

N.B.K.R INSTITUTE OF SCIENCE AND TECHNOLOGY , VIDHYANAGAR, GUDUR

Project Name: Movie Ticket Booking System

Branch/Department: Computer Science and Engineering

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to work on this project titled "Movie Ticket Booking System". Their guidance and support helped me complete this project successfully.

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Certificate

This is to certify that the project entitled "Movie Ticket Booking System" submitted as a record of original work carried

out by him/her during the academic session. The project work has been carried out under my supervision and guidance.

Abstract

This project aims to develop a console-based Movie Ticket Booking System using the C programming language. It allows users to select a movie, choose showtimes, and book seats. The system also stores booking history in a text file for future viewing. It demonstrates basic file handling, structures, and user interaction in C.

Introduction

With the rapid digitalization of entertainment services, movie ticket booking systems have become essential. This project replicates a simple version of an online booking system, allowing the user to book tickets conveniently via a terminal interface.

Objective

- To create an interactive system for booking movie tickets.
- To apply C programming concepts like arrays, structures, file handling, and loops.
- To save booking history for future reference.

Tools and Technologies Used

- Language: C
- Compiler: GCC (GNU Compiler Collection)
- Platform: OnlineGDB (https://www.onlinegdb.com/online_c_compiler)
- Editor: OnlineGDB Editor / Any basic text editor

Methodology

The project is developed using the Structured Programming Approach:

1. Planning the data structures.
2. Designing the menu system.
3. Implementing movie booking, seat selection, and booking history features.
4. Handling user inputs and file operations.
5. Testing various cases to ensure error handling.

Project Description

Problem Statement:

Currently, booking a movie ticket without a centralized online system can be tedious. Manual booking systems are time-consuming and inefficient.

Problem Solution:

This C program provides a simple console-based booking system, offering users an easy and fast way to book movie tickets.

Key Features:

- View list of available movies and their showtimes.
- Book tickets by choosing seat number.
- Save booking information in a file (booking_history.txt).
- View previous booking history.
- User-friendly interface.

Flowchart and Algorithm

Flow Chart:

Start -> Display Menu -> Book Ticket -> Display Movies -> Select Movie -> Select Showtime ->
Enter Seat Number -> Save Booking
-> View Booking History -> Exit -> End

Algorithm:

1. Start the program.
2. Display the main menu with options.
3. If "Book Ticket" selected:
 - Display available movies.
 - Get movie and showtime choice.
 - Ask for seat number.
 - Save the booking to booking_history.txt.
4. If "View Booking History" selected:
 - Open and read from booking_history.txt.
 - Display history.
5. If "Exit" selected, terminate the program.
6. Repeat until user exits.

Program Code

Link to full code:

Click Here to View Code: https://www.onlinegdb.com/online_c_compiler

Output of the programs

```
---- Movie Ticket Booking ----
1. Book a Ticket
2. View Booking History
3. Exit
Enter your choice: 1

Available Movies:
1. Chandramukhi
2. Your Name
3. Matrix
Select a movie (1-3): 1

Available Showtimes for Your Name:
1. 11:00AM
2. 3:00PM
3. 7:00PM
Select a showtime (1-3): 1
Enter seat number (1-50): 4

Booking Confirmed!
Movie: Your Name
Showtime: 11:00AM
Seat Number: 4
Booking saved to history!

---- Movie Ticket Booking ----
1. Book a Ticket
2. View Booking History
3. Exit
Enter your choice: 1
```

```
---- Movie Ticket Booking ----
1. Book a Ticket
2. View Booking History
3. Exit
Enter your choice: 1

Available Movies:
1. Chandramukhi
2. Your Name
3. Matrix
Select a movie (1-3): 2

Available Showtimes for Your Name:
1. 11:00AM
2. 3:00PM
3. 7:00PM
Select a showtime (1-3): 1
Enter seat number (1-50): 4

Booking Confirmed!
Movie: Your Name
Showtime: 11:00AM
Seat Number: 4
Booking saved to history!

---- Movie Ticket Booking ----
1. Book a Ticket
2. View Booking History
3. Exit
Enter your choice: 1
```

```
Available Movies:
1. Chandramukhi
2. Your Name
3. Matrix
Select a movie (1-3): 2

Available Showtimes for Your Name:
1. 11:00AM
2. 3:00PM
3. 7:00PM
Select a showtime (1-3): 1
Enter seat number (1-50): 4

Booking Confirmed!
Movie: Your Name
Showtime: 11:00AM
Seat Number: 4
Booking saved to history!

---- Movie Ticket Booking ----
1. Book a Ticket
2. View Booking History
3. Exit
Enter your choice: 2

---- Booking History ----
Movie: Your Name | Showtime: 11:00AM | Seat: 4

---- Movie Ticket Booking ----
1. Book a Ticket
2. View Booking History
3. Exit
Enter your choice: 1
```

```
Select a movie (1-3): 2

Available Showtimes for Your Name:
1. 11:00AM
2. 3:00PM
3. 7:00PM
Select a showtime (1-3): 1
Enter seat number (1-50): 4

Booking Confirmed!
Movie: Your Name
Showtime: 11:00AM
Seat Number: 4
Booking saved to history!

---- Movie Ticket Booking ----
1. Book a Ticket
2. View Booking History
3. Exit
Enter your choice: 2

---- Booking History ----
Movie: Your Name | Showtime: 11:00AM | Seat: 4

---- Movie Ticket Booking ----
1. Book a Ticket
2. View Booking History
3. Exit
Enter your choice: 3

Thank you for using the booking system!

... Program finished with exit code 0
Please press ENTER to exit console
```

Testing and Validation

- Tested correct movie and showtime selection.
- Tested invalid input handling (wrong movie/showtime/seat number).
- Tested multiple bookings.
- Verified that data is properly saved and read from booking_history.txt.
- All functionalities work as expected.

- Include login system for users.
- Use dynamic memory allocation to manage any number of movies/showtimes.
- Add a GUI (Graphical User Interface).

Conclusion

The Movie Ticket Booking System successfully simulates a basic movie ticket booking experience. It demonstrates the use of important C programming concepts such as arrays, structures, file handling, and control structures. Future improvements can turn this into a complete application.

References

- "Let Us C" by Yashavant Kanetkar
- OnlineGDB Platform (<https://www.onlinegdb.com/>)
- Stack Overflow Community
- GeeksforGeeks C Programming Tutorials

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