

MovieMate

Introduction

Booking movie tickets has been an inconvenience for individuals with busy schedules. This automated system aims to simplify the process by allowing users to specify their seating preferences alongside relevant movie details. The system will then handle the booking process and send a payment link to the user. This project was driven by the desire to streamline the movie ticket booking experience, reducing user effort and saving time.

Getting Started

Let's automate booking a movie ticket. You can follow the tutorial below.

Prerequisites

- Python
- MySQL

Cloning

- Open command prompt or git bash.
- Change the current working directory to the location where you want the cloned directory.
- Enter the below command to clone the git repo:
`git clone https://github.com/ypatil11/ITCS6112_MDSP24_Group6.git`

Configuration

Our project uses several technologies:

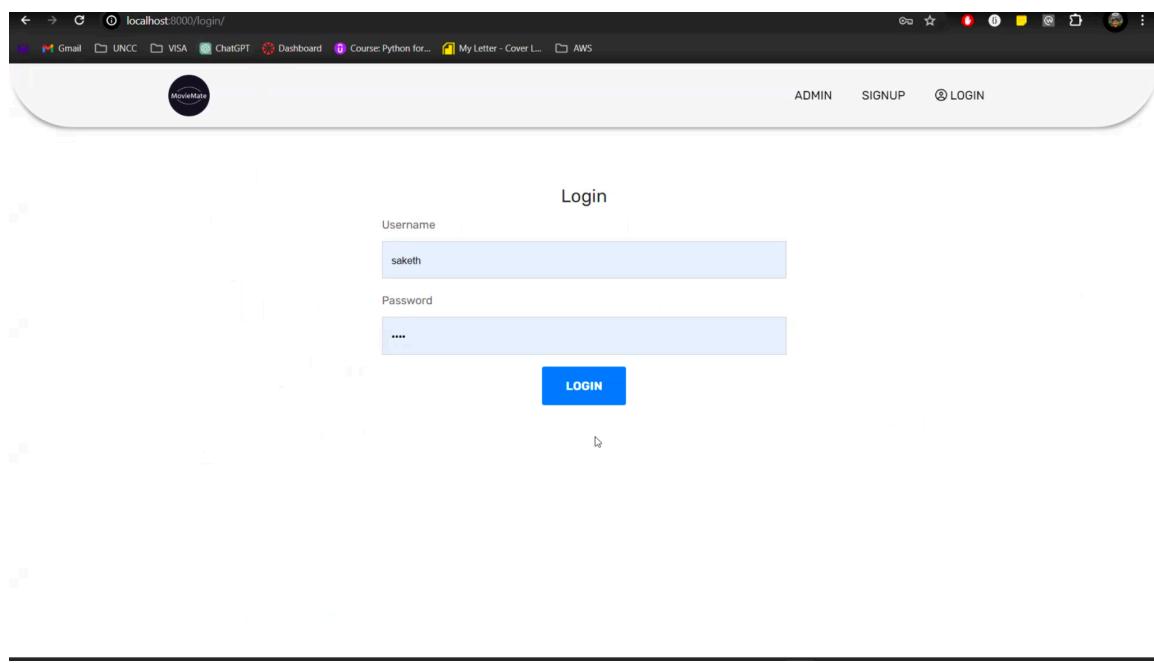
- Python Django
- HTML
- CSS
- Bootstrap
- MySQL server
- ChromeDriver

Commands to run the project

- Setup python virtual environment using the below commands:
`python -m venv tutorial-env`
`tutorial-env\Scripts\activate`

- Change the current working directory to the location where your requirements.txt and install the requirements listed in the requirements.txt
`pip install -r requirements.txt`
- Change the current working directory to the location where you cloned the project and run the below command:
`python manage.py runserver`
- To run chrome driver or the automated script, enter the following command:
`python index.py`

Once the application is up and running you should see the following login page:



As shown in the below screenshot, our application has an administration module(Business admin) in which the administrator can manage:

- Groups
- Users
- MovieGoers
- Movie preferences
- Seat preferences

The screenshot shows the MovieMate Admin Panel at localhost:8000/admin/. The top navigation bar includes links for Gmail, UNCC, VISA, ChatGPT, Dashboard, Course: Python for..., My Letter - Cover L..., and AWS. A "Skip to main content" link is present. The header displays the welcome message "WELCOME SAKETH VIEW SITE / CHANGE PASSWORD / LOG OUT". The main content area is titled "MovieMate Administration" and "Welcome to MovieMate Admin Panel". It features a sidebar with sections for AUTHENTICATION AND AUTHORIZATION (Groups, Users) and BASE (Movie goers, Movie preferences, Seat preferences), each with "Add" and "Change" buttons. On the right, there are "Recent actions" and "My actions" sections, both listing "SeatPreferences object (1)" and "MoviePreferences object (1)".

Also, a new user can sign up, please see the following screenshot:

The screenshot shows the MovieMate sign-up page at localhost:8000/signup/. The top navigation bar includes links for Gmail, UNCC, VISA, ChatGPT, Dashboard, Course: Python for..., My Letter - Cover L..., and AWS. It also features "ADMIN", "SIGNUP", and "LOGIN" buttons. The main content area is titled "Sign Up". It contains three input fields: "Email" (placeholder: "Enter your email address"), "Username" (value: "saketh"), and "Password" (placeholder: "..."). Below these fields is a blue "SIGN UP" button.

After the user logs in, the following page is displayed, it is the home page for our application.

The screenshot shows a web browser window on localhost:8000. The title bar says "localhost:8000". The page header includes a MovieMate logo and a user profile "SAKETH". The main content area starts with "Hi saketh!" and "Your Movie Preferences". A green "ADD NEW" button is visible. Below is a table listing a single reservation:

| City | Cinema Name | Movie Name | Date | Number of Seats | Time From | Time To | Processed | Selecting Preferences |
|-----------|-------------------------|--------------|-------------|-----------------|-----------|---------|-----------|--|
| Hyderabad | AMB Cinemas: Gachibowli | Tillu Square | 01 May 2024 | 2 | 1600 | 1700 | Yes | <button>SELECT SEAT</button> <button>DELETE</button> |

In the home page we can see a list of the reservations made. For example, we can see that for the city of **Hyderabad**, for the theater **AMB Cinemas: Gachibowli**, for the movie Tillu Square, there is a two seat reservation made thanks to our application.

We can add a new reservation by clicking on the green button **ADD NEW**:

The screenshot shows the same web browser window on localhost:8000. The "ADD NEW" button has been clicked, and the table now shows a single row:

| City | Cinema Name | Movie Name | Date | Number of Seats | Time From | Time To | Processed | Selecting Preferences |
|-----------------------------|-------------|------------|------|-----------------|-----------|---------|-----------|-----------------------|
| No movie preferences found. | | | | | | | | |

The URL "localhost:8000/add_movie_preference/" is visible at the bottom of the browser window.

Once clicked our application allows a variety of parameters for a reservation such as: City, Cinema Name, Movie Name, etc. All of these parameters are directly picked from the **BookMyShow** website. Please see the below screenshot:

The screenshot shows a web browser window with the URL `localhost:8000/add_movie_preference/`. The page title is "Add Movie pref". It contains several input fields: "City" (dropdown menu "Select a City"), "Cinema Name" (dropdown menu), "Movie Name" (dropdown menu), "Date" (text input "mm/dd/yyyy"), "Number of Seats" (text input), "Time From (HHMM)" (text input "HHMM"), and "Time To (HHMM)" (text input).

A new reservation is typically not processed until we receive an email that allows us to continue the process. Once the email is received, the process continues and we get to interact with **BookMyShow** website as shown below (we get to pick different parameters, a couple of screenshots of some selected parameters are shown below)

In this screenshot, we get to select the city:

The screenshot shows the BookMyShow website at `in.bookmyshow.com/Hyderabad/cinemas`. The search bar at the top has "Search for Movies, Events, Plays, Sports and Activities". Below it, there's a "Popular Cities" section with icons for Mumbai, Delhi-NCR, Bengaluru, Hyderabad, Ahmedabad, Chandigarh, Chennai, Pune, Kolkata, and Kochi. A dropdown menu "Select your city" is open, showing "Hyderabad" as the selected option. Below the cities, there are several cinema listings: "1, Newfangled Ground and Floor Park, S G Road", "19 Cinema", "4G Nova Cinemax: Mullanpur", "7D Masti: Gaurav Tower Central", "7D Masti: One Awadh Centre, Lucknow", "7 Star Cinema: Satara", "7D Masti: Greater Noida", "7D Masti: Amravati", "7D Masti: Faridabad, Haryana", and "7D Masti: Ghaziabad". Each listing includes the cinema name, address, and a small icon.

In this screenshot, we get to select the theater:

The screenshot shows the BookMyShow website interface for selecting a cinema in Hyderabad. At the top, there's a search bar and navigation links for Movies, Stream, Events, Plays, Sports, Activities, and a sign-in button. Below the header, a section titled "Cinema In Hyderabad" displays a grid of nine theater entries, each with a heart icon and a brief description. The theaters listed are:

- AMB Cinemas: Gachibowli
- Prasads Multiplex: Hyderabad
- Asian Lakshmikala Cinepride: Moosapet
- Cinepolis: Lulu Mall, Hyderabad
- INOX: GSM Mall, Hyderabad
- AAA Cinemas: Ameerpet
- PVR: Nexus Mall Kukatpally, Hyderabad
- MovieMax: AMR, ECIL Secunderabad
- Cinepolis: DSL Virtue Mall Uppal, Hyderabad
- GPR Multiplex: Nizampet, Hyderabad
- INOX: Sattva Necklace Mall, Kavadi guda
- Asian Cineplanet Multiplex: Komppally
- INOX: Ashoka One Mall, Kukatpally Y Junction
- Malikarjuna 70mm A/C DTS: Kukatpally
- Cinepolis: Mantra Mall, Attapur

In this screenshot, we get to select the number of seats:

The screenshot shows the BookMyShow website for seat selection at Amb Cinemas Gachibowli. The interface includes a header with showtimes (04:40 PM, 07:25 PM) and a Dolby Atmos option. Below this, a seating chart for "A" is shown with rows labeled A through L. Row A is "Rs. 350 PLATINUM". Rows B through E are "Rs. 295 GOLD". Rows F through I are "Rs. 295 LOUNGERS". Row J is "RS. 295 GOLD". Row K is "RS. 295 GOLD". Row L is "RS. 295 LOUNGERS". A central modal window titled "How Many Seats?" features a cartoon scooter illustration and a numeric keypad from 1 to 6, with the number 2 highlighted in red. Below the keypad, it shows ticket options: PLATINUM (Rs. 350), GOLD (Rs. 295 Available), and LOUNGERS (Rs. 295 Available). A large pink "Select Seats" button is at the bottom of the modal.

After entering all of the preferences of the user, we get the following which is the final step of the reservation:

The screenshot shows the BookMyShow payment interface. On the left, there are sections for sharing contact details (Email Address, +91), unlocking offers, and payment options (QuickPay, Debit/Credit Card, Net Banking, Mobile Wallets, Gift Voucher, UPI, Redeem Points). The main area displays the Order Summary: 2 Tickets for Tillu Square (U/A) in Telugu, 2D at AMB Cinemas: Gachibowli (SCREEN 6), GOLD - B1, B2, Wed, 1 May, 2024, 04:40 PM. The Sub Total is Rs. 590.00, Convenience fees are Rs. 66.00, and the Amount Payable is Rs. 656.08. A 'Contribute to BookASmile' option is available. The payment form includes fields for Card Number, Name on the card, Expiry (MM YY), and CVV. A 'QUIKPAY' checkbox is present, and a note says 'Save this card information to my BookMyShow account and make faster payments.' A 'MAKE PAYMENT' button is at the bottom, and a note below it states 'By clicking "Make Payment" you agree to the terms and conditions.'

After inputting and submitting, we get a confirmation email as shown below:

The screenshot shows a Gmail inbox with a dark theme. The sidebar includes 'Compose', 'Inbox' (1), 'Starred', 'Snoozed', 'Important', 'Sent', 'Drafts' (16), 'Categories' (Social 23, Updates 2, Forums 2, Promotions 65), 'Labels' (Personal, More), and a 'Compose' button. The main area shows three emails from 'moviematebot@gmail.com': 1. Subject: Hi there Payment URL for movie - Tillu Square is : https://in.bookmyshow.com/payment/?cid=AMBH&cc=ASMB&sid=70385&ety=MT&etk=Y&mtk=Y&ec=ET00343267&reloa (10:00 PM (1 hour ago)). 2. Subject: Hi there Payment URL for movie - Tillu Square is : https://in.bookmyshow.com/payment/?cid=AMBH&cc=ASMB&sid=70385&ety=MT&etk=Y&mtk=Y&ec=ET00343267&reloa (10:36 PM (1 hour ago)). 3. Subject: to me (57 minutes ago). Below the emails are 'Reply', 'Forward', and 'Compose' buttons. A notification at the bottom asks 'Enable desktop notifications for Gmail. OK No thanks X'.

As for our database, as mentioned previously, we used MySQL. Please see below our database which includes authentication tables included with the help of Django as well as our added tables:

- **Base_moviegoer**

This model represents the users of the systems whose preferences we are storing.

- **Base_moviepreferences**

This model represents the movie preferences of the user.

- **Base_seatpreferecenes**

This model represents the seat preferences of the user.

The screenshot shows the MySQL Workbench interface. On the left, the Navigator pane displays the database schema with several schemas listed under 'SCHEMAS' (e.g., aol, ap, movemanate). Under the 'movemanate' schema, there are tables like auth_group, auth_permission, auth_user, auth_user_groups, auth_user_permissions, base_moviegoer, base_moviepreferences, base_seatpreferecenes, django_admin_log, django_content_type, django_migrations, and django_session. The 'base_moviepreferences' table is selected. The 'Information' pane shows the definition of the 'base_moviepreferences' table, which has columns: id (AI PK), user_id, city, movie_name, date, number_of_seats, time_from, time_to, is_processed, and cinema_name. The 'Result Grid' pane shows the data for the 'base_moviepreferences' table, with two rows displayed:

| ID | User ID | City | Movie Name | Date | Number of Seats | Time From | Time To | Is Processed | Cinema Name |
|----|---------|-----------|--------------|------------|-----------------|-----------|---------|--------------|---|
| 8 | 1 | Hyderabad | Tillu Square | 2024-05-01 | 2 | 1600 | 1800 | 1 | AMB Cinemas: Gachibowli |
| 9 | 2 | Hyderabad | Tillu Square | 2024-05-01 | 1 | 1300 | 2000 | 0 | Newfangled Multiplex: Mondeal Retail Park |

The 'Output' pane at the bottom shows the execution history of the query:

```

base_moviepreferences2 >
Action Output
Time Action
1 23:52:04 SELECT * FROM base_moviepreferences LIMIT 0, 1000
2 00:09:07 SELECT * FROM base_moviepreferences LIMIT 0, 1000

```