



## Movie Zone



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## **Abstract :**

Simple Movie Zone System is based on viewing movie listings and buying tickets. This is where users can perform specific tasks such as viewing all current showings, finding movies, and purchasing tickets quickly. The project does have a registration system for both admins and customers . This project contains a lot of features that may help the customers .

Talking about the features of Simple Cinema System, user can easily view all the movies displayed in the list. Displays the theater number, movie title, available tickets and the price of each ticket. The system also provides a update function to update the information when the customer write mistake . This system has an easy purchase method. Users need to enter the correct movie title and the number of tickets they want. The system will then display the total amount of the ticket.



## 1. Introductions:

C++ is faster than most other programming languages and has excellent concurrency support. This makes it useful in areas where performance is critical and low response time is required, making it an inherent choice to use in our project, which we call Movie Zone.

Our project is characterized by many distinguished services and targets all age groups, especially teenagers.

Our project depends on facilitating reservations and purchasing tickets and snacks for customers. also,

Movie zone has offers for all society including families, children, and adults.

One of the problems we encountered was that the programmer needed to access the system to modify it, but he needed a separate system to access and modify the data. We decided to link the two together into one program using a specific function. Moreover, this helps us with many things, the programmer can enter the system with the clients, and the two can do whatever they want once they log into the program.

## 2. Project Problem :

**With this project, there are several things that we had a hard time with, such as :**

**How to be able to satisfy the customers with the services provided?**

Since this system is more straightforward and can help save time, we hope this service can help customers achieve their satisfaction. As everyone knows, it is not easy to satisfy a person. Movie theatres may need help in the process of meeting customer needs. With this system, customer satisfaction is easy.

**How to come up with a flexible time system?**



As we know, without this system, people might use the counter to make any purchases of movie tickets.

Sometimes, it takes longer until they have made one. It is because of the queue and time limitations for each customer, and the worker needs to make a deal. So, with this system, customers can access the system at any time without any complications. Customers can also take their time using the system.

### 3. Methodology:

#### **void loginPage();**

we used the login page functions to make the user to choose between entering as customer or admin.

#### **void customerLoginChoice();**

to make the customer to choose between being a Registered Customer or New Customer .

#### **void adminLogin();**

we used the admin login functions to allow the admins only to have access to it and can edit inside the program .

#### **void customerLogin();**

we used the customer functions to allow the customers to log in the program and enter their account for booking.

#### **void updateInfo();**

to let the customer update the Phone, Email, Address, Username, Password when they want to .

#### **void nearestCinema();**

we used the nearest cinema to let the customer choose their current location “Qatif - Dammam - Khobar – Jubail” and then the nearest cinema will appear to them and they will be able to book the ticket at the right place .

#### **void displayMovies();**

this function will show the customer and the admin the movie name, time, cinemas theatre, the Director, the prices and available seats .



### **void SnackList();**

this function will let the customer to choose that if they want snacks or not . they choose to have snacks ,  
Functions called void displaySnacks will appear to them .

### **void displaySnacks();**

this function will appear to the customers whom choose to have snacks and will let them choose which  
snack package they want .

### **void deleteSnack();**

this function will let the admin delete the snack package they choose .

### **void sortMovi();**

we used this function to swap between the movies based on the films rates to let the customer choose the  
one with high rate.

### **void bookMovie();**

we used this functions to make the customer book the movie he choose .

### **bool floatCheck(string);**

We used this function as a condition at the beginning of the menus, so that when the user enters a number,  
we can make sure that the number is within the range, and if he uses something else, he will get  
an invalid message.

### **float calcPrice(int packno);**

after the user choose the snack he want in“void display Snacks()” , we used the float calcPrice function to  
number the snacks on it .

### **void makeSeats(int);**

This function will make the customer be able to booked the seats that he wants.

### **void inputMovie(Movie, int);**

We used this function for the admin to make him enter the movie information which included movie name,  
movie genre, the director, movie rating, the price, the available seats, also the time and the cinemas.

### **void addMovie();**

We used this function for the customer so he can added how many movie that he want .



#### **void deleteMovie();**

We used this function to make the admin be able to choose which movie he wants to delete it when he add it before .

#### **void displayCustomers();**

this function will display the details like his name, age , phone number, and the address if the admin entered any customer name.

#### **void inputCustomer(Customer, int);**

This function will make the customer and the admin to be able to registered by adding his name, age , phone number, address, username, and his password.

#### **void addCustomer();**

This function takes the customer information when he add it or the admin does and save it for him by adding it in customer array.

#### **void print\_array(string snacks[], int numberOfItems);**

we used this function to print the snacks for the customers or the admin in recursive function.

#### **void inputTicket(Ticket, int);**

too make the costumer select movie and the time and cinema ,and how many ticket the customer want to purchase , and to choose seat number.

#### **void Menu();**

we used this function to display the customer or the admin menu (overloading and using namespace to define which is which) to choose what he want to do.

#### **void printMovieDetails(const Movie &movie);**

we used this functions to print movie name, genre, director, rating , price , time , movie seats.

#### **void deleteAllMovie();**

This function will enable the admin to delete the movies that he choose.

#### **void deleteCustChoice();**

This function will make sure for the admin if he wants to delete all the entry or just a single or he can go back to menu.



**void deleteMovChoice();**

we used this function to allow to the admin to delete the movie he choose if they wanted to .

**void modCustomers();**

this function will display menu to the admins and let them add or delete or display all customers.

**void recgn();**

this function will only organize the code when we run it .

**void nullifyMovieList();**

this function will display movie menu to the admin and let them chooses what they want to delete.

**void deleteCustomer();**

this function will allow the admin to delete the customers .

**void deleteAllCustomer();**

this function will allow to the admin to delete all customers .

**void nullifyCustomerList();**

this function will display a menu to let the Admin chooses what he want to delete .

**void modMovies();**

this functions will allow to the admin to edit the movie list such as deleting or adding or showing all the movies .

**void displayTicketList();**

this function will display to the customers the total purchased and show the movie name and the seats numbers and Time and Cinema and the total cost .

**double Distance (double &x, double &y, double lat, double lon);**

this function is used to help us calculate the distance between the user's location and all existing cinemas locations, it calculated according to a mathematical law after the user enters his area.

**double Distance (double Loc1, double Loc2);**

This function helps us to calculates the nearest cinema theatre, and we can know that because of the previous functions the one that calculate the nearest cinema to the customer .



#### **main input output file;**

input file ; the customer will write movie name.

output file ; the program will ask the customer what movie he want to watch , the exe screen will display the movie that will be released next month.

#### **4. Results and discussion:**

We have reached the required results by creating an easy program that is clear for both the user and the system administrator, and one of the most important strengths of the program is that we relied on a dynamic matrix, which doesn't waste space because in dynamic array the size is determined during runtime. We also faced the problem of closing the output window, so we used functions such as (pause) system and sleep to keep it open for a longer time and to increase the efficiency of the program.

#### **5. Conclusions and recommendations:**

In conclusion, this system can help others do their work lightly. This program can help numerous playhouses to reuse the ordering system briskly. So, it will save the customer's time and workers' time. It will also help the workers reuse the guests' orders.

This system also will be suitable to help colorful types of people. For illustration, it can help aged people. This eco-friendly system should be tutored to our people because it can make much work come lightly and briskly.

We should know that in this period, we should maximize the programming system's use because it has more advantages than disadvantages.