MOVIE TICKET BOOKING SYSTEM

Submitted By

A AJAY   (611722243003)

R ABISHEK (611722243002)

M DEEPAK (611722243012)

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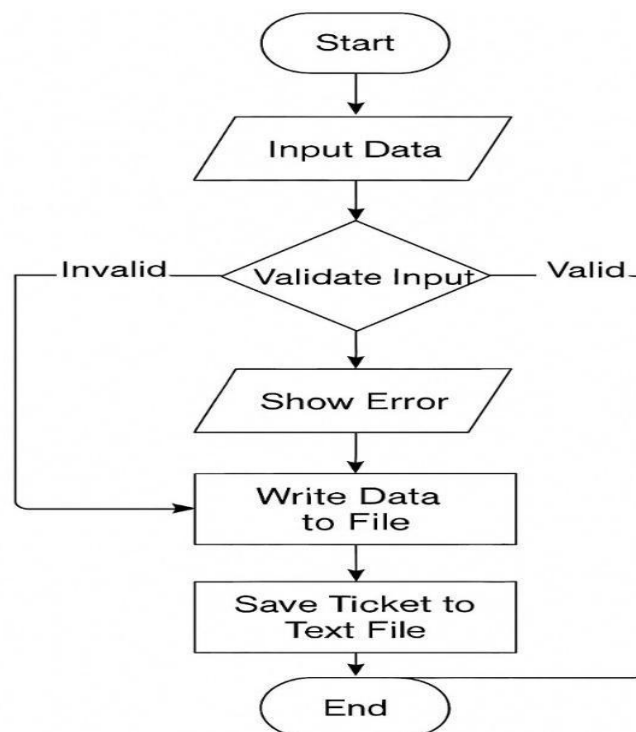
1.1 Introduction

The Movie Ticket Booking System Is a Java-based application that allows customers to book tickets instantly, similar to an on-the-spot registration counter at a cinema. The program does not use a database. Instead, it stores ticket information inside a text file. Each booking generates a formatted ticket receipt which is appended to the text file.

2. System Architecture

2.1 Request Flow

1. The user enters their details (name, movie, showtime, class type, seats).
2. The program validates the inputs (correct class type and seat count).
3. If valid, the booking is confirmed and the ticket is saved into the text file.
4. If invalid, an error message is shown.
5. The text file acts as the permanent record of the booking.

2.2 Architecture Diagram

User → Input Data → Validation → File Writer → Ticket Saved in Text File

3. File-Based Storage Model

3.1 Data Representation in Text File

- The program writes each booking as a block of text inside a file.
- The block contains:

Field	Data Type	Description
Date & Time	String / DateTime	The exact date and time of booking (e.g., 2025-09-04 08:30 PM).
Customer Name	String	Name of the person booking the ticket (e.g., Deepak).
Movie Name	String	Title of the movie (e.g., KGF 2).
Class Type	String	Ticket class with price (e.g., Second Class (₹200)).
Showtime	String / Time	The scheduled time of the movie (e.g., 6:30).
Number of Seats	Integer	Total seats booked by the customer (e.g., 3).
Total Price	Double / Integer	Calculated price of all booked seats (e.g., 600).
Unique Code	Hexadecimal	A12B34CD

3.2 File Format Example

```
---------------- THE BLITZ CINEMAS -------------------
Code: ABC123DEF
Date & Time: 2025-09-04 08:30 PM
Customer Name: Deepak
Movie: KGF 2
Class Type: Second Class (₹200)
Showtime: 6:30
Seats Booked: 3
Total Price: 600
```
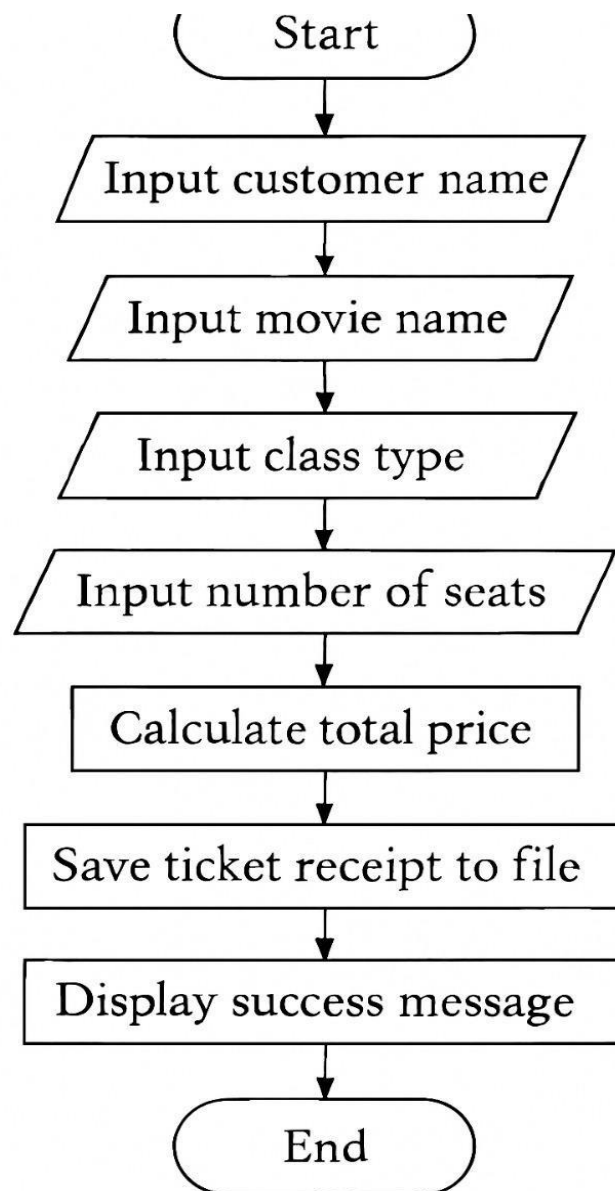
4. Functional Requirements

4.1 Booking Flow

- The program asks for: file name, customer name, movie, showtime, class type, and seats.
- The system calculates ticket price and saves it into the file.
- A success message is shown.

```
                    ( Start )
                        |
                        v
          / Input customer name /
                        |
                        v
           / Input movie name /
                        |
                        v
            / Input class type /
                        |
                        v
         / Input number of seats /
                        |
                        v
          [ Calculate total price ]
                        |
                        v
       [ Save ticket receipt to file ]
                        |
                        v
       [ Display success message ]
                        |
                        v
                    ( End )
```

4.2 Validation Rules

- Class type must be either **1, 2, or 3**.
- Number of seats must be between **given seat limits**.
- Invalid input results in an error message.

5. Sample Input/Output

Console Input by User:

Enter file name: tickets.txt
Enter your name: Deepak
Enter movie name: KGF 2
Enter showtime: 6:30
Class type (1=150, 2=200, 3=300): 2 Enter
number of seats: 3

EXAMPLE

Blitz Cinemas — Ticket Booking

Name
Enter your full name

Movie
Select movie (LEO / KANTARA / KGF 2)

Showtime
10:30 AM / 2:30 PM / 6:30 PM

Class Type
1 - First (150) 2 - Second (200) 3 - Third (300)

Seats
Enter number of seats (min 5)

Start Seat
e.g. A10

Book Tickets

Ticket Preview

Blitz Cinemas
Movie: LEO
Showtime: 10:30 AM
Seats: A10, A11, A12, A13, A14

Total
Rs. 750

Tip: Use the 'Start Seat' field to auto-generate seat numbers.

Designed: Front-end mockup for ticket booking UI

Console Output:

You're welcome to the Blitz Cinemas
Ticket booked successfully! Receipt saved to: tickets.txt **tickets.txt**

File Content:

---------------- THE BLITZ CINEMAS ------------------
Code: ABC123DEF
Date & Time: 2025-09-04 08:30 PM
Customer Name: Deepak
Movie: KGF 2
Class Type: Second Class (₹200)
Showtime: 6:30
Seats Booked: 3
Total Price: 600
----------------- THANK YOU ------------------------

Movie Ticket Confirmation

BOOKING CONFIRMED

Customer: John Smith

Movie: Avengers

Language: English

Showtime: 7:30 PM

Class: Premium

Seats: A12, A13

Total: $25.00

Code: BK12345

Thank You!