

MOVIE TICKET BOOKING WEB APPLICATION

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In
Information Technology

Mini Project
Final Evaluation Report
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ABSTRACT

Whenever we have to watch a movie in a cinema hall we decide it by watching their trailer and then book the ticket on an offline platform in a particular cinema. As going to an offline platform for booking tickets may be difficult for everyone as the movie theatre can be very far away from the home sometimes so by booking tickets online one can save his/her time by not standing in long queues for booking the movie tickets.

This dummy project aims to develop an online platform where we can watch movie details/trailers and can check about the availability of the tickets in a cinema hall and users can even book the tickets by signing up with his/her profile on the home page.

The project report is all about discussing about developing such a web application

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1. INTRODUCTION

1.1 BACKGROUND INFORMATION / MOTIVATION

One Day my friends and I were searching for a movie to watch in a theatre then first we had to search for its trailer on youtube to see if it's worth watching or not and then we decided if we should book tickets for this movie on an offline platform. So then an idea came to me that our life would be much easier if we can watch a movie by its particular genre and then by searching for it on the website we can watch its trailer and then decide to book tickets of their particular choice online. So users don't have to waste time booking the tickets on an offline platform. So this was a significant motivation for building this project.

1.2 LITERATURE SURVEY

One of the most popular web applications in the current Indian market related to the online movie ticket booking system is "Book My Show".

<https://in.bookmyshow.com>

It currently features over 50M+ downloads by users all over the world and it helps in booking tickets for various events and movies all over the globe. The only and a small limitation on the "Book My show app" is limited to purchase only a specified number of tickets for each event.

So the primary motivation in building the movie ticket booking system is that users can buy any number of tickets while purchasing for any movie in this dummy ticket booking model.

1.3 PROJECT OBJECTIVES

The primary objectives of the project are as follows:-

- 1. Searching movies with a genre**:- We can search the movie with a particular genre like comedy, Action, Adventure, etc. By clicking on a genre option on the web page it shows details of the movies with that particular genre.
- 2. Watching the movie trailer**:- After clicking on the movie if it's available in the database it will be redirected to its trailer on youtube where users can watch it's trailer and can see the details of that movie.
- 3. Checking of the available seats**:- The user can check for the seats of his/her choice available and can select the seats which are not occupied. All the information regarding the occupied seats is stored in the local database setup.
- 4. Ticket Booking of selected seats**:- After selecting the seats we will get the total amount of selected seats and then we can proceed with the dummy booking of it after filling in the payment details i.e Card details etc.

2. METHODOLOGY

2.1 SYSTEM ARCHITECTURE

This web application is mainly created under **Model View Controller(MVC)** as it is popularly called, is a software design pattern for developing web applications.

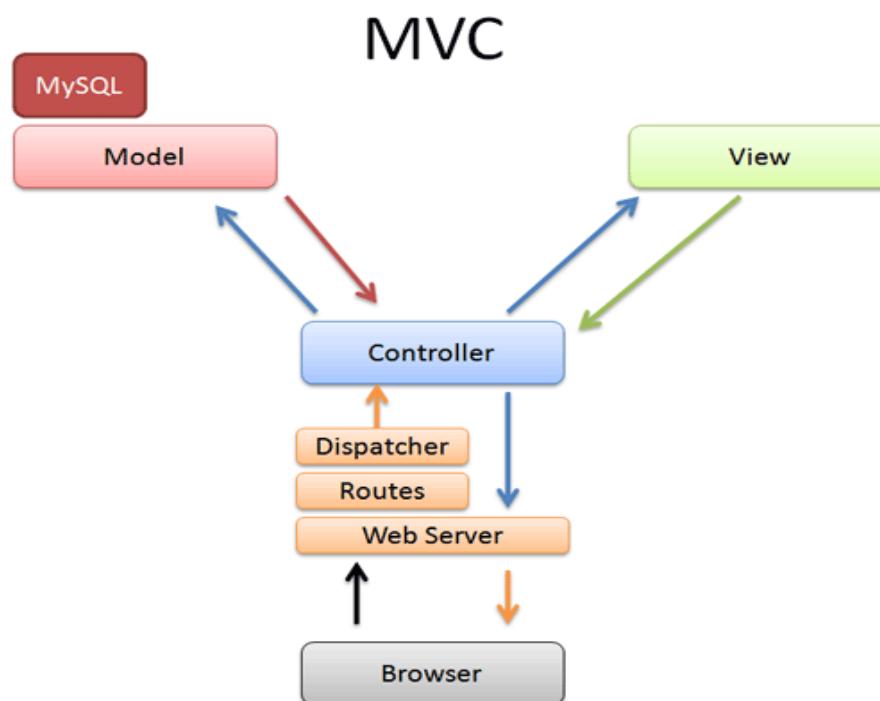
MVC is popular as it isolates the application logic from the user interface

And supports the separation of concerns. Here the Controller receives all requests for the application and then works with the model to prepare any data needed by the view that uses the data prepared by the controller to generate a final presentable response.

An MVC is made up of the following three parts:-

1. **Model**- The lowest level of the pattern is responsible for maintaining data.
2. **View**-This is responsible for displaying all or a portion of the data to the user.
3. **Controller**- Software Code that controls the interactions between the Model and View.

MVC (Model View Controller) flow diagram:-



The Project is mainly divided into three layers:-

1) Model Layer:-

This model component stores data and its related logic. It represents data that is being transferred between controller components or any other related business logic.

It responds to the request from the views and also responds to instructions from the controller to update itself. It is also the lowest level of the pattern which is responsible for maintaining data.

It is responsible for retrieving data and converting it into meaningful concepts for your application. This includes processing, validating, associating, or other tasks related to handling data.

At a first glance, Model objects can be looked at as the first layer of interaction with any database you might be using for your application. But in general, they stand for the major concepts around which you implement your application.

2) View Layer:-

The View renders a presentation of modeled data. Being separated from the Model objects, it is responsible for using the information it has available to produce any presentational interface your application might need.

For example, as the Model layer returns a set of data, the view would use it to render an HTML page containing it, or an XML formatted result for others to consume.

The View layer is not only limited to HTML or text representation of the data. It can be used to deliver a wide variety of formats depending on your needs, such as videos, music, documents, and any other format you can think of.

The view also represents the data from charts, diagrams, and tables. For example, any customer view will include all the UI components like text boxes, dropdowns, etc.

In this Project the View Layer does the following things:-

- a) It takes the request of the user to interact with the database and present the searched content to the user.
- b) It presents and renders the requested movie trailer HTML page in the searched genre to the user.
- c) When a user clicks the movie it redirects the user to the link of the movie trailer present in the database and presents it to the user.
- d) The view layer interacts with the user to provide the booking of the tickets by user's choice and then it presents the total amount of the seats selected by the user.
- e) Then the View layer presents or renders the payment page and presents a dummy booking to the user after the user fills in the card details.

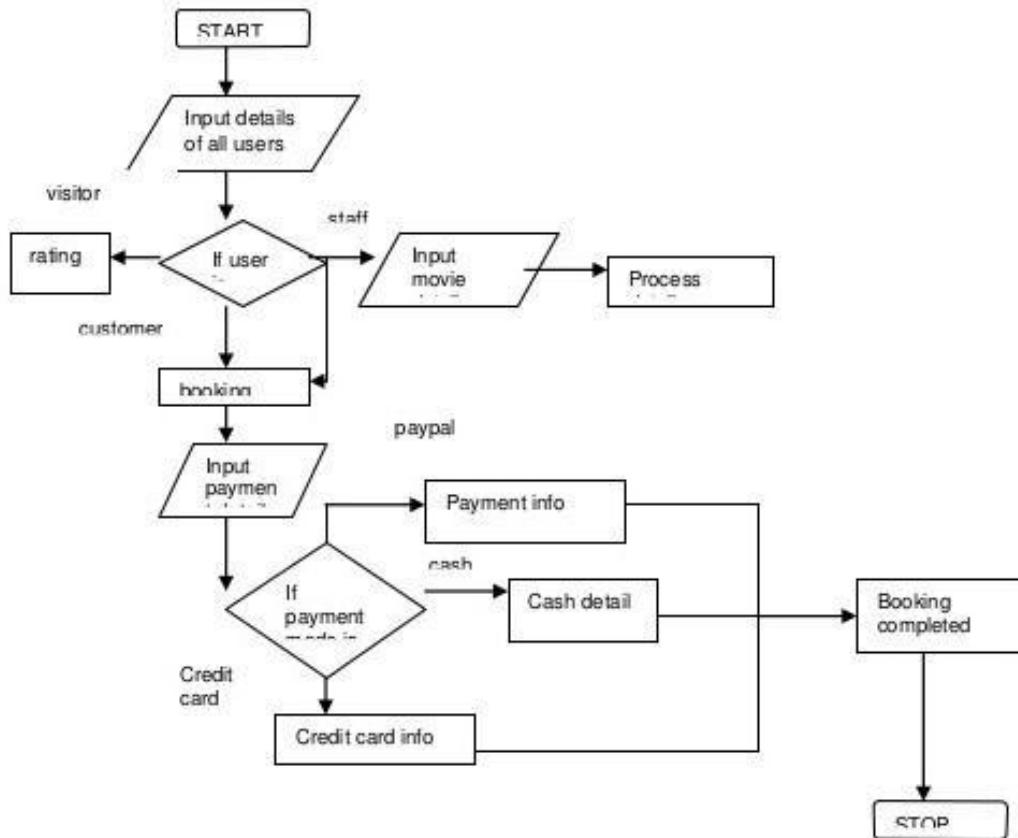
3) Controller Layer:-

The Controller layer handles requests from users. It is responsible for rendering a response with the aid of both the Model and the View layer.

A controller can be seen as a manager that ensures that all resources needed for completing a task are delegated to the correct workers. It waits for petitions from clients, checks their validity according to authentication or authorization rules, delegates data fetching or processing to the model, selects the type of presentational data that the clients are accepting, and finally delegates the rendering process to the View layer.

A Controller sends commands to the model to update its state(E.g., Saving a specific document). The controller also sends commands to its associated view to change the view's presentation (For example scrolling a particular document).

2.2 BLOCK DESIGN DIAGRAM:-



2.3 METHODOLOGY

The main features of the web application are as follows:-

- 1). The home page of the web application will have a list of the genre of movies, trending movies, the latest movies and a search option where users can specifically search for a movie.
- 2). The web page will be generated according to the data in the database for the searched genre or movie by the user and will be provided with the details such as release date, genre, runtime, etc of the searched movie.
- 3). The user needs to select the movie city and the particular time and date. The cinema has three different types of seats/classes viz Platinum, Gold, and Silver. Depending upon the availability and price the user can select the seats of his/her choice.
- 4). After selecting the seats, the user will be given the total amount of the seats selected by him, after which by clicking on the payment user will be directed and is required to fill in the card details for the dummy booking.

2.4 IMPLEMENTATION

1.) This web application is created mainly under RDBMS using MySQL for all transaction elements. MySQL is an open-source RDBMS system.

RDBMS (Relational database management system) is based on the Relational Model invented by E.F. Codd. It refers to a database that stores data in a structured format using rows and columns.

2.) The IDE used for building this project in Visual Studio Code. It is a free source code editor developed by Microsoft for developing web applications and for building various multi-purpose projects.

3). The language which we use for the server-side(backend) of the project is PHP as it is used worldwide in most web applications(almost 80%). Our system runs on the apache server version in the XAMPP control panel which supports PHP.

4) The Scripting Language used for the front end of the project is HTML, CSS, JAVAscript, JQuery, Bootstrap. JAVAscript is used here for all of the Client-Side Server Validation.

5) The database used for storing the information of the user and details of movies is MySQL. The view layer interacts with the database to provide the information to the user by rendering the HTML page of the requested information.

6) The Signup on the homepage stores all the information of the user in the database. The Name, Username, and Password are stored in VARCHAR format in the form of strings in the database. The phone number is stored in the format of INT in the form of strings in the database.

7) The movies are stored according to their genre in the database and when the user tries to access a particular genre the movies from the database of that genre will be fetched to the user on the page.

8) The selection of seats in the movie theatre is implemented through JQuery by using clicking events in it and then it is connected to a database to store the information of the selected seats and price of selected seats in the theatre.

9) The database will store the information of users in a user's local storage in a tabular format. The entity will be named as User_Info and the fields for the entity is as follows:-

- a). **NAME**- (Varchar)-Name of the user whose information has to be stored in the database
- b). **USERNAME**- (PRIMARY KEY)(Varchar)-it stores the username of the user and is unique for every user.
- c). **Phone Number**-(INT_10 digits)- it stores the mobile number is helpful to uniquely identify each row in a table.
- d).**PASSWORD**-(PROTECTED KEY)-(VarChar)-It protects the information of the user in the database.

2.5 TOOLS AND LIBRARIES

jQuery- jQuery is a fast, small, and feature-rich JavaScript library. It makes things like HTML document traversal and manipulation, event handling, animation, and Ajax much simpler with an easy-to-use API that works across a multitude of browsers.

BootStrap-Bootstrap is a free and open-source front-end development framework for the creation of websites and web apps. The Bootstrap framework is built on HTML, CSS, and JavaScript(JS) to facilitate the development of responsive sites and apps.

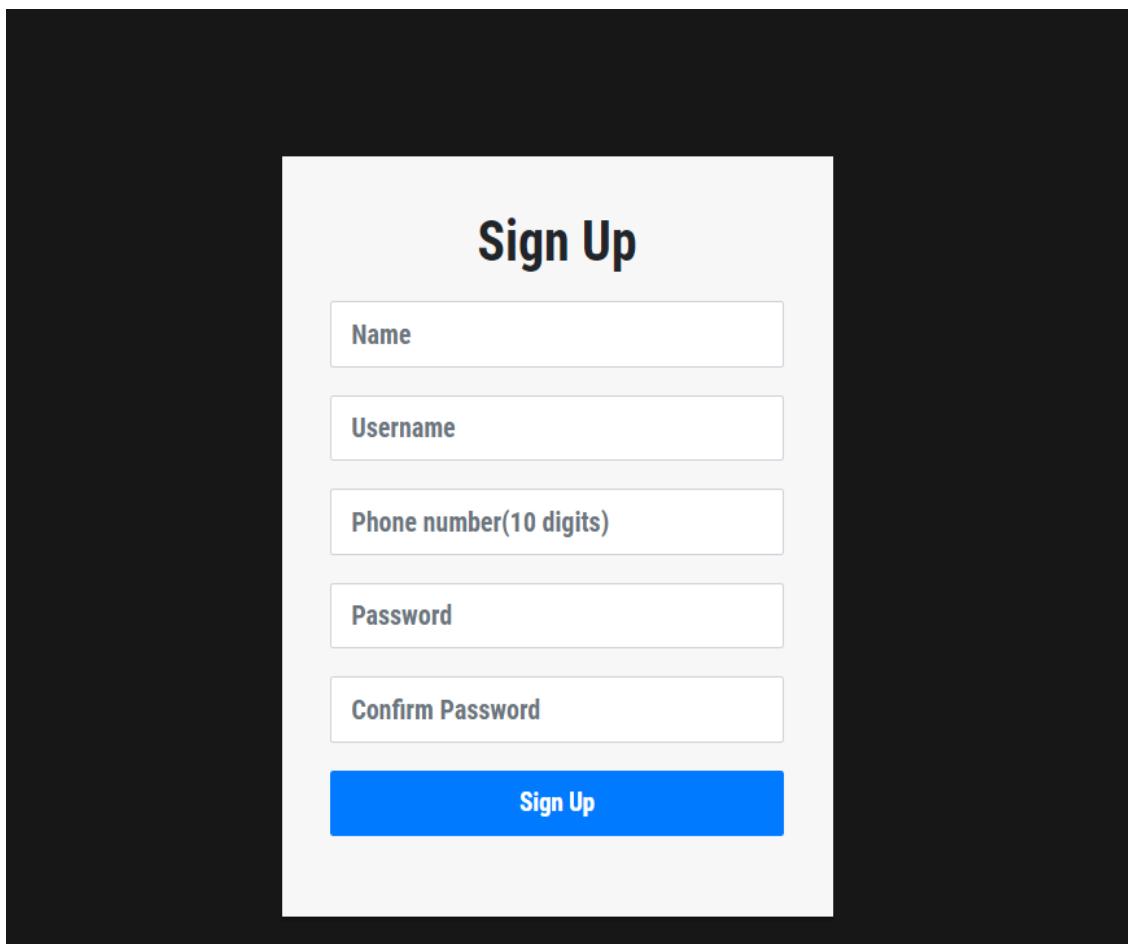
Foundation- Family of responsive front-end frameworks that make it easy to design beautiful responsive websites, apps, and emails that look amazing on any device.

Cake PHP: CakePHP is an open-source framework for PHP. It is intended to make developing, deploying, and maintaining applications

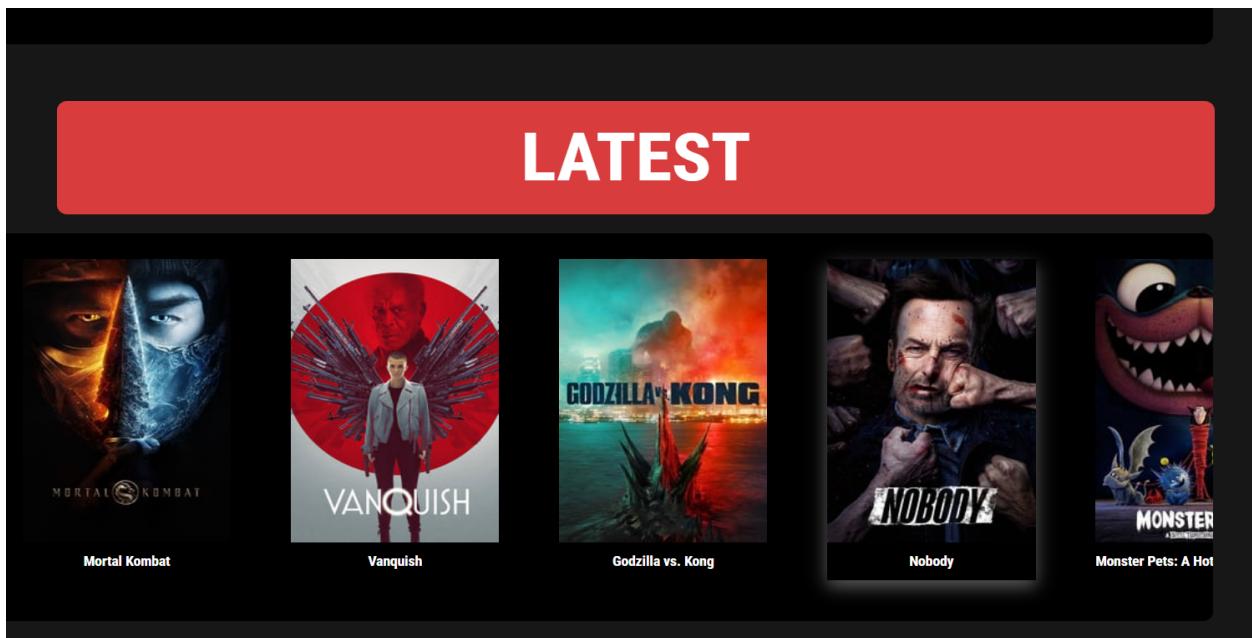
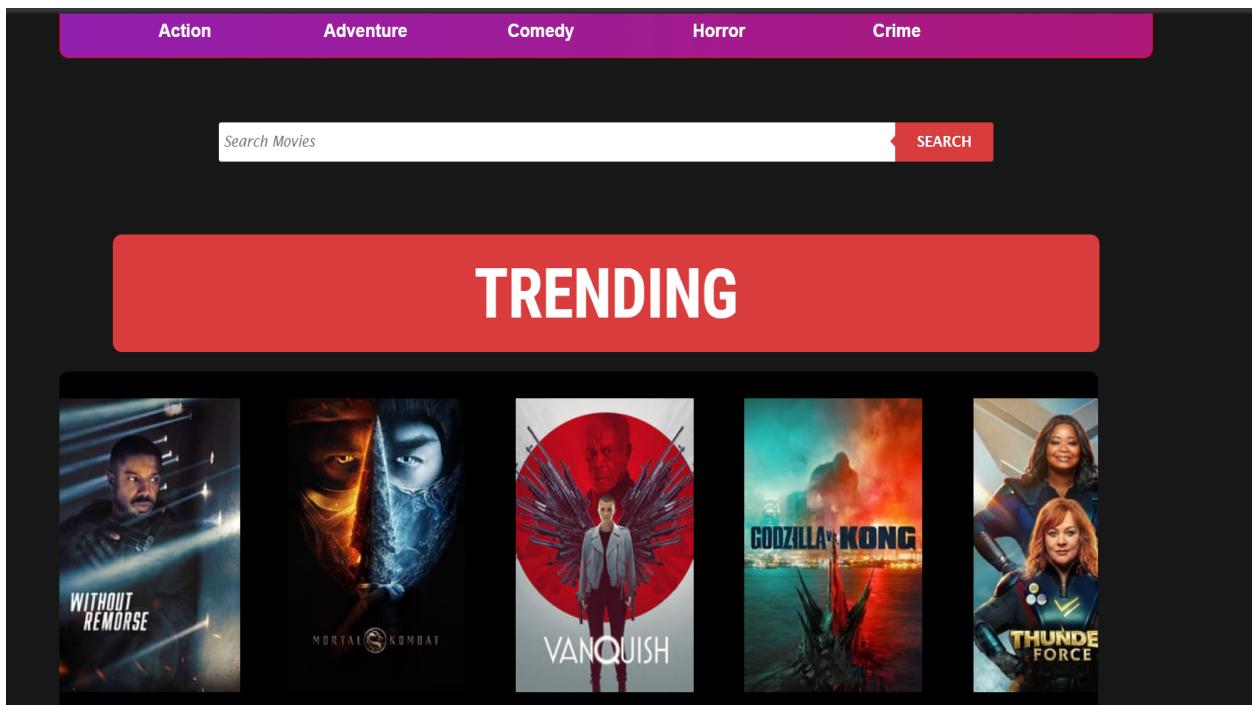
much easier. CakePHP is based on an MVC-like architecture that is both powerful and easy to grasp. Models, Views, and Controllers guarantee a strict, but a natural separation of business logic from data and presentation layers.

3. RESULT

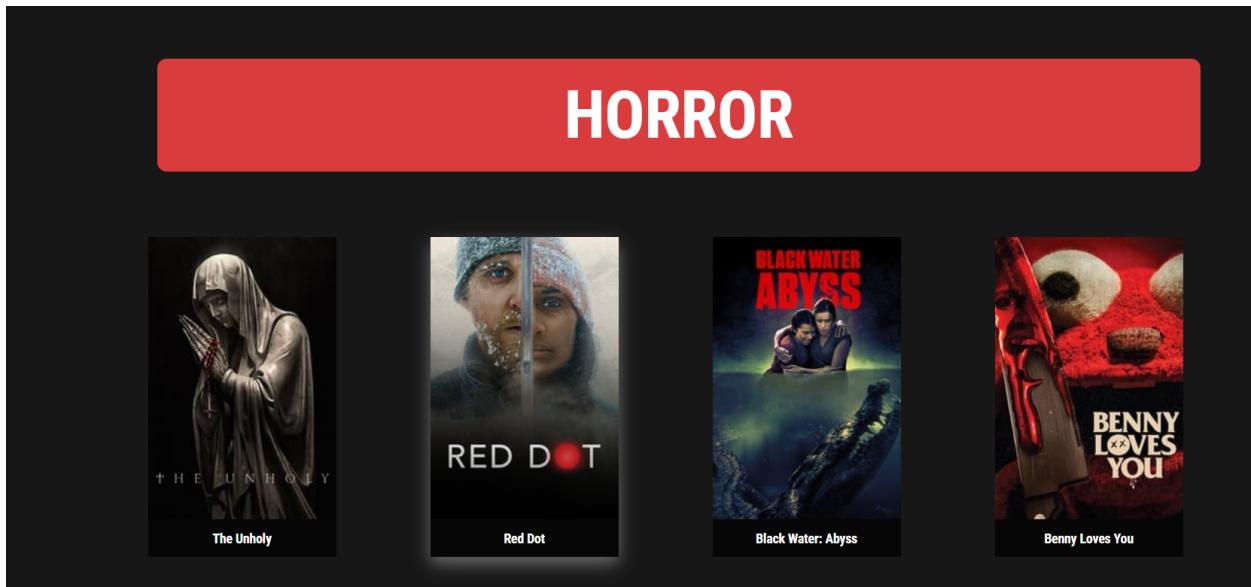
- 1).The user can sign up on the homepage to create his/her profile to book the tickets on the platform.



2).After we sign up with the profile We can have a look at the trending and latest movies in the market at the home page of the application.



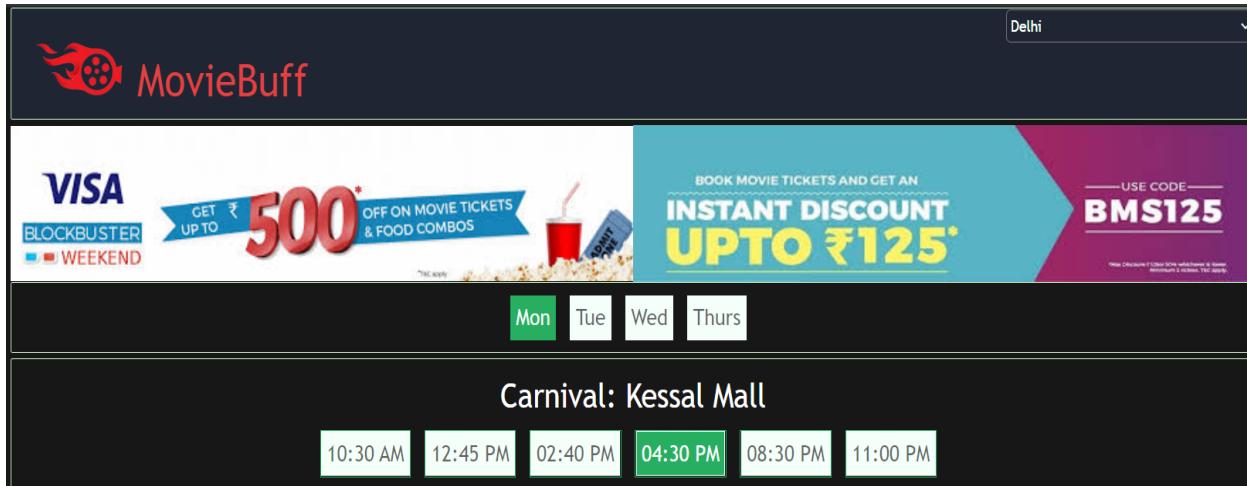
3). Searching movies with a particular genre shows the list of movies of that genre.



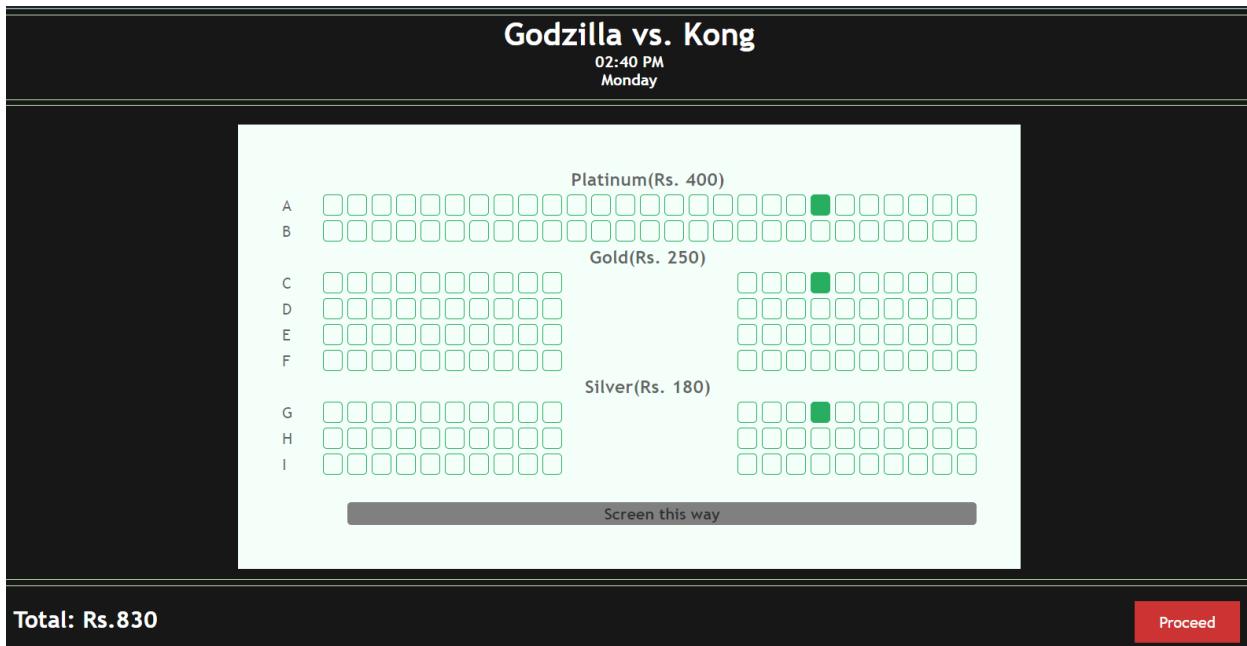
4). We can watch the movie trailer by clicking on the icon of that movie and it will redirect the user to the trailer of that movie on YouTube.



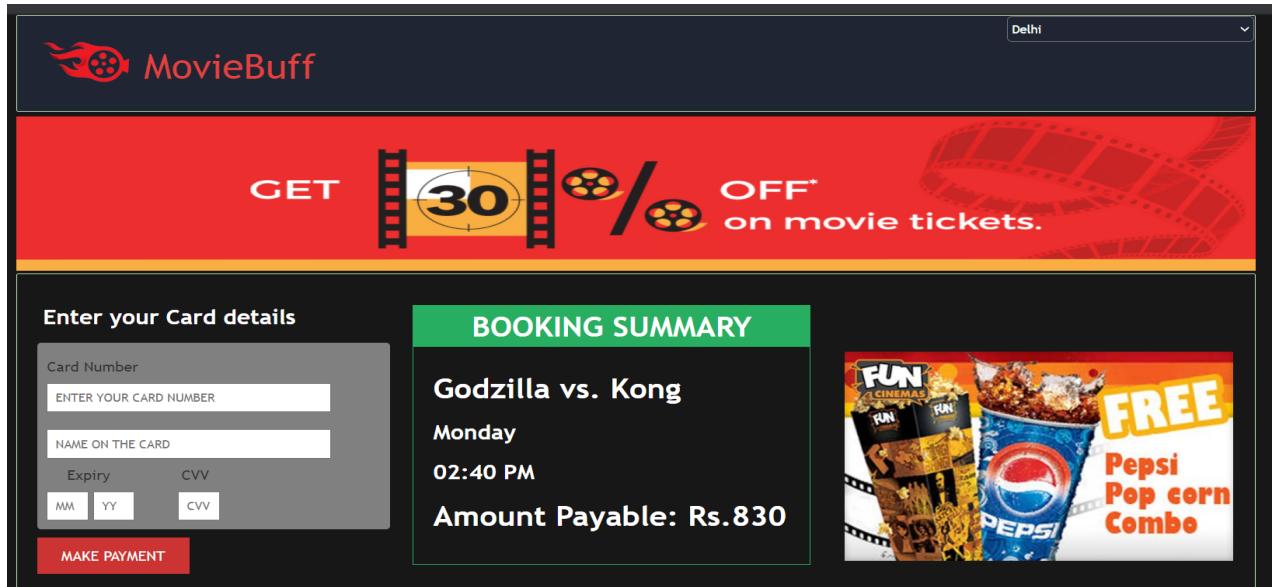
5). We can select the movie day and time according to our choice by clicking on the book tickets option under the trailer of the movie. After that we will be redirected to the seat selection page in the hall.



6).We can select the seats of our particular choice by proceeding with the booking and below shows the total amount of the selected seats of our choice



7). This Page shows the payment which the user has to do for the selected seats of the choice and this completes our dummy booking of the movie tickets.



4. CONCLUSION

4.1 ADVANTAGEOUS

This web application has numerous advantages:-

1. The user has no longer to book tickets on an offline platform.
2. The user can search movies according to their favorite genre (i.e horror, comedy, etc).
3. One can watch a movie trailer by just searching its name and can simultaneously book the tickets on the same platform.

4. The user can choose the seats of his choice only just by selecting the seats.

4.2 LIMITATIONS

Some of the limitations of the application are:-

1. This is a static web page application that contains only the information stored in the user database.
2. It is a dummy movie ticket platform as everyone can't access the bank API for the transaction and payment of the tickets.
3. The user should have access to the internet to view the web application and to view the contents of the webpage.

4.3 FUTURE WORK

1. In the future the web pages can be dynamic i.e. they really can store the information of the trending and the latest movies so users can watch the real trend of the market. So it allows users to search for the movies and watch their information(release date, run time) and trailers more efficiently according to the newly released movies in the industry.
2. An equivalent mobile application for this website can be developed.

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