



Report - 01

Team: The Achievers

Title: Movie Ticket Management System

Course Name: Data Structure Lab

Course Code: CSE 134

Submitted To

Rishad Amin Pulok

Lecturer

Department of Computer Science & Engineering
Metropolitan University, Bangladesh

Submitted By

Name: Rita Begum ID: 232-115-010

Name: Sumaya Akther Rose ID: 232-115-038

Name: Sadia Sharmin Tumpa ID: 232-115-039

Batch: 59th Section A

Department of Computer Science & Engineering
Metropolitan University, Bangladesh

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INTRODUCTION

The Movie Ticket Management System is designed to streamline the process of booking movie tickets, enabling users to view available shows, check seat availability, and book tickets efficiently. In an age where digital solutions are paramount, this project simplifies the user experience while ensuring that the backend operations are robust and efficient. This system serves not only moviegoers but also cinema operators by providing a reliable platform for managing ticket sales and seat allocations.

MARKET REVIEW

In the current market, several movie ticket management systems exist, including well-known platforms such as Fandango, BookMyShow and Atom Tickets. These platforms offer various features, including user-friendly interfaces, extensive movie listings, and integrated payment systems.

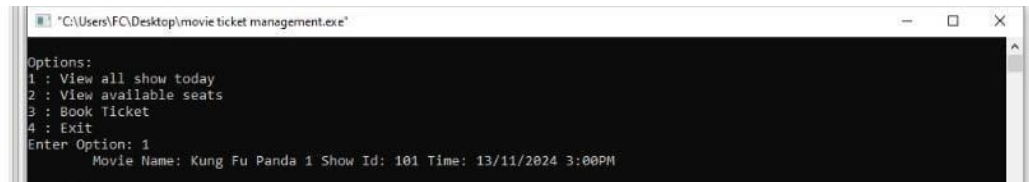
COMPARISON

- ❖ **USER EXPERIENCE:** While established platforms provide a polished user experience, they may overwhelm users with excessive features. Our system focuses on simplicity and ease of use.
- ❖ **CUSTOMIZATION:** Many existing solutions are rigid in terms of customization. Our project allows for tailored implementations based on specific cinema requirements.
- ❖ **COST:** Established platforms often involve fees for usage or commissions. Our system can be implemented at a lower cost, especially for smaller cinemas or independent operators.

KEY FEATURES

• VIEW ALL SHOWS TODAY

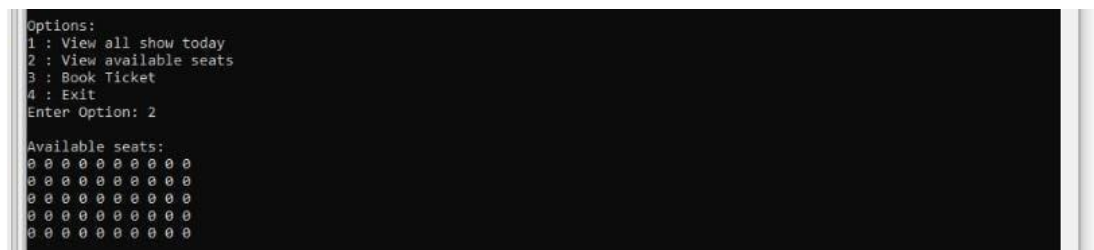
Users can easily access a list of all movies being screened on a particular day, along with their showtimes. This feature enhances user convenience by allowing them to plan their movie outings effectively.



```
"C:\Users\FC\Desktop\movie ticket management.exe"
Options:
1 : View all show today
2 : View available seats
3 : Book Ticket
4 : Exit
Enter Option: 1
      Movie Name: Kung Fu Panda 1 Show Id: 101 Time: 13/11/2024 3:00PM
```

• VIEW AVAILABLE SEATES

Before booking, users can check which seats are available for their selected movie. This real time availability feature ensures that users can make informed decisions and secure their preferred seating. If the seats are available it will show 0 and if the seats are already booked it will show 1



```
Options:
1 : View all show today
2 : View available seats
3 : Book Ticket
4 : Exit
Enter Option: 2

Available seats:
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
```



```
Options:
1 : View all show today
2 : View available seats
3 : Book Ticket
4 : Exit
Enter Option: 2

Available seats:
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 0 0 0 1 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
```

□ BOOK TICKET

The ticket booking process is streamlined, allowing users to select their desired showtime and seats quickly. The system handles seat allocation automatically, reducing the chances of double bookings and enhancing user satisfaction. If someone wants to book a seat which is already booked

it will show that seat is already booked. Also if someone enters a invalid row or column number it will show that invalid seat position.

```
Options:
1 : View all show today
2 : View available seats
3 : Book Ticket
4 : Exit
Enter Option: 3
Enter the row number (0 to 4): 2
Enter the column number (0 to 9): 4
    Seat at (2, 4) successfully booked.
```

```
Options:
1 : View all show today
2 : View available seats
3 : Book Ticket
4 : Exit
Enter Option: 3
Enter the row number (0 to 4): 2
Enter the column number (0 to 9): 4
    Seat at (2, 4) is already booked.
```

```
Options:
1 : View all show today
2 : View available seats
3 : Book Ticket
4 : Exit
Enter Option: 3
Enter the row number (0 to 4): 5
Enter the column number (0 to 9): 11
    Invalid seat position!
```

❑ INVALID OPTION

If someone give an invalid option which is not valid in the program it will show Invalid option. Please try again.

```
Options:
1 : View all show today
2 : View available seats
3 : Book Ticket
4 : Exit
Enter Option: 5
    Invalid Option. Please try again.
```

• EXIT

This feature allows users to exit the application gracefully, ensuring that any unsaved data is not lost and the application closes without errors.

```
Options:
1 : View all show today
2 : View available seats
3 : Book Ticket
4 : Exit
Enter Option: 4
    Exiting the system. Have a nice day!
Process returned 0 (0x0)   execution time : 4898.642 s
Press any key to continue.
```

ADVANTAGES OF MOVIE TICKET MANAGEMENT

- **EFFICIENCY**

The system automates the ticket booking process, reducing the time required for manual bookings.

- **USER FRIENDLY INTERFACE**

A simple and intuitive interface enhances user experience, attracting more customers.

- **REAL TIME UPDATES**

Users receive immediate feedback on seat availability and booking confirmations.

- **COST-EFFECTIVENESS**

Lower operational costs compared to established platforms make it accessible for small to medium sized cinemas.

LIMITATIONS OF MOVIE TICKET MANAGEMENT

- **SCALABILITY**

As demand increases the system may struggle to handle a high volume of simultaneous users.

- **LIMITED FEATURES**

Compared to larger platforms, our system may lack advanced features such as loyalty programs or dynamic pricing.

- **DEPENDENCY ON INTERNET CONNECTIVITY**

The system requires a stable internet connection, which may limit access in areas with poor connectivity.

HOW TO OVERCOME THE LIMITATIONS

- **SCALABILITY SOLUTIONS**

Implementing cloud based solutions can help manage increased traffic and ensure smooth performance during peak times.

- **FEATURE EXPANSION**

Future iterations of the system can incorporate additional features based on user feedback and market trends.

- **OFFLINE FUNCTIONALITY**

Developing a mobile application that offers offline capabilities could enhance accessibility for users in low-connectivity areas.

FUTURE GOALS

The future goals for the Movie Ticket Management System include:

- **FEATURE ENRICHMENT**

Adding features such as user accounts for storing preferences, payment history, and loyalty rewards.

- **MOBILE APPLICATION DEVELOPMENT**

Creating a mobile app to provide users with on the go access to movie information and ticket booking.

- **INTEGRATION WITH SOCIAL MEDIA**

Allowing users to share their movie plans and reviews on social media platforms to increase engagement and visibility.

- **ADVANCED ANALYTICS**

Implementing analytics tools to help cinema operators understand customer preferences and improve their offerings.

To conclude, The Movie Ticket Management System aims to provide an efficient, user-friendly solution for both consumers and cinema operators. By addressing current limitations and focusing on future enhancements, the project is poised for success in a competitive market.