

iMovies

Online Movie Reservation System

A PROJECT REPORT

Submitted for the partial fulfillment of the project for the subject, Database Management Systems

By

K GOKUL RAJ - 19BCE0522

RAHUL SANJEEV - 19BCE0952

MOHIT SINHA - 19BCE0947

Under the guidance of

Prof. KURUVA LAKSHMANNA



School of Computer Science and

Engineering October,2020

ABSTRACT

Our project 'Online Movie Reservation System' focuses on creating an easy, user friendly system to book movies. Entertainment industry with movies being such an important part of our lives we are always excited to go to the theatres. We want to create an easy online site that makes the movie-booking experience wholesome.

The program when runs can be used by two individuals. We have named them 'Admins' and 'Users'. The program would allow users to select a movie from the different ones that are played on a daily basis in different theatres. Users can choose the theatre of their choice and select a time slot available. The availability will be based on the Seat Availability of that slot in the theatre of their choice. After choosing these, they would move into payments and hence pay for their tickets

Admins are allowed to add a new movie in a theatre. They are allowed to add a new theatre location. Admins are also allowed to choose the number of seats in the theatre and also the pricing range for the seats in their theatre. Hence, admins can create new theatre locations that the users can choose from.

Program starts off with a login page. Users select the option and is asked to choose a location. This opens up a new option to choose theatres that have a wide range of movie options, mainly 'Currently Running', 'Coming Soon' and 'Closed'. Users would then choose their desired movie. This would show a short description of the movie and there would be a 'Book Now' option that they would choose to move forward. On clicking this option, they have to choose the Date and time of the movie based on the seat availability. The seats have been divided into 4 categories of different prices; they are – 'Normal', 'Deluxe', 'Gold' and 'Platinum'. These are of varying price ranges and users must choose their desired seat choice and give the number of seats they want. The users have to put in the details of each booked participant (i.e. Name, Age and Gender). After this they would move to the Payment gateway, Users can choose to pay through- 'Credit Card', 'Debit Card', 'UPI' and 'Net Banking'. They have to then pay and then 'PAYMENT SUCEEDED' or 'PAYMENT FAILED' option would come up. Users also have choice of putting their movie in a cart and pay for it at a later time.

When the admins log in, they must first put in the Movie Name. They should fill in the details of the Movie- Title, Director Name, Cast Details and a small description of the movie. They should fill in the Theatre ID and Movie ID. When they want to fill in a new Theatre location, admins must fill in location details and also the seat numbers and prices. These prices and the number of seats is under the admin's discretion.

This was a brief abstract of the working model of this project- 'Online Movie Reservation System'.

ACKNOWLEDGEMENT

First of all, we thank the almighty who showered his immense blessings on us, that has helped us to complete this project with success.

Our heartfelt thanks to Prof.Kuruva Lakshmanna for giving us the necessary environment to acquire knowledge and skills.

Our sincere and warmest thanks for his valuable and inspiring guidance and encouragement given throughout the period of this project. We feel indebted to him for guiding our project with reviews, evaluations, guidance and suggestions offered throughout this project.

We also express my whole hearted thanks to our parents for their encouragement to bring this project to a successful completion.

1. INTRODUCTION

Introduction to Online Movie Reservation System:

Welcome to newly designed website movie ticket booking is a faster, cleaner and a tad more personal website, specially designed to make your booking experience better. Log on, navigate and find out for yourselves and if time permits leave your valuable feedback. Customers may view the contents of any movie show at any time and may book any movie ticket as needed. The program automatically calculates the subtotal and grand total. When a visitor decides to finally book the ticket, the order information including the buyer's name, address and billing instruction is stored in the database securely and payment has been made. The combo booking is also provided at the time of booking the ticket and there's a wonderful facility of delivering the combos at your seat when you are watching the movie.

You need to register a new user whenever you have first visited or site then for future it will be stored in our database permanently and you can book you movie ticket at any time you want with this username and password.

Online Movie Reservation System is a user-friendly site that allows users to choose their favourite movie at their desired time. They may choose the type of seats they want and also choose the type of Payment Gateway they would like to use for booking the tickets. We have also given an Admin Login that allows admins to add a new movie or a new theatre location that users can choose from later.

1.1. Purpose Scope and Applicability of Project:

The main purpose of this project is to provide a reliable, secure, efficient and user friendly environment to the customers and management authorities. Also benefit to the customer with efficient and faster service.

The Project “Online Movie Ticket Booking System” as a wide scope as it is generalized software and can be easily used in any ticket booking process system with little or no change. The Changes in software can be easily accommodated. The addition and deletion of the modules in software can be easily adjusted. This project has a lot of scope for further enhancement too. This project can save money and efforts in managing the record, just a mouse click can make the task easy and faster

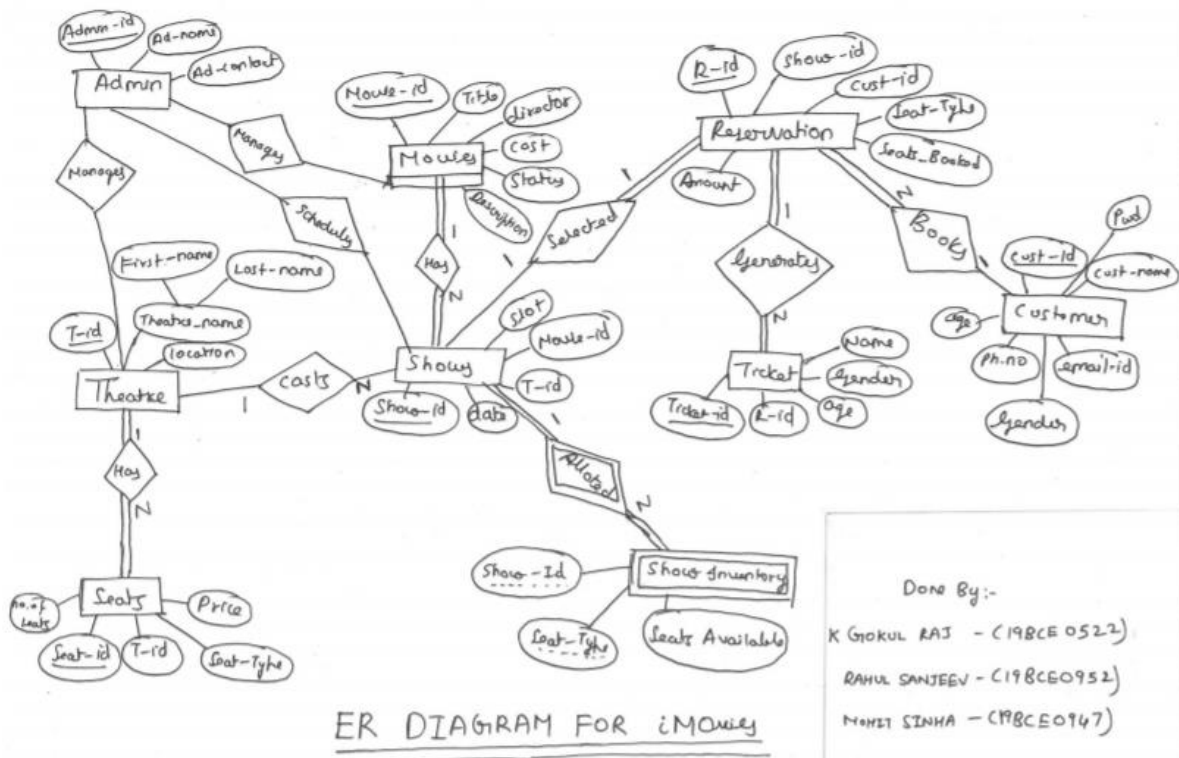
1.2. Objective of Project

The project “Online Movie Ticket Booking System” is dedicated to the general Requirements of multiplex theaters. The main objective of the project is to create an Online Movie Ticket Booking processing that allows customers to know about new movies, their schedules, cinema locations, class and ticket price etc. In the booking process when customer selects his city then cinemas of that city are filtered. In next step he/she selects his desired cinema where he/she wish to see movie, then selects movie and other details like show date, show time, class and no of tickets. Based on given parameters a graphical layout of seat status is visible to the customer. Now customer can select his desired seat location and number of seats. The Administrator will be able to see all booked and canceled tickets.

The main objectives of “Online Movie Ticket Booking System” project are as follows:

- 1) Facility to store the information of new customer, different types of movie show timing, ticket rates of different types on show class etc.
- 2) And Give the admin the function to add movie, theatre, seats and create shows and manage shows.

ER model



Tables and Constraints (Generated by DBeaver software):

Key : PRI = PRIMARY KEY

MUL = FOREIGN KEY

WE HAVE HOSTED OUR PROJECT IN INTERNET:

LINK FOR THE WEBSITE: iMovies2020.epizy.com

CLOUD WEBSITE USED FOR HOSTING – infintiyfree.net

2. Tables Used:

- Theatre Table

Columns	Column Name	#	Data Type	Not Null	Auto Increment	Key
	123 theatre_id	1	int	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PRI
Constraints	ABC theatre_name	2	char(30)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Foreign Keys	ABC theatre_location	3	char(30)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
References						
Triggers						
Indexes						
Partitions						
Statistics						
DDL						
Virtual						

- Seats Table

Columns	Column Name	#	Data Type	Not Null	Auto Increment	Key
	123 seat_id	1	int	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PRI
Constraints	123 seat_theatre_id	2	int	<input checked="" type="checkbox"/>	<input type="checkbox"/>	MUL
Foreign Keys	ABC seat_type	3	enum('normal','deluxe','gold','platinum')	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
References	123 seats_no_of_seats	4	int	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Triggers	123 seat_price	5	decimal(10,0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Indexes						
Partitions						
Statistics						
DDL						
Virtual						

- Movies Table

Columns	Column Name	#	Data Type	Not Null	Auto Increment	Key
	123 movie_id	1	int	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PRI
Constraints	ABC movie_title	2	char(100)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Foreign Keys	ABC movie_director	3	varchar(100)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
References	ABC movie_cast	4	varchar(200)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Triggers	ABC movie_description	5	varchar(300)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Indexes	ABC movie_release_date	6	date	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Partitions	ABC movie_language	7	char(20)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Statistics	ABC movie_image_fn	8	varchar(50)	<input type="checkbox"/>	<input type="checkbox"/>	
DDL						
Virtual						

- Shows Table

Columns	Column Name	#	Data Type	Not Null	Auto Increment	Key
Constraints	123 show_id	1	int	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PRI
Foreign Keys	123 show_theatre_id	2	int	<input checked="" type="checkbox"/>	<input type="checkbox"/>	MUL
References	show_date	3	date	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Triggers	123 show_movie_id	4	int	<input checked="" type="checkbox"/>	<input type="checkbox"/>	MUL
Indexes	ABC show_slot	5	enum('morning','evening','night','midnight')	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Partitions	ABC show_status	6	enum('running','upcoming','closed')	<input type="checkbox"/>	<input type="checkbox"/>	
Statistics						
DDL						
Virtual						

- Show Inventory Table

Columns	Column Name	#	Data Type	Not Null	Auto Increment	Key
Constraints	123 inventory_show_id	1	int	<input type="checkbox"/>	<input type="checkbox"/>	MUL
Foreign Keys	ABC inventory_seat_type	2	enum('normal','deluxe','gold','platinum')	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
References	123 inventory_seats_available	3	int	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Triggers						
Indexes						
Partitions						
Statistics						
DDL						
Virtual						

- Customer Table

Columns	Column Name	#	Data Type	Not Null	Auto Increment	Key
Constraints	123 cust_id	1	int	<input checked="" type="checkbox"/>	<input type="checkbox"/>	PRI
Foreign Keys	ABC cust_name	2	varchar(50)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
References	ABC cust_pwd	3	char(15)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Triggers	ABC cust_email_id	4	varchar(100)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Indexes	ABC cust_ph_no	5	char(20)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Partitions	123 cust_age	6	int	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Statistics	ABC cust_gender	7	enum('m','f','t')	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
DDL						
Virtual						

- Reservation Table

	Column Name	#	Data Type	Not Null	Auto Increment	Key
Columns	123 reservation_id	1	int	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PRI
Constraints	123 reservation_show_id	2	int	<input checked="" type="checkbox"/>	<input type="checkbox"/>	MUL
Foreign Keys	123 reservation_cust_id	3	int	<input checked="" type="checkbox"/>	<input type="checkbox"/>	MUL
References	ABC reservation_seat_type	4	enum('normal','deluxe','gold','platinum')	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Triggers	123 reservation_seats_booked	5	int	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Indexes	123 reservation_amount	6	int	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Partitions	ABC reservation_payment_status	7	enum('Payment pending','Payment failed','Payment success')	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Statistics	ABC reservation_payment_mode	8	enum('Credit card','Debit card','Net banking','UPI')	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
DDL						
Virtual						

- Ticket Table

	Column Name	#	Data Type	Not Null	Auto Increment	Key
Columns	123 ticket_id	1	int	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PRI
Constraints	123 ticket_reservation_id	2	int	<input checked="" type="checkbox"/>	<input type="checkbox"/>	MUL
Foreign Keys	ABC ticket_name	3	char(20)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
References	123 ticket_age	4	int	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Triggers	ABC ticket_gender	5	enum('m','f','t')	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Indexes						
Partitions						
Statistics						
DDL						
Virtual						

- Admin Table

	Column Name	#	Data Type	Not Null	Auto Increment	Key
Columns	123 admin_id	1	int	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PRI
Constraints	ABC admin_name	2	char(20)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Foreign Keys	ABC admin_contact	3	char(20)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
References	ABC admin_pwd	4	char(15)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Triggers						
Indexes						
Partitions						
Statistics						
DDL						
Virtual						

Step by step ER to relational mapping

STEP 1: Mapping of Regular Entity Type.

For each regular entity type in the ER schema, create a relation R that includes all the simple attributes of the entity.

Choose one of the key attributes of the entity as the primary key for the relation, R.

If the chosen key of the entity is composite, the set of simple attributes will together form the primary key of R.

STEP2: Mapping of Weak Entity Type

For each weak entity type (W) in the ER schema with its owner entity type i.e E, create a relation R & then include all simple attributes of W as attributes of the relation, R.

Include a foreign key attributes of Relation, R as the primary key attribute of the relation that correspond to the owner entity type.

The primary key of relation, R is the combination of the primary key of the owner and the partial key of the weak entity type, W, if any.

STEP3: Mapping of Binary 1:1 Relation Type

For each binary 1:1 relationship type R in the ER schema, identify the relations S and T that correspond to the entity types that participates in the relation, R.

STEP4: Mapping of Binary 1:N Relationship Type.

For regular binary 1:N relationship type R, identify the relation, let's say, S that represents the participating entity type at the N-side of the binary relationship type.

Include a foreign key in S as the primary key of the relation T that represents other entity type participating in R.

Include the simple attributes of the 1:N relation as the attributes of S.

STEP5: Mapping of Binary M:N Relationship Types.

For regular binary M:N relationship type R, create another relation S to represent the relation, R.

Include a foreign key attribute in S as the primary key of the relations that represent the participating entity types and then their combination will be the primary key.

Also include the simple attribute of the M:N relationship type as attribute of S.

STEP6: Mapping of Multivalued attribute.

For each multivalued attribute A, create a relation R.

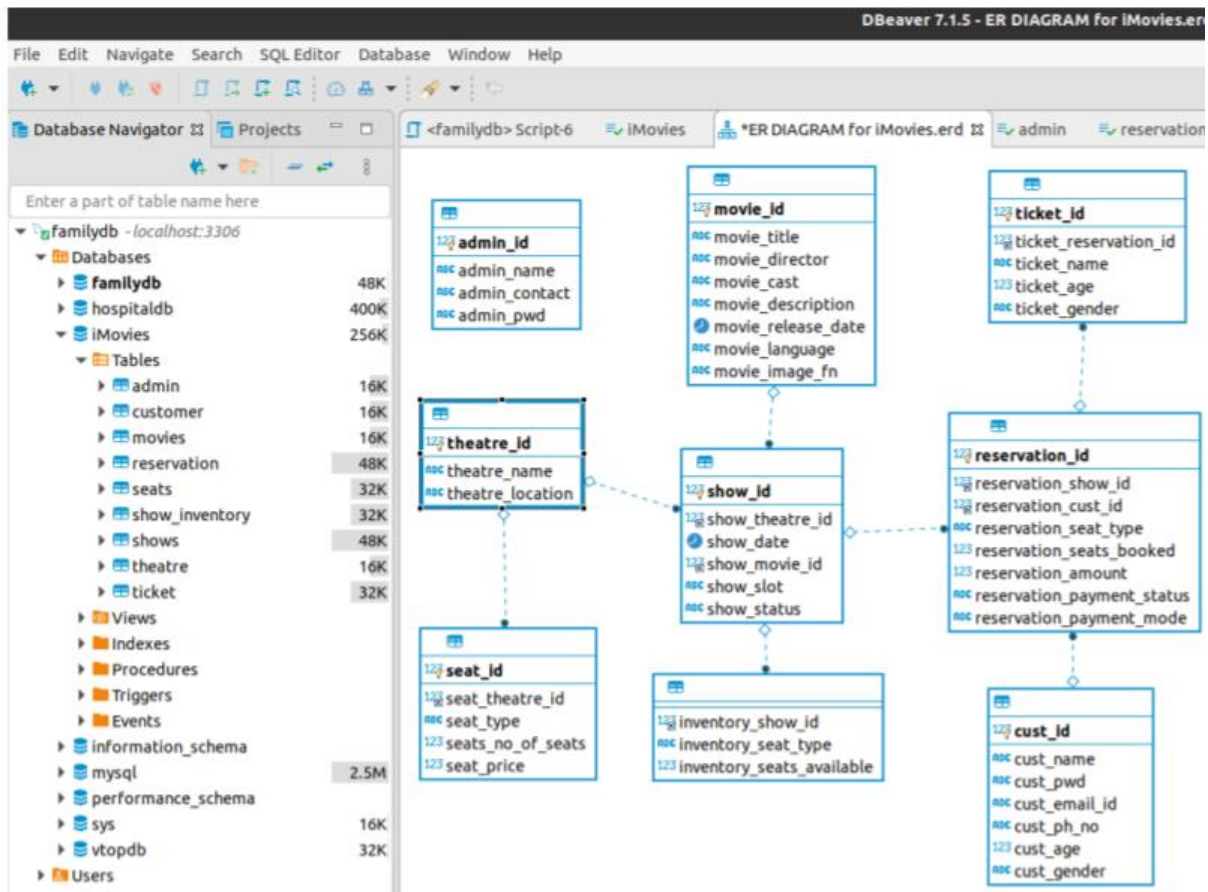
This relation R will include the attributes corresponding to A, also add the primary key attribute K as the foreign key in R of the relation. The primary key of R is the combination of A and primary key, K. If the multivalued attribute is composite, we include their simple components.

STEP7: Mapping of N-ary Relationship Type.

For each n-ary relationship type R, where $n > 2$, we create a relationship S to represent R. Include a foreign key attribute in S as the primary key of the relation that represent the participating entity types.

Also include the simple attributes of the N-ary relationship as the attributes of S.

Relational Scheme Diagram –



3.SYSTEM DESIGN

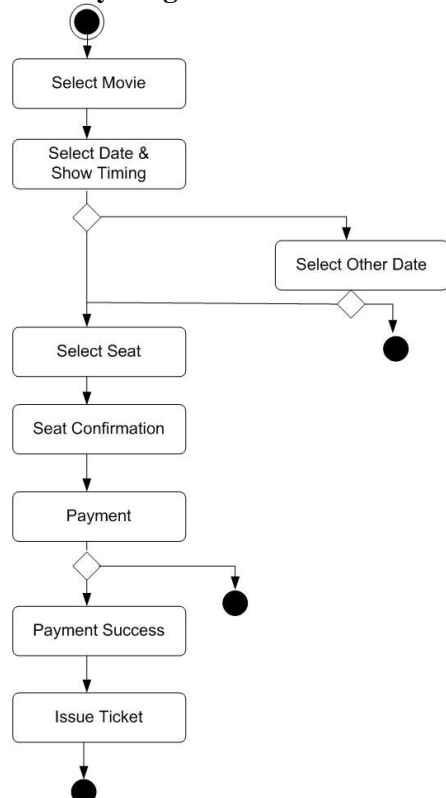
Systems design is simply the design of systems. It implies a systematic and Rigorous approach to design—an approach demanded by the scale and complexity of many Systems problems. The main purpose of the system is to design a security and efficient System for online movie ticket booking portal. It must be utilize very low system resources.



Online Movie Ticket Booking Process

The “Online Movie Ticket Booking System” manages all the movie ticket booking process and ticket amount payment process. This maintains information of list of all currently running movies in different multiplex of the same company in various locations. The process of booking movie tickets online is kept very simple. The customer can go to the online ticket booking portal where they can see list of all movies running currently in different cinemas situated in various location and cities, different show timing etc. The customer selects their desired cinema, movie, preferred date, show timing, desired no of tickets and see the booking status / available seats. Then customer register it self on the portal and reserve his desired no of seats. In the next step system ask customer for payment online. After successful payment the system will generate movie ticket. All registered customers can login to the ticket booking portal and see their previous ticket booking status.

Activity Diagram



Description of model

SCENARIOS:

Customer Registration Scenario

All customers' detailed information will be stored in the database and they will be given unique account numbers. The system will provide facility of adding new customer record, updating old customer records and deleting any customer record. This information is further used by all the modules as required. The customer record is very important in the project. This customer record will be used by the project every where it is needed.

Security & Movie Ticket Management Scenario

In this scenario we will manage all information of all the master records of the project such as cinema master, movie master, screen master, show timing etc. This master information is used by the project as required by the project. This module also sends the book information to all the modules as needed. Online Movie Ticket Booking System & Cinema schedule maker module uses this information for preparing cinema schedule.

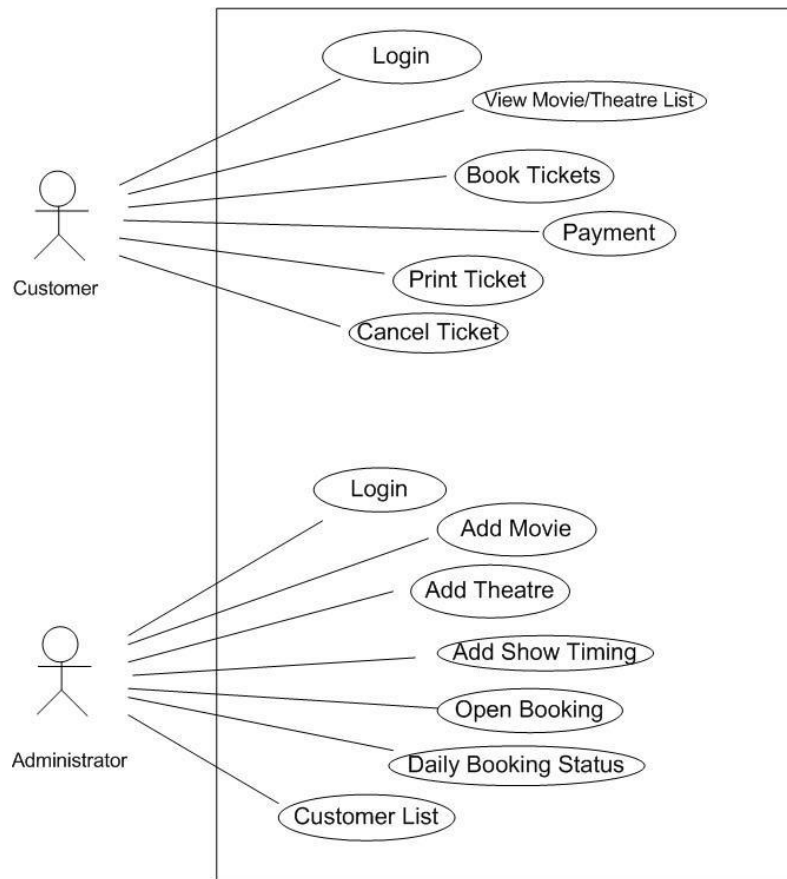
Movie Show Timing Management Scenario

In this scenario of the project online movie ticket booking project. As the name indicates we will manage all the records related with the making a movie show timing schedule for showing different movies in different screens and time, in different cinemas and their show timings etc. When a new movie has to be added in cinema, this module is used to prepare a daily show plan for this movie. The running show booking can be controlled by this module. When a movie has completed enough business, its booking can be closed by this module. Show booking for next date begins when we add next date in this module.

Seat Confirmation & Payment Scenario

All seat allocation and ticket booking is done here. This module takes customer details and show date time and allocates seats and calculates booking amount, which is further used for payment & ticket printing.

In payment & ticket print scenario the system prepares ticket based on the information given by the seat allocation & ticket booking module. This is the final process of ticket booking process.



USE CASE DIAGRAM

Important SQLs used in this project

Purpose	Populate landing page with latest movies details
Pages Impacted	Index2.php, adminIndex.php
Brief description	Fetch latest 6 movies and related details like movie images to display as carousel
SQL statement	#1
<pre>select movie_id, movie_title, movie_image_fn, movie_cast "select movie_id,movie_title,movie_image_fn,movie_cast from \$t_Movies order by movie_id desc limit 6"</pre>	

Purpose	Validate login credentials for customer and admin
Pages Impacted	Index2.php, adminIndex.php
Brief description	Fetch user id and password from customer or admin table to compare with HTML form variables
SQL statement	#2
<pre>"Select * from \$t_customer where cust_username = '\$uid' and cust_pwd = '\$pwd'";</pre>	

Purpose	Add new theatre and related details
Pages Impacted	addTheatre.php, insertTheatre.php
Brief description	Based on the HTML form variables, insert new theatre details, followed by inserting seat types, # of seats and price details
SQL statement	#3
Insert new theatre into theatre table:	
<pre>"INSERT INTO \$t_theatre (theatre_name, theatre_location) VALUES ('\$tName','\$tCity')"</pre>	
Based on the theatre id (auto generated), insert seat details	
<pre>"INSERT INTO \$t_seats (seat_theatre_id, seat_type,seats_no_of_seats,seat_price) VALUES (\$t_theatre_id,'\$sType','\$sNumbers','\$sPrice)'"</pre>	

Purpose	Add new movie and related details
Pages Impacted	addMovie.php, insertMovie.php
Brief description	Based on the HTML form variables, insert new movie and related details
SQL statement	#4
<pre>"INSERT INTO \$t_movies (movie_title, movie_cast, movie_director, movie_image_fn, movie_language, movie_release_date, movie_description) VALUES ('\$iname','\$icast', '\$idirect','\$sfn', '\$ilang', date('\$ireldate'), '\$idesc')"</pre>	

Purpose	Add new show and modify the inventory
Pages Impacted	addShow.php and insertShow.php
Brief description	Fetch city theatre , the movie , status and the running dates from their respective tables to compare with HTML form variables and add it if there is no conflict (existing show)
SQL statement	#5
Select distinct city location:	
<pre>"SELECT distinct theatre_location from \$t_theatre") as \$rs1){ \$cities[] = array("tcity" => \$rs1['theatre_location']</pre>	
Based on the selected loaction filter and display the theatres:	
<pre>"SELECT theatre_location, theatre_id, theatre_name from \$t_theatre") as \$rs2){ \$theatres[\$rs2['theatre_location']][] = array("tid" => \$rs2['t heatre_id'], "tname" => \$rs2['theatre_name']</pre>	
To check the conflict if any existing shows are present for the given combination of dates,slot and theatres.	
<pre>"SELECT b.theatre_name, b.theatre_location, a.show_date, c.movie_title, a.show _slot from \$t_shows as a, \$t_theatre as b, \$t_movies as c where a.sh ow_theatre_id = b.theatre_id and a.show_movie_id = c.movie_id and a.show_theatre_id = \$show Theatre and a.show_date = '\$checkDate' and a.show_slot = '\$showSlots[\$i]' and a.show_status <> 'closed' "</pre>	

Insert into shows database if there is no conflict:

```
"INSERT INTO $t_movies (movie_title, movie_cast, movie_director, movie_image_f
n, movie_language,
                        movie_release_date, movie_description) VALUES ('$iname', '$icast'
, '$idirect', '$ifn', '$ilang',
                        date('$ireldate'), '$idesc' )"

```

Purpose	Manage the shows (closing shows of running movies)
Pages Impacted	manageShow.php manageShow2.php manageShow3.php manageShow4.php
Brief description	Fetch city theatre, movie scheduled all the shows will be displayed and admin can close the shows as per his convenience
SQL statement	#6

Select the city where movies are scheduled:

```
"SELECT distinct theatre_location from $t_theatre") as $rs1){
    $cities[] = array( "tcity" => $rs1['theatre_location']

```

Select the theatres in city where movies are scheduled:

```
"SELECT theatre_location, theatre_id, theatre_name from $t_theatre") as $rs2){
    $theatres[$rs2['theatre_location']][] = array("tid" => $rs2['t
heatre_id'], "tname" => $rs2['theatre_name']

```

Purpose	To display all the reservations booked in a show
Pages Impacted	ticketShow.php ticketShow2.php ticketShow3.php
Brief description	Fetch city theatre , movie and using the show id find the number of seats in reservation table and names of each customer in tickets table
SQL statement	#7

To show all running shows of selected slot:

```
"select show_id, show_date, show_slot, show_status from $t_shows
    where show_theatre_id = $theatreID and show_movie_id=$tMovieID and sho
w_status <> 'closed'"

```

To show number of tickets:

```
"select sum(reservation_seats_booked) as booked from $t_reservation a,
                        $t_shows b where a.reservation_show_id=$tshowi
d and a.reservation_show_id=b.show_id
                        and b.show_date='$tshowdate' and b.show_slot =
'$tshowslot'
                        group by reservation_show_id")-
>fetch()['booked']

```

Normalization:

1NF(RULES):

- Each column should contain atomic values.
- A column should contain values that are of the same type.

- Each column should have a unique name.

As our table follows these conditions our table would look like:

Functional Dependencies:

Tables:

admin:

FD1: admin_id -> admin_name, admin_contact, admin_pwd, admin_username

customer:

FD1: id -> cust_name, cust_pwd, cust_email_id, cust_ph_no, cust_age, cust_gender, cust_username

movies:

FD1: movie_id -> movie_title, movie_director, movie_cast, movie_description, movie_release_date, movie_language, movie_image_fn

reservation:

FD1: reservation_id -> reservation_show_id, reservation_cust_id, reservation_seat_type, reservation_seats_booked, reservation_amount, reservation_payment_status, reservation_payment_mode

ticket:

FD1: ticket_id -> ticket_reservation_id, ticket_name, ticket_age, ticket_gender

schedule:

FD1: schedule_id -> schedule_screen_id, schedule_date, schedule_movie_id, schedule_slot, schedule_status

FD2 : schedule_seat_id -> schedule_seat_type, schedule_seats_available

screens:

FD1: screen_id -> screen_name, screen_location

FD2: screen_seat_id -> seat_type, seats_no_of_seats, seat_price

2NF(RULES):

- It should be in the 1 st normal form.

- It should not have Partial Dependencies.

All tables are in 2NF form so no change in schema

3NF(RULES):

- It should be in 2 nd normal form.
- It should not have Transitive Dependencies.

Functional Dependencies:

Tables:

admin:

FD1: admin_id -> admin_name, admin_contact, admin_pwd, admin_username

customer:

FD1: id -> cust_name, cust_pwd, cust_email_id, cust_ph_no, cust_age, cust_gender, cust_username

movies:

FD1: movie_id -> movie_title, movie_director, movie_cast, movie_description, movie_release_date, movie_language, movie_image_fn

reservation:

FD1: reservation_id -> reservation_show_id, reservation_cust_id, reservation_seat_type, reservation_seats_booked, reservation_amount, reservation_payment_status, reservation_payment_mode

ticket:

FD1: ticket_id -> ticket_reservation_id, ticket_name, ticket_age, ticket_gender

schedule:

FD1: schedule_id -> schedule_screen_id, schedule_date, schedule_movie_id, schedule_slot, schedule_status

FD2 : schedule_seat_id -> schedule_seat_type, schedule_seats_available

As we can see schedule has transitive dependency nature it further gets splitted to following tables

Column Name	#	Data Type	Not Null	Auto Increment	Key	Default	Extra
schedule_id	1	int	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PRI		auto_increme
schedule_screen_id	2	int	<input checked="" type="checkbox"/>	<input type="checkbox"/>	MUL		
schedule_date	3	date	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
schedule_movie_id	4	int	<input checked="" type="checkbox"/>	<input type="checkbox"/>	MUL		
schedule_slot	5	enum('morning','	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
schedule_status	6	enum('running','u	<input type="checkbox"/>	<input type="checkbox"/>			
schedule_seat_type	7	enum('normal','d	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
schedule_seats_availa	8	int	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
schedule_seat_id	9	int	<input checked="" type="checkbox"/>	<input type="checkbox"/>			

==>>

Column Name	#	Data Type	Not Null	Auto Increment	Key	Default	Extra
show_id	1	int	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PRI		auto_increme
show_theatre_id	2	int	<input checked="" type="checkbox"/>	<input type="checkbox"/>	MUL		
show_date	3	date	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
show_movie_id	4	int	<input checked="" type="checkbox"/>	<input type="checkbox"/>	MUL		
show_slot	5	enum('morning','	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
show_status	6	enum('running','u	<input type="checkbox"/>	<input type="checkbox"/>			

screens:

FD1: screen_id -> screen_name, screen_location

FD2: screen_seat_id -> seat_type, seats_no_of_seats, seat_price

+

Column Name	#	Data Type	Not Null	Auto Increment	Key
inventory_show_id	1	int	<input type="checkbox"/>	<input type="checkbox"/>	MUL
inventory_seat_type	2	enum('normal','d	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
inventory_seats_available	3	int	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

schema for shows : (show_id, show_theatre_id, show_dates, how_movie_id, show_slotshow_status)

FD1 : show_id -> show_theatre_id, show_dates, how_movie_id, show_slotshow_status

schema for show_inventory:(inventory_show_id, inventory_seat_type, inventory_seats_available)

FD1 : inventory_show_id -> nventory_seat_type, inventory_seats_available

screens:

FD1: screen_id -> screen_name, screen_location

FD2: screen_seat_id -> seat_type, seats_no_of_seats, seat_price

As we can see screens has transitive dependency nature it further gets splitted to following tables

Column Name	#	Data Type	Not Null	Auto Increment	Key	Default	Extra
123 screen_id	1	int	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PRI		auto_increme
ABC screen_name	2	char(30)	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
ABC screen_location	3	char(30)	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
ABC seat_type	4	enum('normal','d	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
123 seats_no_of_seats	5	int	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
123 seat_price	6	decimal(10,0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
123 screen_seat_id	7	int	<input checked="" type="checkbox"/>	<input type="checkbox"/>			

==>

Column Name	#	Data Type	Not Null	Auto Increment	Key	Default	Extra
123 theatre_id	1	int	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PRI		auto_increme
ABC theatre_name	2	char(30)	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
ABC theatre_location	3	char(30)	<input checked="" type="checkbox"/>	<input type="checkbox"/>			

+

Column Name	#	Data Type	Not Null	Auto Increment	Key	Default	Extra
123 seat_id	1	int	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PRI		auto_increme
123 seat_theatre_id	2	int	<input checked="" type="checkbox"/>	<input type="checkbox"/>	MUL		
ABC seat_type	3	enum('normal','d	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
123 seats_no_of_seats	4	int	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
123 seat_price	5	decimal(10,0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>			

schema for theatre :(theatre_id, theatre_name, theatre_location)

FD1: theatre_id -> theatre_name, theatre_location

schema for seats : (seat_id, seat_theatre_id, seat_type, seats_no_of_seats, seat_price)

FD2: seat_id -> seat_theatre_id, seat_type, seats_no_of_seats, seat_price

BCNF(RULES):

- It should be in 3 rd normal form.
- No non-prime attribute should derive any prime attribute

All our tables satisfies all these conditions so it remains the same

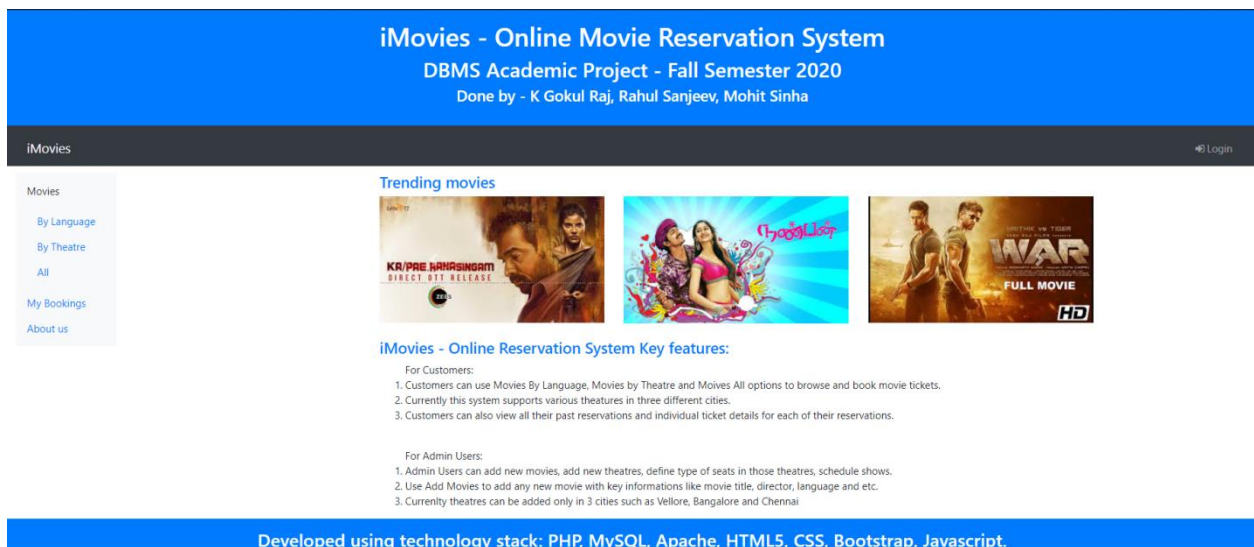
4. Run-Through : iMovie Ticket Booking:

As a customer:

Index2.php Page (Landing Page):

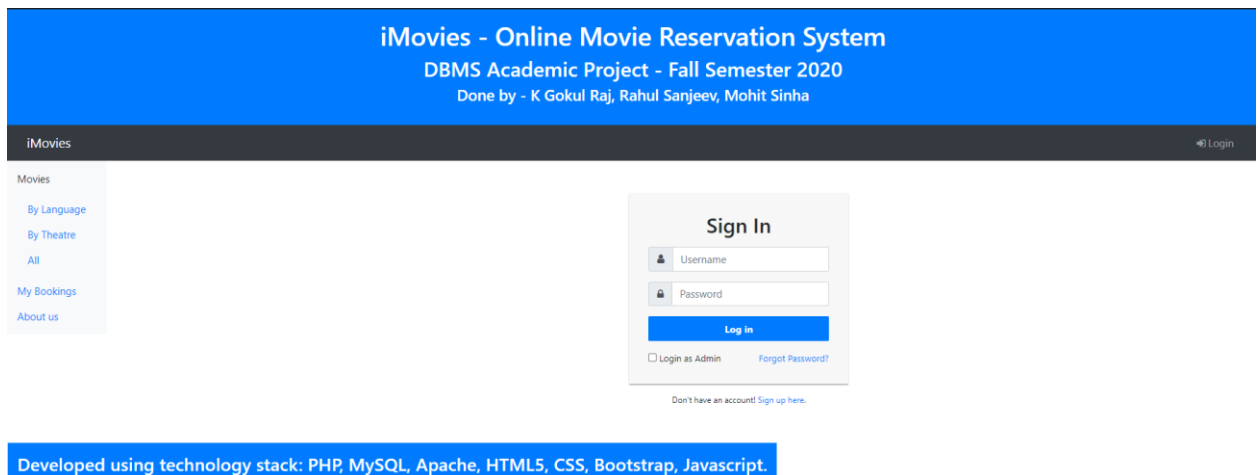
After you enter the website URL you will be directed to index2.php page which consists of three main containers (segments) :

- 1) **Horizontal NAV BAR** : which contains the menu for directing to index2.php – iMovies
Login – which directs the customer to login page\
- 2) **Vertical NAV BAR** : Contains the list of functions/options available for customer to make it more attractive, user friendly website and the list of options which user can make use of
- 3) **Carousel** : Top 6 trending movies will be displayed to user in carousel mode



Registration.php Page:

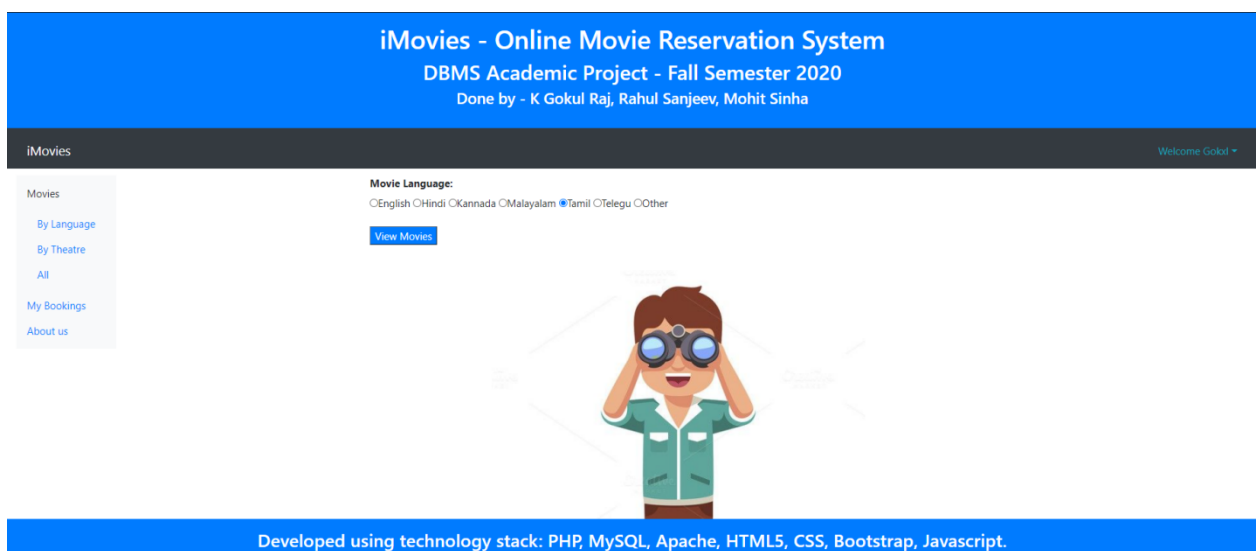
- 1) User can login with his credentials which will set the login menu in the NAV BAR with his name
- 2) If user has not yet registered he can do it by clicking on the Sign up here href link
- 3) If the user is a admin (which will be registered by an authorized person who has access to the respective databases directly.



By Language:

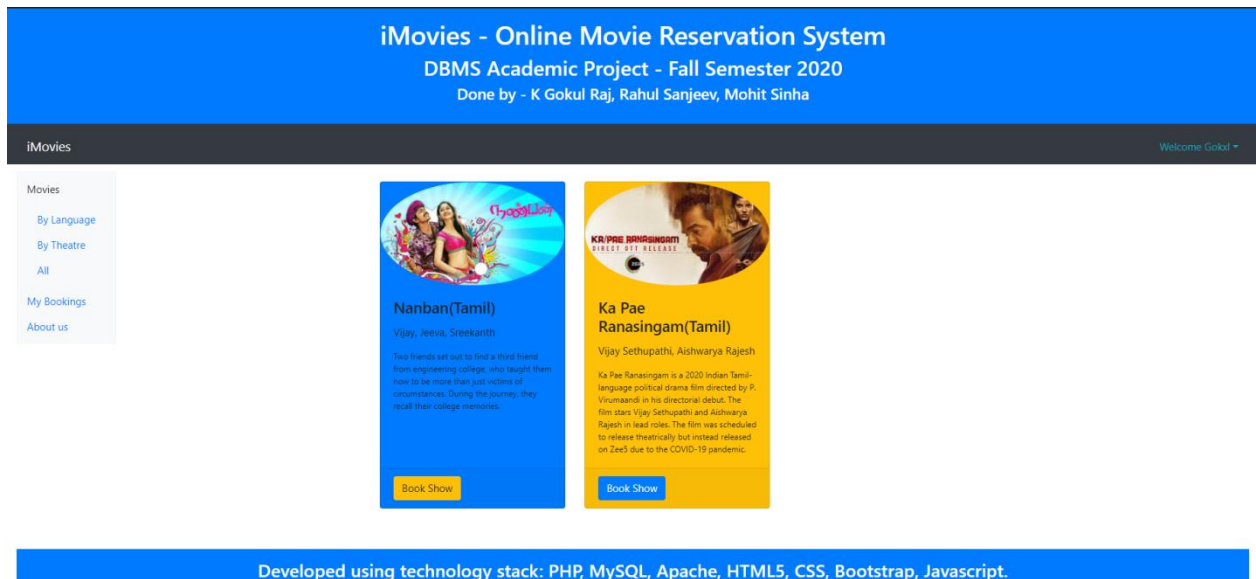
viewLang.php:

- 1) If the customer wants to see movies of specific movies he can make use of the By Language option.
- 2) He can select the language which he wants. The language id will be sent to the next page



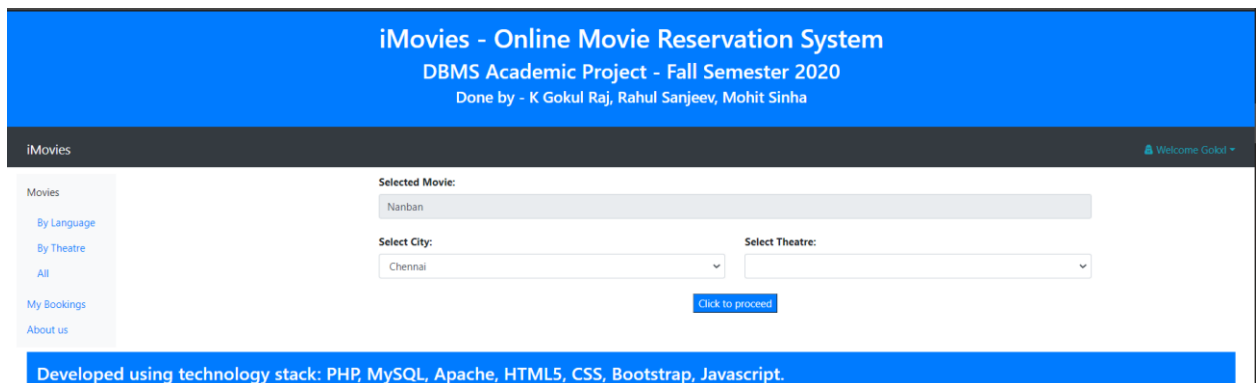
viewLang2.php:

- 1) The movies of the selected language will be displayed and the user can click the Book Show button to proceed for the next step of booking
- 2) The movie_id will be sent to the next page



bookShow.php:

- 1) The selected movie of selected language will be displayed as a read-only input so that data integrity is not violated, if the user wants to change his choice of language he has to again start from language.
- 2) Customer has to select the city and the respective theatre present in the selected city.
theatre_id will be sent to next page



bookShow2.php:

- 1) Customer has to select the date and slot which are available for the respective date.
- 2) All the previous id's and the date and slot will be sent to next page

iMovies - Online Movie Reservation System
DBMS Academic Project - Fall Semester 2020
Done by - K Gokul Raj, Rahul Sanjeev, Mohit Sinha

iMovies 🔔 Welcome Gokul ▾

Movies

- By Language
- By Theatre
- All
- My Bookings
- About us

Congratulations!... your booking completed successfully.

Booking Reference: 8 **City:** Vellore **Theatre:** Venus **Movie:** Nanban

Date: 2020-01-10 **Slot:** evening **Payment Mode:** Net **Amount Paid:** 90

Current seats availability **Seat Type: normal No. of Seats: 14**

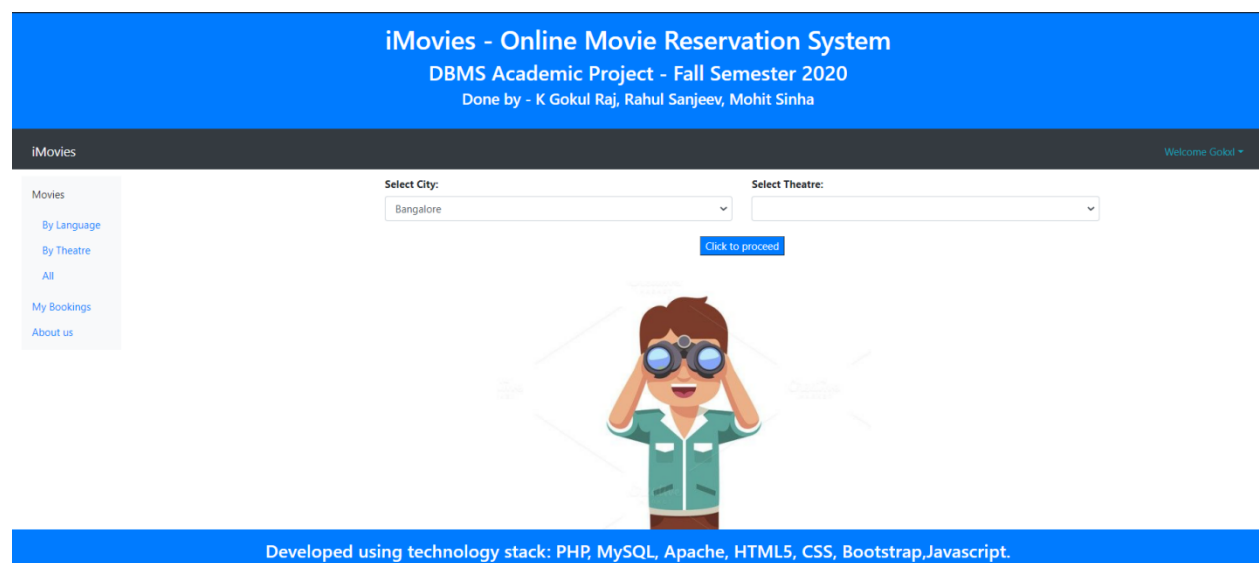
Movie Tickets:

Ticket ID	Customer Name	Gender	Age	Seat Type	Ticket Cost
20	Gokul	m	22	normal	90
Total Amount Paid:					90

Check your email/SMS. Tickets will be delivered through registered email & mobile number.

Developed using technology stack: PHP, MySQL, Apache, HTML5, CSS, Bootstrap, Javascript.

viewTheatre.php: To view movies based on the theatre you want to go and watch



viewAll.php: Display all the movies added by the admin to this Booking system portal

myBookings.php: To display all the bookings of the user

iMovies - Online Movie Reservation System
DBMS Academic Project - Fall Semester 2020
 Done by - K Gokul Raj, Rahul Sanjeev, Mohit Sinha

iMovies Welcome Gokul

Movies

- By Language
- By Theatre
- All
- My Bookings
- About us

My Booking History:

Res.ID	Movie Title	Theatre	Show Date	Show Slot	Seat Type	# of Seats	Amount
1	Aqua Man	Sangam(Chennai)	2020-11-01	morning	gold	3	390
2	Aqua Man	Sangam(Chennai)	2020-11-01	morning	gold	3	390
3	Aqua Man	Sangam(Chennai)	2020-11-01	morning	gold	3	390
4	Aqua Man	Sangam(Chennai)	2020-11-01	morning	gold	3	390
5	Aqua Man	Sangam(Chennai)	2020-11-01	morning	gold	3	390
6	Aqua Man	Sangam(Chennai)	2020-11-01	morning	gold	3	390
7	Nanban	Mayajaal(Chennai)	2020-01-06	night	normal	1	100
8	Nanban	Venus(Vellore)	2020-01-10	evening	normal	1	90

Developed using technology stack: PHP, MySQL, Apache, HTML5, CSS, Bootstrap, Javascript.

myTicket.php:

iMovies

Welcome Gokul

Movies

By Language

By Theatre

All

My Bookings

About us

My Reservation Details:

Res.ID	Movie Title	Theatre	Show Date	Show Slot	Seat Type	# of Seats	Amount
6	Aqua Man	Sangam(Chennai)	2020-11-01	morning	gold	3	390

My Ticket Details for this reservation:

TicketID	Name	Age	Gender	Cost
16	Gokul	19	m	130
17	Mohit	19	m	130
18	Rahul	19	m	130

Developed using technology stack: PHP, MySQL, Apache, HTML5, CSS, Bootstrap, Javascript.

Login as admin:

login.php

- 1) user has to click on the login as admin checkbox and enter his credentials to enter as admin
- 2) admin credentials will be given by the manager of the portal and owner of the organization

← → ↻ ⚠ Not secure | imovies2020.epizy.com/imovies/login.php

Apps

iMovies

Movies

By Language

By Theatre

All

My Bookings

About us

Sign In

admin1

••••••••

Log in

☒ Login as Admin

[Forgot Password?](#)

[Don't have an account! Sign up here.](#)

adminIndex.php

After logging as an admin you will be directed to a login home page. Here you will have option to add movies, add theaters, change show time and slot, modify seats etc.

Basic

Add Movie

Add Theatre / Seats

Main

Add Show / Inventory

Manage Shows




Report

Tickets by Show

Collection by Theatre

Collection by Movie

Trending movies



iMovies - Online Reservation System Key features:

Admin Users:

- Admin Users can add new movies, add new theatres, define type of seats in those theatres, schedule shows.
- Use Add Movies to add any new movie with key informations like movie title, director, language and etc.
- Use Add Theatre to add new theatre and type of seats, number of seats in that. Currently theatres can be added only in 3 cities such as Vellore, Bangalore and Chennai
- Use Add Show/Inventory option to schedule movie shows in the selected theatre, for specific dates and slots. If shows are already scheduled, conflict details will be displayed
- Use Manage Shows option to close scheduled shows in the selected theatre, for a specific date and slots
- Use various report options for administrative and management purpose. eg., use Tickets by Show to view list of all customers for a particular show and total collection for that show.

addMovies.php

In add Movies you can add movies by filling up the details like: title, description, cast, director, Image, language and release date.

Basic

Add Movie

Add Theatre / Seats

Main

Add Show / Inventory

Manage Shows

Report

Tickets by Show

Collection by Theatre

Movie Title:

Please fill out this field.

Movie Cast:

Please fill out this field.

Movie Director:

Please fill out this field.

Movie Language:

☐English ☐Hindi ☐Kannada ☐Malayalam ☒Tamil ☐Telegu ☐Other

Release Date:

Movie Short Description:


Please fill out this field.

Movie Image:

Choose File

No file chosen

Please fill out this field.



Add Movie

addTheatre.php

In add theater admin can add a new theater by filling theater name, city, seat type.

iMovies

Welcome admin1

Basic

Add Movie

Add Theatre / Seats

Main

Add Show / Inventory

Manage Shows

Report

Enter Theatre Name:

PVR

Select City:

Vellore

Seat Type	Number of Seats	Rate / Price
DELUXE	60	0

Add Entry

Add Theatre

addShow.php

In add show admin can add a new show to the site by selecting city, theater, movies, status, start date, and end date.

iMovies

Welcome admin1

Basic

Add Movie

Add Theatre / Seats

Main

Add Show / Inventory

Manage Shows

Report

Select City:

Bangalore

Select Theatre:

Select Movie:

WAR(Hindi)

Select Status:

Running

Select Start Date:

dd-mm-yyyy

Select End Date:

dd-mm-yyyy

Select Slot(s) for screening:

☐ Morning
 ☐ Matinee
 ☒ Evening
 ☒ Night

Create Show & Show Inventory

manageShow..php

In this page admin can manage different theaters by selecting city and theater name.

iMovies

Welcome admin1

Basic

Add Movie

Add Theatre / Seats

Main

Add Show / Inventory

Manage Shows

Select City:

Bangalore

Select Theatre:

Click to proceed

TECHNOLOGY USED:

1. Front end:

- HTML- Easy to use for the designing aspect of our site
- Bootstrap - is the most popular HTML, CSS and Javascript Framework to develop easy-to-use websites

2. Back end:

- PHP - It is a general-purpose scripting language which is extensively used for Web Development. It is implemented mainly in C language with some components of C++. We used it for the backend programming of our project

3. Database Connection:

- MySQL server 8.0 - It is used for the Database Connection of all the tables in the site to the backend. It allows to navigate through databases easily

4. IDE for Database Connection:

- dBeaver - is a SQL client software application and a database administration tool. For relational databases it uses the JDBC application programming interface to interact with databases via a JDBC driver.

5. IDE for HTML and Bootstrap:

- Visual Studio Code - is a free source-code editor made by Microsoft for Windows, Linux and macOS. Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git.

6. Website used for hosting:

- Infinity free.net – It is a free hosting platform for websites with PHP and MySQL. We have uploaded all files and database to this.