

TOPIC – THEATRE MANAGEMENT SYSTEM

Arjit Arora – 170001009

Yasasvi V Peruvemba - 170002061

Objective:-

With the cinema industry on a high and multiplexes and large cinema chains starting to entertain audiences, there arises a need for easy access and management from both the customer and the business provider's point of view.

These days, internet is within everyone's reach. What better way to solve this problem of management of all this data by using a back end database management software with a front end website.

The objective of project is to track the daily bookings, the shows of movie theatres, along with handling the movie database. Options we plan to include are the ability to add/remove from the movie database by the Theatre Management admin's account and the ability to book shows from the customers accounts.

The various aspects of the Theatre Management System can be presented in views of the different people involved with it. The main people involved in Theatre Management are

1. Administrator
2. Customer

Administrator's view:-

The administrator needs to know and control the following information at all times

- 1) Add/Remove shows for every movie in every multiplex.
- 2) Schedule of all movies in a day.
- 3) Schedule of a particular movie in a week.
- 4) Information of each customer with date, name and seat number of show.

Information about the customer include details like-

1. First Name
2. Last Name
3. Gender
4. Phone Number
5. Email ID

Customer's view:-

A customer needs to know the following information:

1. Availability of movie shows for the required date.
2. Movies sorted by date.
3. Movie schedule for the next 2 days.
4. Ticket Prices.
5. Check and Display Ticket.

Implementation:-

We plan to use Python to operate at the back end. Databases will be created and edited using SQL queries via MySQL. We plan to include features like sorting and listing movies via different attributes like language, rating, timings etc and use joins to display the conjunction of these attributes together. Extracting data from these databases would require extensive use of SQL commands.

Software Used -

- 1) Server version: 8.0.11 MySQL Community Server – GPL
- 2) Python 3.7.0
 1. DateTime=4.3
 2. Flask=1.0.2
 3. Jinja2=2.10
 4. mysql-connector-python=8.0.13
 5. Werkzeug=0.14.1
- 3) HTML, AJAX, JAVASCRIPT, BOOTSTRAP, CSS

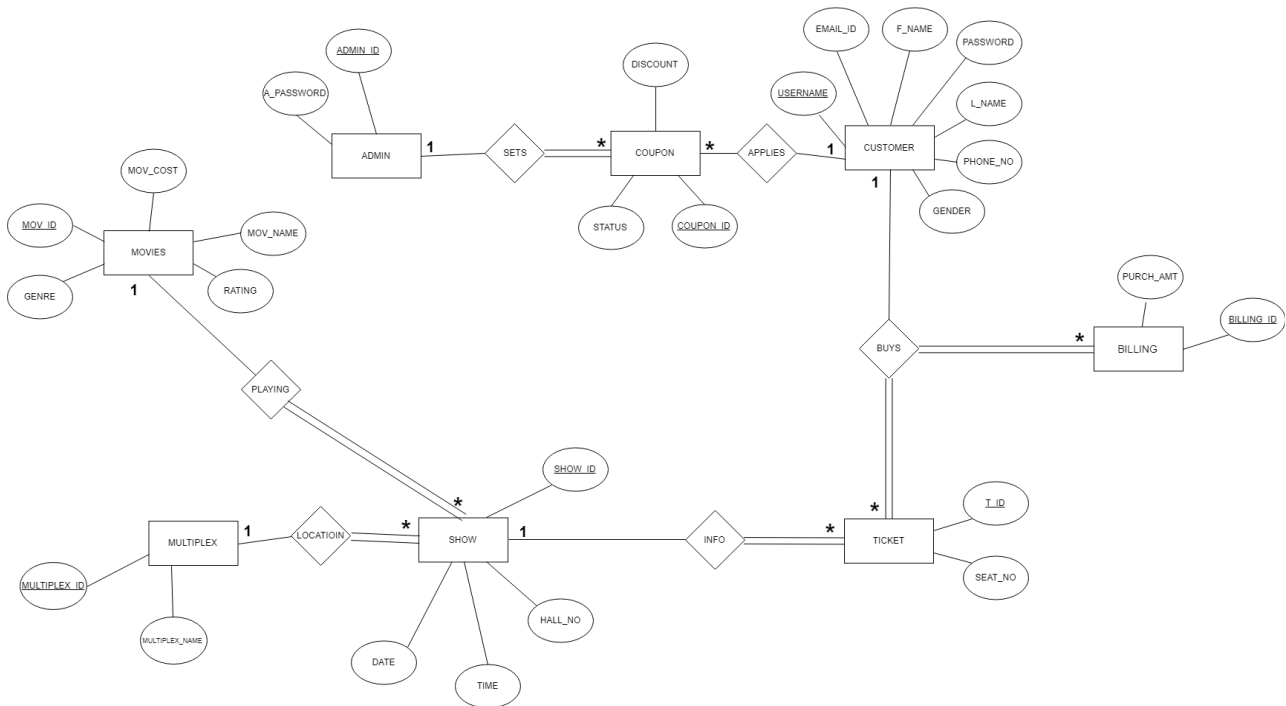
Expected Functionalities through automation:-

- 1) Better customer satisfaction.
- 2) Easy access to the information about movie timings.
- 3) Easy maintenance of the databases by the administrator.
- 4) Calculate the number of customers for study purposes.

Additional functionalities if time permits:-

- 1) Platinum, Gold priority seats along with the ordinary ones
- 2) Expansion into booking of events other than movies.
- 3) Adding of Multiplexes.

ER DIAGRAM



RELATIONAL SCHEMA

ENTITY SETS-

ADMIN (ADMIN_ID,A_PASSWORD)

F={ADMIN_ID->ADMIN_ID,PASSWORD}

CUSTOMER (USERNAME,PASSWORD,EMAIL_ID,F_NAME,L_NAME,PHONE_NO,GENDER)

F={USERNAME->USERNAME,PASSWORD,EMAIL_ID,L_NAME,F_NAME,PHONE_NO,GENDER}

BILLING (USERNAME,PURCH_AMT,DATE_OF_PURCHASE)

F={USERNAME->USERNAME,PURCH_AMT,DATE_OF_PURCHASE}

COUPON (COUPON_ID,DISCOUNT,STATUS)

F={COUPON_ID->COUPON_ID,DISCOUNT,STATUS}

TICKET (T_ID,SEAT_NO,CUST_ID,SHOW_ID)

F={T_ID->T_ID,SEAT_NO,CUST_ID,SHOW_ID}

SHOW (SHOW_ID,HALL_NO,TIME,DATE,MULTIPLEX_ID,MOV_ID)

F={SHOW_ID->SHOW_ID,HALL_NO,TIME,DATE,MULTIPLEX_ID,MOV_ID}

MULTIPLEX (MULTIPLEX_ID,MULTIPLEX_NAME,CITY)

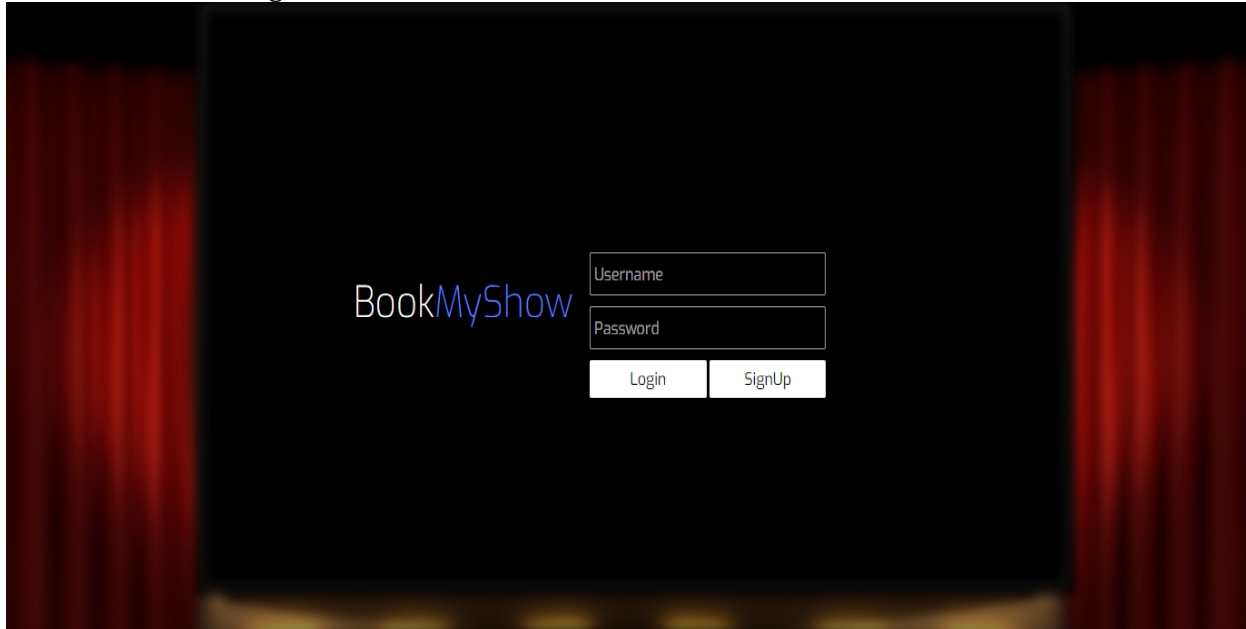
F={MULTIPLEX_ID->MULTIPLEX_ID,MULTIPLEX_NAME,CITY}

MOVIE (MOV_ID,MOV_NAME,RATING,GENRE)

F={MOV_ID->MOV_ID,MOV_NAME,RATING,GENRE}

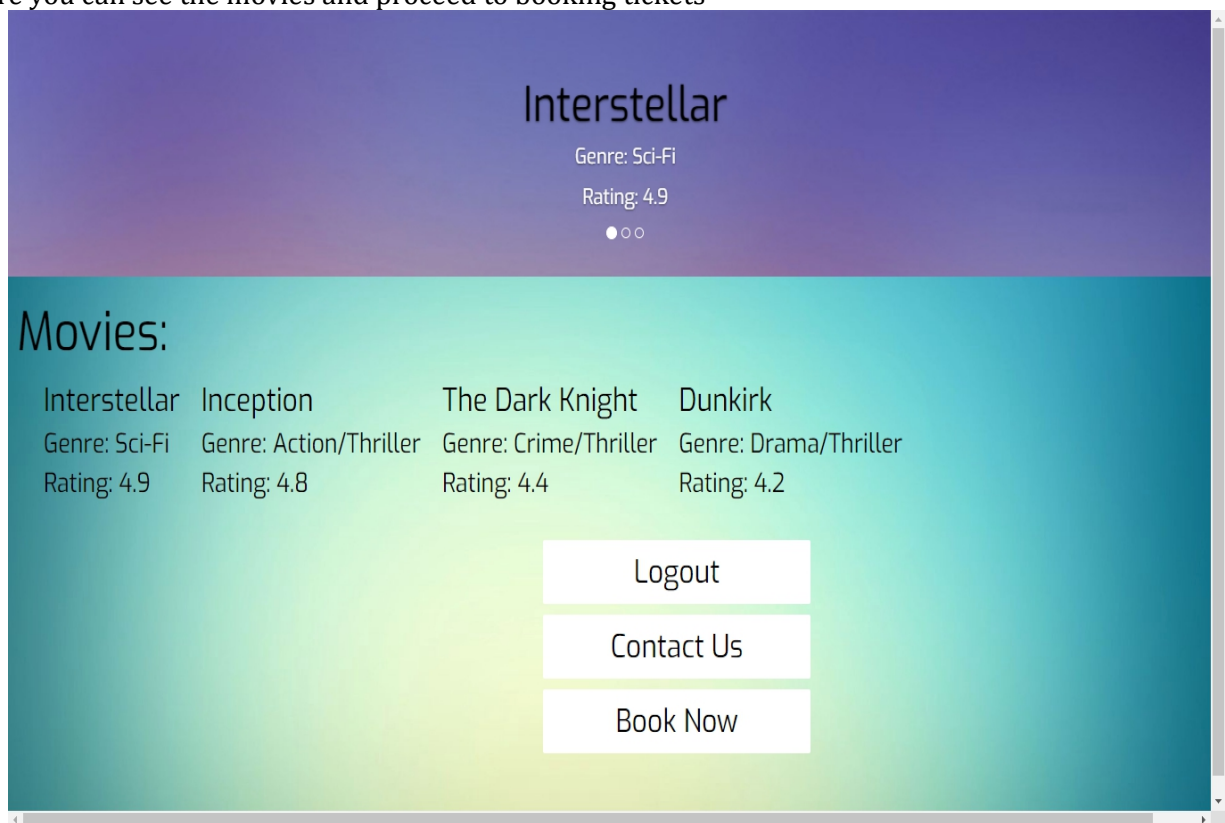
LOGIN PAGE

Here a customer can login with their credentials-



HOME PAGE

Here you can see the movies and proceed to booking tickets-



FEEDBACK PAGE

Here the customer can submit feedback on their experience-

CONTACT US

We at BookMyShow have always tried our level best to provide you with the best possible services. We have people willing to help you out even for the slightest issues you face. Feel free to fill up the form and we guarantee to contact you back within 24 hours.

Fill this form

It was a great experience.

SUBMIT

BOOKING A TICKET

Here the Customer must select the movie, multiplex and date of the show-

BOOK TICKET

CHOOSE MOVIE:
Interstellar ↓

CHOOSE MULTIPLEX:
M2 ↓

CHOOSE DATE:
dd-mm-yyyy

SHORTLIST SHOWS

BACK

Here the customer gets to select the show timing and whether to apply a coupon-

BOOK TICKET

MOVIE:
Interstellar

MULTIPLEX:
M2

SHOW DATE:
21-10-2018

SHOW TIMING:
22:30:00 ↓

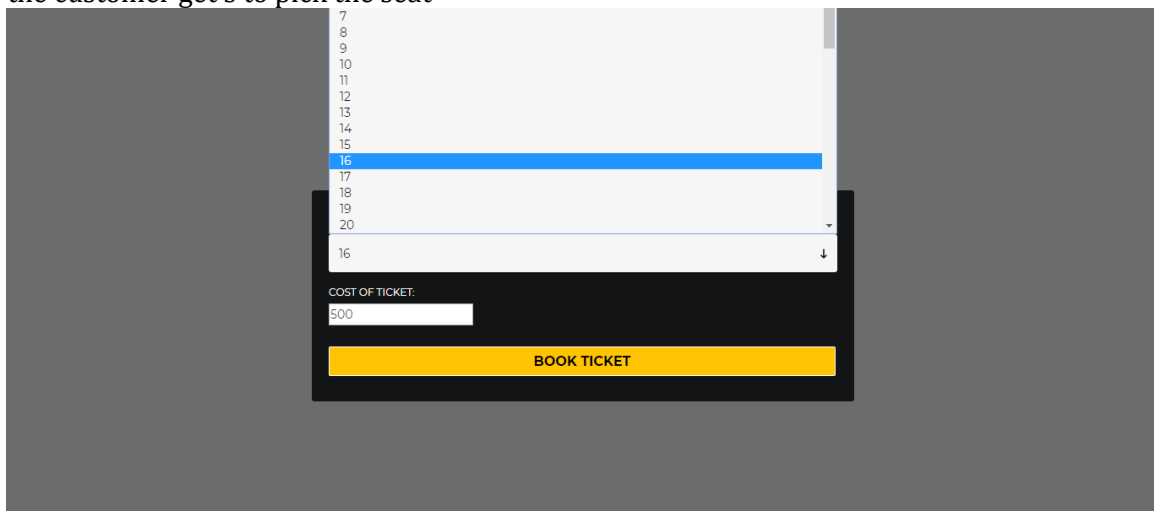
COUPON CODE

APPLY COUPON & CONTINUE

CONTINUE

BACK

Here the customer get's to pick the seat-

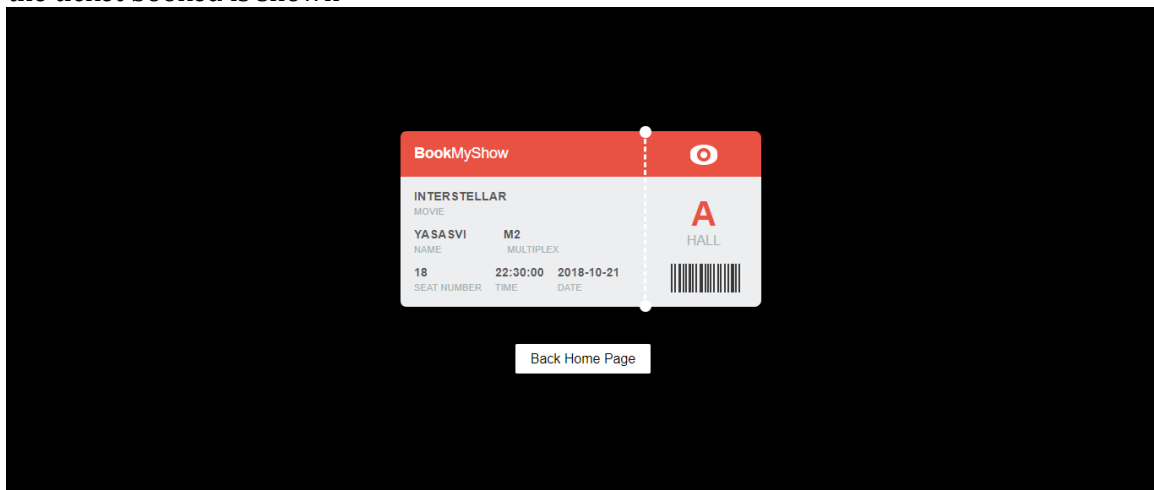


7
8
9
10
11
12
13
14
15
16
17
18
19
20

COST OF TICKET:
500

BOOK TICKET

Here the ticket booked is shown-



BookMyShow

INTERSTELLAR
MOVIE

YASA SVI M2
NAME MULTIPLEX

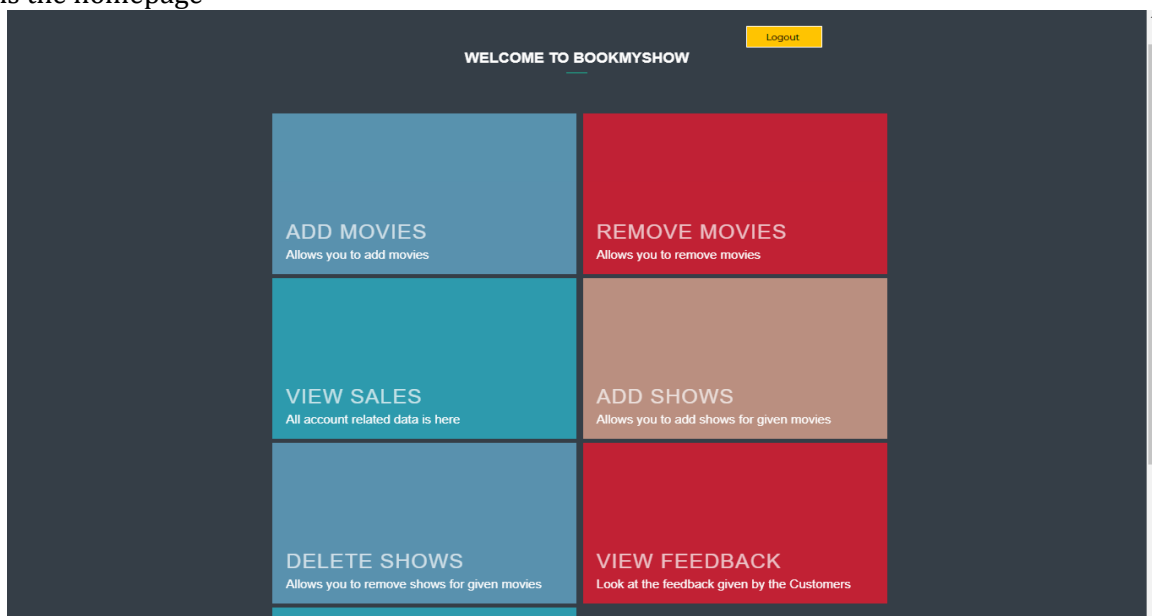
18 22:30:00 2018-10-21
SEAT NUMBER TIME DATE

A
HALL

Back Home Page

ADMINISTRATOR

Here is the homepage-



WELCOME TO BOOKMYSHOW Logout

ADD MOVIES
Allows you to add movies

REMOVE MOVIES
Allows you to remove movies

VIEW SALES
All account related data is here

ADD SHOWS
Allows you to add shows for given movies

DELETE SHOWS
Allows you to remove shows for given movies

VIEW FEEDBACK
Look at the feedback given by the Customers

Here is the page to add movies-

ADD MOVIE

NAME OF MOVIE:
Shutter Island

GENRE:
Action/Thriller

RATING(OUT OF 5):
5

PRICE OF TICKET:
500

ADD MOVIE

BACK

Here is the page to Remove Movies-

REMOVE MOVIE

NAME OF MOVIE:
Dunkirk

Dunkirk
Inception
Interstellar
The Dark Knight

BACK

Here is the page to view multiplex sales-

SELECT CRITERIA

CHOOSE MULTIPLEX:
M1

CHOOSE INTERVAL:
Last Week

SHOW DETAILS BACK

Ticket_ID	Username	Purchase Amount	Date of Purchase	Multiplex
19	Yasasvi	300	2018-11-16	M1
20	Yasasvi	300	2018-11-16	M1
21	Yasasvi	300	2018-11-16	M1
22	Yasasvi	225	2018-11-16	M1

[Back](#)

Here is the page to add shows-

ADD SHOW

SELECT MULTIPLEX:
M1

SELECT MOVIE:
Dunkirk

CONTINUE

BACK

Here is the table of pre existing shows and form to fill details of the new show-

Show_ID	Hall	Date	Timing
7	A	2018-10-21	23:30:00
8	B	2018-10-21	20:30:00
9	B	2018-10-22	21:30:00

ADDING A SHOW

SELECT HALL:
A

ENTER DATE:
dd-mm-yyyy

ENTER TIME:
--:--:--

MOVIE:
Dunkirk

MULTIPLEX:
3

ADD SHOW

BACK

Here the admin can delete shows-

A screenshot of a web form titled "SELECT MULTIPLEX TO REMOVE SHOW" in large yellow letters on a dark gray background. The form is a dark gray box with a white label "NAME OF MULTIPLEX:" above a white dropdown menu showing "M1" with a downward arrow. Below the dropdown is a yellow button labeled "REMOVE SHOW". At the bottom of the form is another yellow button labeled "BACK".

Here the pre-existing shows are shown from which the admin selects the show to delete-

A screenshot of a web page titled "REMOVING SHOW" in large yellow letters on a dark purple background. At the top is a table with the following data:

Show_ID	Movie	Multiplex	Hall	Date	Timing
1	Inception	1	A	2018-10-21	19:30:00
2	Inception	1	A	2018-10-22	19:30:00
10	The Dark Knight	1	A	2018-10-21	21:30:00

Below the table is a dark gray box with a white label "SELECT SHOWID TO REMOVE:" above a white dropdown menu showing "1" with a downward arrow. Below the dropdown is a yellow button labeled "REMOVE".

Here the admin can review the feedbacks provided by the Users-

A screenshot of a web page showing a table of user feedback. The table has three columns: "Message", "Date", and "Username".

Message	Date	Username
I had a great time and an easy booking experience	2018-11-14	Yasasvi
	2018-11-14	Yasasvi
This is amazing	2018-11-16	Arjit
Hello, it has been quite a wonderful experience	2018-11-16	Yasasvi
It was great	2018-11-16	Yasasvi
It was a great experience.	2018-11-22	Yasasvi

At the bottom left of the page is a small "Back" button.

Here the admin can add coupons for customers to use-

ADD COUPON

ENTER COUPONID:

QWERTY

ENTER DISCOUNT:

40

ADD COUPON

BACK

-----XXX-----