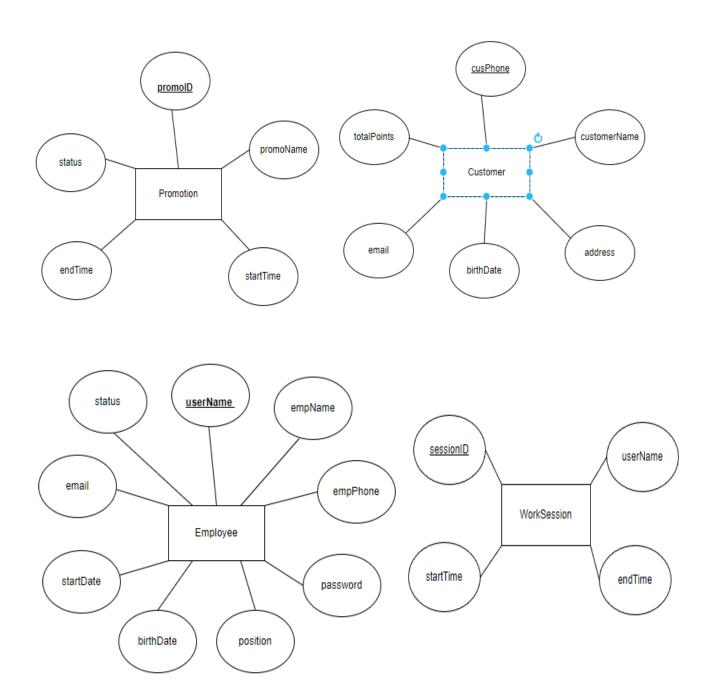
Design Plan:	Document Name:	SWD/Form No.04/ERD/Ver1.0
Cinema-Booking	Entity Relationship Diagram	
Effective Date:3/21/2023	Version 1.0	Page No: 7 of 31



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Date		

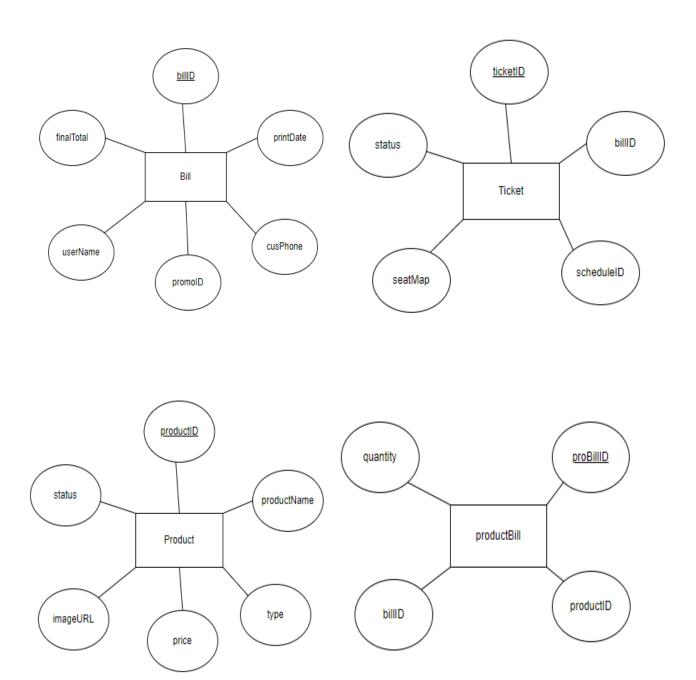
Design Plan:	Document Name:	SWD/Form No.04/ERD/Ver1.0
Cinema-Booking	Entity Relationship Diagram	
Effective Date:3/21/2023	Version 1.0	Page No: 8 of 31

B. Entity Attributes



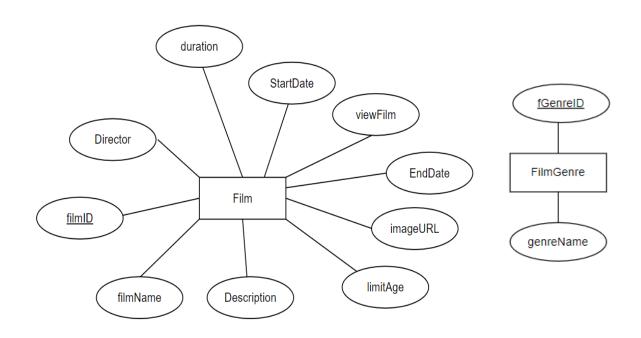
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	Project Group No:	LE THANH NHAN
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Date		

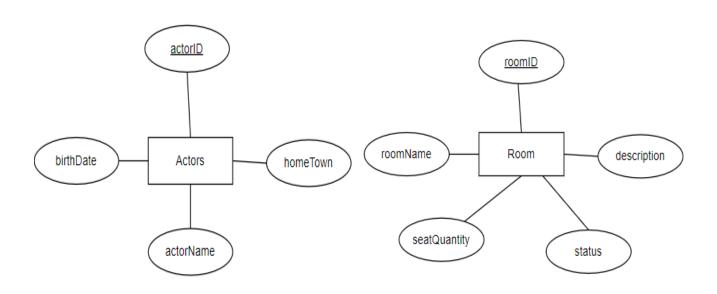
Design Plan:	Document Name:	SWD/Form No.04/ERD/Ver1.0
Cinema-Booking	Entity Relationship Diagram	
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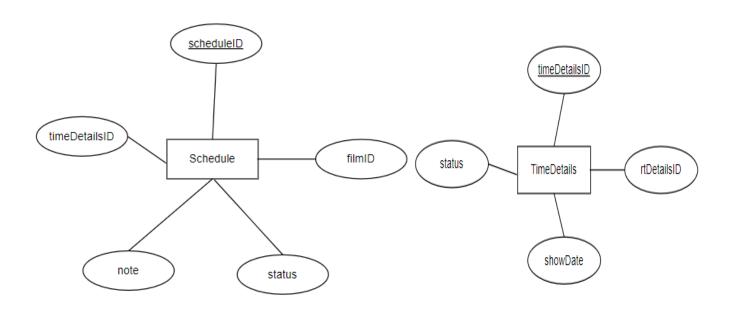
Design Plan:	Document Name:	SWD/Form No.04/ERD/Ver1.0
Cinema-Booking	Entity Relationship Diagram	
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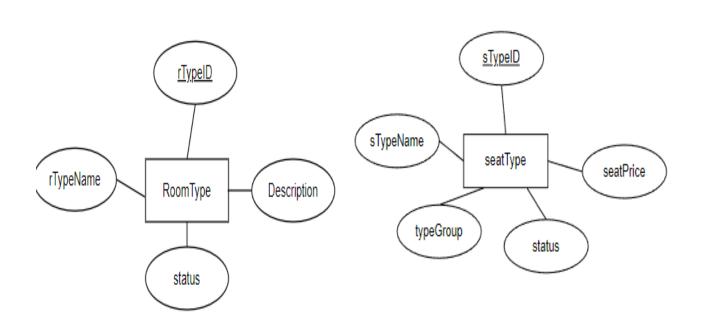




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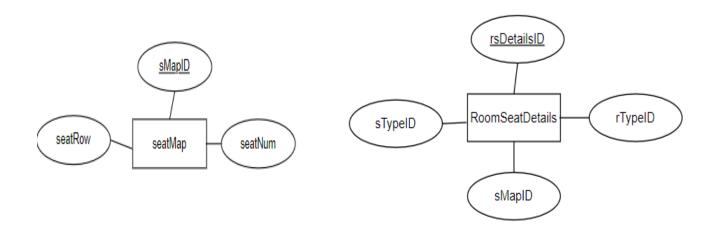
Design Plan:	Document Name:	SWD/Form No.04/ERD/Ver1.0
Cinema-Booking	Entity Relationship Diagram	
Effective Date:3/21/2023	Version 1.0	Page No: 11 of 31

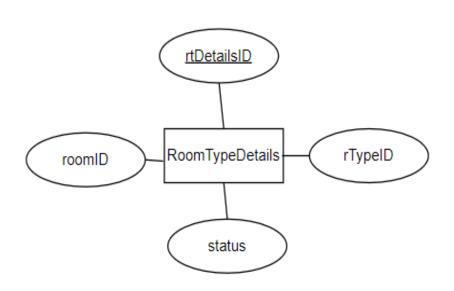




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Design Plan:	Document Name:	SWD/Form No.04/ERD/Ver1.0
Cinema-Booking	Entity Relationship Diagram	
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Date		

Design Plan:	Document Name:Table Design	SWD/Form No.05/TAB/Ver1.0
Cinema-Booking		
Effective Date: 3/21/2023	Version 1.0	Page No: 13 of 31

A. Table Design

	Promotion				
STT	Column Name	Data type	Keys	Constraints	Description
					A unique code assigned to each
1	promolD	int	Primary key	not null	promotion in the table.
					The name of the promotion
2	promoName	varchar()		null	(optional).
3	startTime	datetime		null	The start time of the promotion.
4	endTime	datetime		null	The end time of the promotion.
					The status of the promotion
5	status	bit		null	(optional).

	Customer				
STT	Column Name	Data type	Keys	Constraints	Description
1	cusPhone	varchar()	Primary key	not null	The customer's phone number.
2	customerName	varchar()		not null	The name of the customer.
3	address	varchar()			The customer's address.
4	birthDate	date			The customer's birth date.
5	email	varchar()			The customer's email address.
_					The total number of loyalty points
6	totalPoints	int			accumulated by the customer.

	Bill				
STT	Column Name	Data type	Keys	Constraints	Description
4					A unique code assigned to each bill
1	<u>billID</u>	int	Primary key	not null	in the table.
2					The date on which the bill was
2	printDate	datetime			printed.
3	cusPhone	varchar()	Foreign key		The customer's phone number.
4					The unique code of the promotion
4	promolD	int	Foreign key		applied to the bill (optional).
					The name of the user who printed
5	userName	varchar()	Foreign key		the bill.
					The final total amount to be paid
6					after any discounts or promotions
	exchangePoints	float			are applied.

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Date		

Design Plan:	Document Name:Table Design	SWD/Form No.05/TAB/Ver1.0
Cinema-Booking		
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	Employee				
STT	Column Name	Data type	Keys	Constraints	Description
1					The username used by the
1	<u>userName</u>	varchar()	Primary key	not null	employee to log in.
2	empName	varchar()		not null	The name of the employee.
2					The phone number of the
3	empPhone	varchar()			employee.
4					The password used by the
4	password	varchar()		not null	employee to log in
5	position	varchar()		not null	The job position of the employee.
6	birthDate	date			The birth date of the employee.
7					The start date of the employee's
7	startDate	date			employment.
8					
	email	varchar()			The email address of the employee.
9					The status of the employee, such as
9	status	bit			"active" or "inactive".

	WorkSession				
STT	Column Name	Data type	Keys	Constraints	Description
_					A unique code assigned to each
1	sessionID	varchar()	Primary key	not null	session in the table.
_					The username of the user who
2	userName	varchar()	Foreign key		started the session.
3	startTime	date			The start time of the session.
4	endTime	date			The end time of the session.

	productBill				
STT	Column Name	Data type	Keys	Constraints	Description
1					A unique code assigned to each
1	proBillID	varchar()	Primary key	not null	product in the bill.
2	productID	varchar()	Foreign key		The ID of the product.
2					The ID of the bill to which the
3	billID	int	Foreign key		product belongs.
					The quantity of the product
4	quantity	int			purchased.

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Date		

Design Plan:	Document Name:Table Design	SWD/Form No.05/TAB/Ver1.0
Cinema-Booking		
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	Product				
STT	Column Name	Data type	Keys	Constraints	Description
					The unique ID assigned to each
1	productID	varchar()	Primary key	not null	product in the table.
2	productName	varchar()		not null	The name of the product.
_					The category or type of the
3	type	varchar()			product.
4	price	decimal			The price of the product.
_					The status of the product, such as
5	status	bit			"available" or "out of stock".

	Ticket				
STT	Column Name	Data type	Keys	Constraints	Description
					A unique code assigned to each
1	ticketID	int	Primary key	(identity), n.null	ticket in the table.
					The ID of the bill for which the
2	billID	int	Foreign key		ticket was purchased.
_					The ID of the schedule for which
3	scheduleID	varchar()	Foreign key		the ticket was purchased.
4					The seat number and location of
	seatMap	varchar()			the ticket
_					The status of the ticket, such as
5	status	bit			"booked" or "canceled".

	SeatType				
STT	Column Name	Data type	Keys	Constraints	Description
1					The unique ID assigned to each
1	<u>sTypeID</u>	varchar()	Primary key	not null	seat type in the table.
2					The name of the seat type, such as
2	sTypeName	varchar()			"VIP" or "Standard".
2					The group to which the seat type
3	typeGroup	varchar()			belongs.
4	seatPrice	int			The price of the seat type.
					The status of the seat type, such as
5	staus	bit			"active" or "inactive".

	SeatMap				
STT	Column Name	Data type	Keys	Constraints	Description
					The unique ID assigned to each
1	<u>sMapID</u>	varchar()	Primary key	not null	seat in the seat map table.
2	seatRow	varchar()			The row number of the seat.
3	seatNum	int			The seat number within the row.

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Design Plan:	Document Name:Table Design	SWD/Form No.05/TAB/Ver1.0
Cinema-Booking		
Effective Date: 3/21/2023	Version 1.0	Page No: 16 of 31

	RoomSeatDetails				
STT	Column Name	Data type	Keys	Constraints	Description
					The unique ID assigned to each
1	<u>rsDetailsID</u>	varchar()	Primary key	not null	reservation detail in the table.
2					The ID of the reservation type to
2	rTypelD	varchar()	Foreign key		which the detail belongs.
3	sTypelD	varchar()	Foreign key		The ID of the seat type reserved.
,					The ID of the seat in the seat map
4	sMapID	varchar()	Foreign key		reserved.

	Film				
STT	Column Name	Data type	Keys	Constraints	Description
1	<u>filmID</u>	varchar(10)	Primary Key	Not null	Film Identification
2	limitAge	int		Not null	Limit Age
3	startDate	date		Not null	Film's start date
4	endDate	date		Not null	Film's End Date
5	duration	int		not null	Film' duration
6	description	varchar(255)		null	Film's description
7	imageURL	varchar(255)		not null	Film's Image
8	director	varchar(50)		null	Film's director
9	viewFilm	int		null	Film's view
10	filmName	varchar(100)		Not null	Film's Name

		Actors				
S	STT	Column Name	Data type	Keys	Constraints	Description
	1	<u>actorID</u>	int	Primary Key	Not null, identity	Actors's Identification
	2	actorName	varchar(100)		Not null	Actors's Name
	3	birthDate	date		null	Actors's birthday
	4	homeTown	varchar(100)		null	Actors's home town

)		FilmGenre				
	STT	Column Name	Data type	Keys	Constraints	Description
2	1	<u>fGenreID</u>	int	Primary Key	Not null, identity	Film Genre's Identification
;	2	fGenreName	varchar(100)		Not null	Film Genre's Name

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Date		

Design Plan:	Document Name:Table Design	SWD/Form No.05/TAB/Ver1.0
Cinema-Booking		
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,		Schedule				
	STT	Column Name	Data type	Keys	Constraints	Description
Г	1	<u>scheduleID</u>	varchar(20)	Primary Key	Not null	Schedule's Identification
Г	2	filmID	varchar(10)	Foreign Key	Not null	Film's Identification
	3	timeDetailsID	int	Foreign Key	Not null	Time Details's Identification
	4	note	varchar(255)		null	Schedule's note
Γ	5	status	bit		not null	Schedule's status

	TimeDetails				
STT	Column Name	Data type	Keys	Constraints	Description
1	<u>timeDetailsID</u>	int	Primary Key	Not null	ID's Time Details
2	rtDetailsID	int	Foreign Key	null	ID's Room Type
3	showDate	datetime		null	showDate's Time Details
5	status	bit		not null	Schedule's status

	Room				
STT	Column Name	Data type	Keys	Constraints	Description
1	<u>roomID</u>	varchar(10)	Primary Key	Not null	Room's Identification
2	roomName	varchar(100)		Not null	Room's Identification
3	seatQuanlity	int		null	Quanlity of Seat
4	description	varchar(100)		null	Room's description
5	status	bit		not null	Room's status

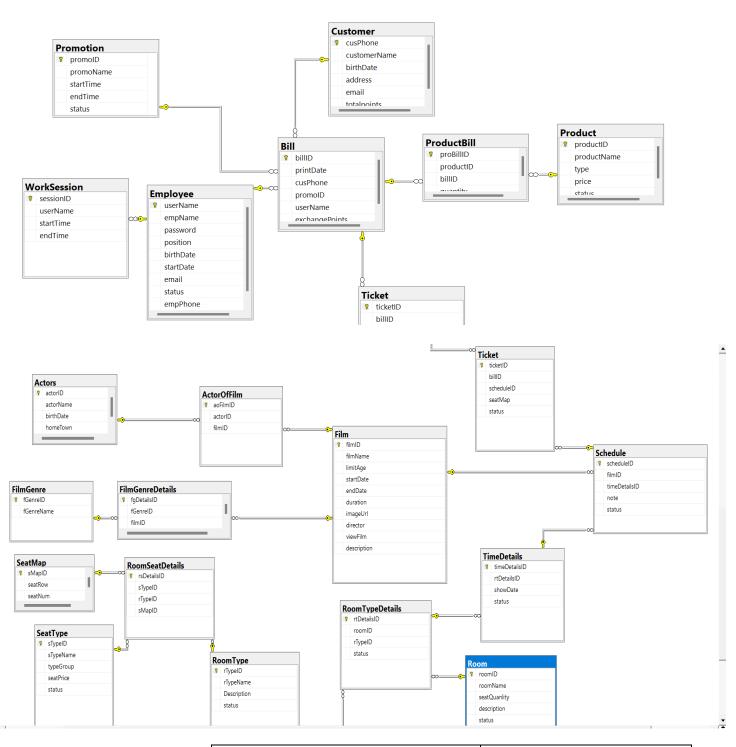
	Room Type				
STT	Column Name	Data type	Keys	Constraints	Description
1	rTypeID	varchar(10)	Primary Key	not null	ID's Room Type
2	rTypeName	varchar(100)		not null	Name's Room Type
3	description	varchar			Description's Room Type
4	status	bit		null	status's Room Type

	RoomTypeDetails				
STT	Column Name	Data type	Keys	Constraints	Description
1	rtDetailsID	int	Primary Key	not null	ID's Room Type Details
2	roomID	varchar(10)	Foreign Key	null	ID's Room
3	rTypeID	varchar(10)	Foreign Key	null	ID's Room Type
4	status	bit		null	status's Room Type Details

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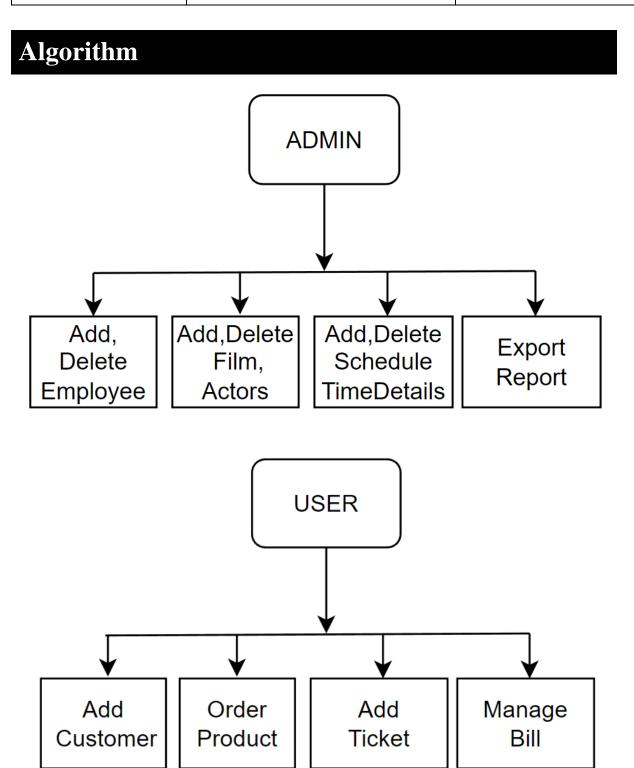
Design Plan:	Document Name:Table Design	SWD/Form No.05/TAB/Ver1.0
Cinema-Booking		
Effective Date: 3/21/2023	Version 1.0	Page No: 18 of 31

B. Relationship Diagram

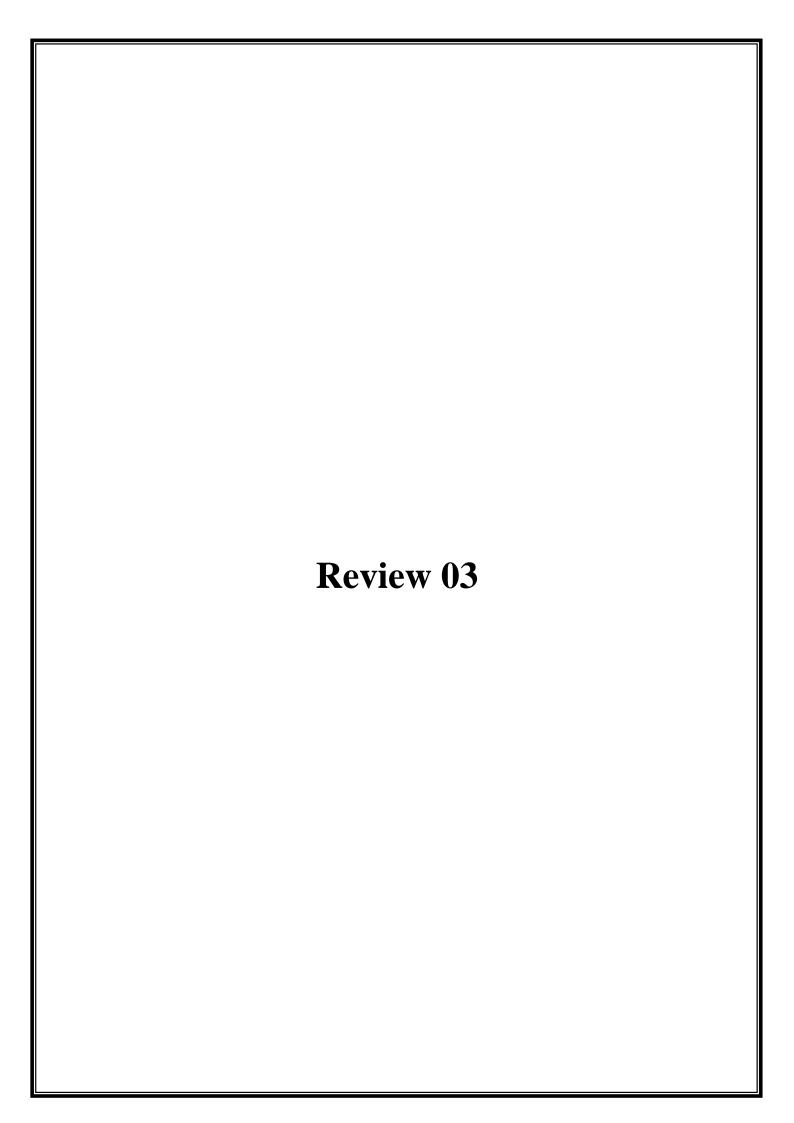


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Design Plan:	Document Name: Algorithm	SWD/Form No.07/ALG/Ver1.0
Cinema-Booking		
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Date		



Design Plan:	Document Name: Screen shots	SWD/Form No.08/SS/Ver1.0
Effective Date:	Version 1.0	Page No: 21 of 31

Screen shots

Các layout mô tả màn hình. Sinh viên có thể vẽ layout. Nếu không thể thì code HTML cơ bản rồi chụp lại hình màn hình.

Ví dụ cách thứ nhất: (Khuyến cáo sử dụng)

I. Homepage:

Logo		Banner size x size	Banner size x size	
Homepage	Categories	Register	About us	
<	Services	Carousel	>	
Enter text for search	ing:			
		(Click for seaching	
	Foc	oter		

Description : Mô tả màn hình là gì? Dùng làm gì?

From : Được mở từ đâu? Menu nào?

To : Có thể tới được trang nào khác?

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Date		

Design Plan:	Document Name: Screen shots	SWD/Form No.08/SS/Ver1.0
Effective Date:	Version 1.0	Page No: 22 of 31

Ví dụ cách thứ hai:

I. Homepage:



Description : Mô tả màn hình là gì? Dùng làm gì?

From : Được mở từ đâu? Menu nào?

To : Có thể tới được trang nào khác?

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Date		

Design Plan:	Document Name: Testing document	SWD/Form No.09/TD/Ver1.0		
Effective Date:	Version 1.0	Page No: 23 of 31		

Testing document

Sr.No	Features Tested	Remarks
1		
2		
3		
4		
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6		
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8		
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10		
11		
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15		

	Prepared by (Student)	Approved by (Faculty)
	Project Group No:	LE THANH NHAN
Signature		
Date		

Design Plan:	Document Name: Final checklist	SWD/Form No.10/FC/Ver1.0
Effective Date:	Version 1.0	Page No: 24 of 31

Final checklist

Sr.No	Aspected Tested	Suggestion/ Remarks
1	Are all the users able to view the images and links?	
2	Have all the views, modules and controllers been properly integrated and is the site function as a single page application?	
3	Are the GUI content devoid of spelling mistakes?	
4	Is the application user-friendly?	
5	Is the Website launching correctly in all popular browsers?	
6	Are all the forms validated with proper criteria?	
7	Do all text links lead to the appropriate website?	
8	Do all image links lead to the appropriate website?	
9	Are all the images and links clearly visible on the page?	
10	Does the Web page work properly in all the tested browsers?	
11	Does the Web page take too long to be loaded fully?	
12	Is the navigation sequences correct through all the Web pages on the site?	
13	Is the JavaScript code working as expected in all click events?	
	(Circle 112 - 12 - 12 - 14 - 2 - 1	
	(Sinh viên ghi thêm)	

	Prepared by (Student)	Approved by (Faculty)
	Project Group No:	LE THANH NHAN
Signature		
Date		

Design Plan:	Document Name: Task Sheet	SWD/Form No.11/TS/Ver1.0
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				Activity Plan	Date of Preparation of Activity Plan			
No	Member	Member Contents		Table Name	Planed Start Date	Actual Start Date	Actual Days	Status
		Admin	Form for input: Schedule		3/21/2023	3/21/2023	5	OK
		Adillili	Form for input. Schedule	Ticket,	3/21/2023	3/21/2023	5	OK
1	Lê Viết Đông		Manage Ticket, and order product and export report by Excel	Schedule, TimeDetails,	3/21/2023	3/21/2023	5	OK
		User	note: Ticket table is empty and insert auto when choose Ticket on user interface	ProductBill	3/21/2023	3/21/2023	5	ОК
					3/21/2023	3/21/2023	5	OK
		Admin	Form for input: Employee		3/21/2023	3/21/2023	5	OK
2	2 Huỳnh Tấn Phước			Employee,	3/21/2023	3/21/2023	5	OK
2		Phước	User	Manage login process Manage Personal Account Manage working session and export report by Excel	WorkingSession,	3/21/2023	3/21/2023	5
					3/21/2023	3/21/2023	5	OK
	Nguyễn Nhật	Admin	Form for input: Customer	Customer.	3/21/2023	3/21/2023	5	OK
3	Minh	**	Manage Bill and export Bill	Bill	3/21/2023	3/21/2023	5	OK
		User User		3/21/2023	3/21/2023	5	OK	
	4 Trần Thụ Huy	A denie	Forms for inputs Film Cohodulo Actor		3/21/2023	3/21/2023	5	OK
4		Admin	Form for input: Film, Schedule,Actor	Film, Actor. Film Genre Details.	3/21/2023	3/21/2023	5	OK
4		User	Export report for Film by Excel	ActorOfFilm	3/21/2023	3/21/2023	5	OK
			User		7 ICLOT OIT IIII	3/21/2023	3/21/2023	5

	Prepared by (Student)	Approved by (Faculty)
	Project Group No:	LE THANH NHAN
Signature		
Date		