# DATA STRUCTURES

# PROJECT LAB REPORT

## *Title:*

## Movie Ticket Management System


### ABSTRACT:

Movies have been the major source of entertainment to the people these days. Many people liketo watch movie in cinema theatres to enjoy the experience. For this they need to book tickets.
Watching movie with family and friends in theatres is one of the best medium of entertainment. Online movie ticket booking provides the customers facility to bool tickets for cinema halls online, through which they can book tickets anywhere anytime, and this prevents from standing in the long queues. The customers can not only buy tickets online but can also cancel the tickets. It is an internet-based application in which user can select the movie to watch and book the ticketby paying the money online. The main goals of this project include provide anytime anywhere service to the customers, to minimize the work of staff. It indirectly promotes the movie on the website by rating it. This can increase the profit also.

This online is one of the best opportunities for those who cannot afford enough time to gettickets reserved standing in the long queues.

## INTRODUCTION:

This project is based on online movie ticket booking which is specifically designed to provide tickets online to reserve tickets online to the viewers. It is an easy method to book a ticket rather than wasting time by standing in the long queues for hours and hours. In this application three options are provided. One is inserting a ticket in which the customer should provide the details like name, title of the movie, number of seats, date and time of screening etc. After the user inputs the details, the ticket will be displayed with all the details that the customers have provided. Another option provided is to cancel the booked tickets. If the user is willing to cancel the ticket, they should provide some details and the ticket will be cancelled with the amount refunded. This whole process is implemented in the form of code in this project with the help of data structures inC language.

The rest of the document is organized as follows: section 1 contains literature survey; section 2 provides methodologies used; section 3 provides requirements;section 4 presents the output of code; section 5 is the conclusion.

## LITARATURE SURVEY:

Many researches were performed on the available movie booking websites and applications. Research is mainly focused on the platform and framework in whichthe application has been developed. Also, the various features related to other systems were analyzed to set an idea of what are the features has been implemented.

In South Africa a seed of an idea of book my show was planted. The site was started in 1999, and since then it is one of the most famous online movie bookingsystem. It uses a PHP based web site. The web site provides detailed information regarding movies. There are columns in which reviews can be added and published on the web page. Seat confirmation and payment can easily be done using online payment portal which is further connected to banking system. The site has 34 million apps downloaded till date, 10 million tickets sold per month, and 3billion page view per month.

Ticketplease.com is a one is one of the most famous online movies booking system which also books ticket for college Concerts, Plays and Sports Event. It provides the user a facility of buying tickets online along with lots of offers & features that would keep them entertained. Ticketplease.com has tied up withleading multiplexes along with several single screen theatres across India to provide customers the convenience of ticketing almost anywhere.

In this project we have used stack data structure to perform the inserting andcancelling the movie tickets.

**Algorithm**:

- Start.
- Declare a structure consisting name of the customer, ticket id, number of tickets, title of the movie, duration of the movie, ticket cost. Define a constant‘max’ with specific value.
- Declare push(), pop(), functions used in stack implementation.
- Create a one-dimensional array with fixed size consisting of maximumnumber of structures (c[max])
- Define an integer variable ‘top’ and initialize with ‘-1’. (int top = -1).
- In the main function, display menu with list of operations.
- Take the input (choice) from the user.
- By using switch cases for inserting call the push() function, for deletion call the pop() function and in case of displaying details Create a for loop and print thedetails of the customer, and tickets that are stored.
- Stop.

**Algorithm of push() function**:

- Start.

- Increase the value of the top by one (top++).
- Input the details I.e., Name of the customer, ticket Id, number of tickets,movie time and movie name.
- Store the input details in the array of structure (c[top].cname, c[top].id,c[top].tickets, c[top].time, c[top].mname).
- Stop.

**Algorithm of pop() function**:

- Start.
- Check whether stack is EMPTY (top == -1).
- If it is EMPTY, then display “Stack is empty” and terminate the function.
- If it is NOT EMPTY, then delete c[top].
- Print the details that are deleted (c[top].cname, c[top].id) and decrementtop value by one (top--).
- Stop.

Operating System: “Windows 10” operating system.

Coding Languages: In this project we are using “Data Structures in C”.

IDE (editor): Code::Blocks with gcc compiler (or) code chef.

## ***Results and discussions:***

An online movie ticket booking system has been developed which can beaccessed by anyone who wishes
to book a movie ticket and has access to internet.

This online movie booking system results in reduced time
wastage asticket can be booked
through few simple steps.

Misunderstandings created by human error are avoided.
As ticket can be booked through less hard work customer satisfaction is promised.

This ticketing system is simple to operate and easy to understand keepingin mind that the customers
wanting to book a movie ticket might not be computer experts.

## Input:

```
Menu
1.Insert new ticket
2.Cancel of ticket
3.Display total tickets
4.exit

Enter your choice:1

Enter Ticket Id: 101

Enter name: abc

Enter Movie name: fgh

Enter Movie time: 2:00pm

Enter no of seats: 4

To continue enter 1, to exit enter 0: 1

Menu
1.Insert new ticket
2.Cancel of ticket
3.Display total tickets
4.exit

Enter your choice:1

Enter Ticket Id: 102

Enter name: lmn

Enter Movie name: fgh

Enter Movie time: 6:00pm

Enter no of seats: 3

To continue enter 1, to exit enter 0: 1

Menu
1.Insert new ticket
2.Cancel of ticket
```

```
Enter your choice:1

Enter Ticket Id: 102

Enter name: lmn

Enter Movie name: fgh

Enter Movie time: 6:00pm

Enter no of seats: 3

To continue enter 1, to exit enter 0: 1

Menu
1.Insert new ticket
2.Cancel of ticket
3.Display total tickets
4.exit

Enter your choice:3
```

**Output:**

```
       ******XYZ Cinemas******
-------------------------------------------------------------------------------

S.no    Name     ID     Movie Name      Movie Time      No.of seats     TotalCo
1       lmn     102     fgh             6:00pm          3               Rs.390
2       abc     101     fgh             2:00pm          4               Rs.520
-------------------------------------------------------------------------------

Process returned 1 (0x1)   execution time : 46.531 s
Press any key to continue.
```

Nowadays, traditional reservation ways of movie ticketingis dying. Its new age where technology dominates human life. With the software and technological devices, exceptions are reduced and even terminated. Also, peopleprefer easy, quick and safe way for every part of his life.
This project is designed to meet the requirements of a movie ticket booking system. It is the best way to improve selling tickets with less efforts.
Automation of the entire system improves the efficiency.

The project movie ticket booking system is flexible enough to meet therequirements of the customers.
This project also has scope of future enhancements like :

- Home delivery of tickets may be provided.
- Online booking of purchases of eatables can be provided.
- Facility of providing review of the movie after watching can beprovided.

## References:


https://www.geeksforgeeks.org/stack-data-structure-introduction-program/

http://ijersonline.org/HTMLPaper.aspx?Journal=Research%20Journal%20of%20En gineering%20and%20Technology;PID=2019-10-1-4