CTP Mini Project

Movie Ticket Booking Interface



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```
C: > Users > Ienovo > Dropbox > PC > Downloads > € ctp projectfinal1.c > ...
    #include <stdio.h>
     struct SeatNo
        char row;
        int col:
     void TimeSlot()
        printf("\n======\n");
        printf("Please enter your preferred time slot\n");
        printf("----\n");
        printf("1- 13.00- 16.00\n");
        printf("2- 17.00 - 20.00\n");
        printf("----\n");
     void SeatArrangement(char seat[][10])
        for (int i = 0; i < 10; i++)
           for (int j = 0; j < 10; j++)
              if (i -- 0 && j -- 0)
              else if (i -- 0 && j >- 1)
              else if (j -- 0 && i >- 1)
                 seat[i][j] = i + 64;
     void DisplaySeatCategories()
        printf("\n=======\n");
        printf("Seat slots and their prices\n");
```



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C: \ Users \ lenovo \ Dropbox \ PC \ Downloads \ \ \ c \ cto projectfinal1.c \ \ ...
           void DisplaySeatCategories()
                                                                //To display the categaro of seats available
               printf("\n======\n"):
               printf("Seat slots and their prices\n");
               printf("----\\n");
               printf("1 - VIP (Fare - 600 per ticket)\n");
               printf("2 - Premium (Fare - 400 per ticket)\n");
               printf("3 - Normal (Fare - 200 per ticket)\n");
               printf("=====\\n\n"):
void DisplaySeatArrangement(char seat[][10])
                                                               //To dislay the seat arrangement, called once before booking and once after booking
                                                               //to show the selected seats. The booked seats are shown with "B".
               for (int i = 0; i < 10; i++)
                   if (i == 1)
                      printf("
                                    VIP\n");
                                     PREMIUM(n");
                      printf("
                   else if (i == 6)
                                     NORMAL\n");
                      printf("
                   for (int j = 0; j < 10; j++)
                      printf("%c ", seat[i][j]);
                       if (j == 0)
                          printf(" ");
                   printf("\n");
               printf("\n");
               printf("
            void change(int i, int j, char seat[][10]) //To change status of selected seat by user to 'B' which indicates seat booked
               i - i - 65 + 1;
```



```
C: > Users > Jenovo > Dropbox > PC > Downloads > € ctp_projectfinal1.c > ...
      void change(int i, int j, char seat[][10]) //To change status of selected seat by user to 'B' which indicates seat booked
      void book(int nt, char seat[][10])
                                                  //to book the seats according to user input
          int cost - 0;
          rebook:
              printf("\nPlease enter the category of seat %d you want : ", i); //Taking input the category of seat from the user
              scanf("%d", &cat);
              printf("Please enter your preferred seat no. : ");
                                                                             //Taking input the preferred seat no. in the selected category
              fflush(stdin);
              struct SeatNo id;
              scanf("%c%d", &id.row, &id.col);
              printf("%c%d\n", id.row, id.col);
              if (seat[id.row - 64][id.col] == 'B')
                                                                 //If seat no. selected has a value='B' indiacating seat already booked, redirecting
                  printf("Seat already occupied.Please choose again\n\n");
                  goto rebook;
                                                                //If seat available for booking, then booking seats by changing selected seat no.
                  if (cat == 1 && id.row >= 'A' && id.row <= 'B')
                      int price = 600;
                      cost - cost + price;
                      change(id.row, id.col, seat);
                  else if (cat == 2 && id.row >= 'C' && id.row <= 'E')
                      int price = 400;
                      cost - cost + price;
                      change(id.row, id.col, seat);
                  else if (cat == 3 && id.row >= 'F' && id.row <= 'I')
                       int price = 200;
                      cost = cost + price;
                      change(id.row, id.col, seat):
```



```
C: > Users > Ienovo > Dropbox > PC > Downloads > € ctp_projectfinal1.c > ...
                else if (cat == 3 && id.row >= 'F' && id.row <= 'I')
                    int price = 200;
                    cost = cost + price;
                    change(id.row, id.col, seat);
                   printf("The seat no does not match with the seat category. Please choose and the seat No. again \n\n");
         printf("\n=======\n"); //Dispalving the message seats booked and showing final price.
         printf("Your seats are booked.\n");
         printf("Total Fare : Rs%d\n", cost);
      void hall1(char seata[][10], char seatb[][10])
         int nt;
         printf("\nYour selected movie is Gehraiyaan\n");
         TimeSlot();
                                                        //calling TimeSlot() to display available time slots
         int t:
      time:
         scanf("%d", &t);
         if (t -- 1)
            printf("\nYour selected time slot is 13.00-16.00\n");
         else if (t -- 2)
            printf("\nYour selected time slot is 17.00-20.00\n");
            printf("Invalid input. Enter time slot again : \n");
                                                                  //If invalid time slot entered, taking input nfor time again
             goto time;
         printf("\n");
         printf("\n======\n");
         printf("The following seats are currently available\n");
         printf("----\n");
         (t -- 1) ? DisplaySeatArrangement(seata) : DisplaySeatArrangement(seatb); //Displaying current status of seats for selected time slot 1
         printf("-----\n");
         DisplaySeatCategories();
```



```
C: > Users > Ienovo > Dropbox > PC > Downloads > € ctp_projectfinal1.c > ...
        DisplaySeatCategories();
        printf("\n=----\n");
        printf("Please enter the number of tickets\n");
                                                                     //Taking input number of tickets user wants to book
        printf("----\\n");
        scanf("%d", &nt);
        (t == 1) ? book(nt, seata) : book(nt, seatb);
                                                       //redirecting to book() with required arguments according to selected time slot
                                                       //Here, seata refers to time slot 1 and seatb refers to time slot 2
        (t == 1) ? DisplaySeatArrangement(seata) : DisplaySeatArrangement(seatb); //Displaying seat arrangements after tickets booked.
        int nt:
        printf("\nYour selected movie is RRR\n");
        TimeSlot();
        int t;
181 time:
        scanf("%d", &t);
        if (t == 1)
           printf("\nYour selected time slot is 13.00-16.00\n");
        else if (t == 2)
           printf("\nYour selected time slot is 17.00-20.00\n");
           printf("Invalid input, Enter time slot again :");
            goto time;
        printf("\n");
        printf("\n=======\n");
        printf("The following seats are currently available\n");
        printf("----\n");
        (t -- 1) ? DisplaySeatArrangement(seata) : DisplaySeatArrangement(seatb);
        printf("==========\n");
        DisplaySeatCategories();
        printf("\n======\n");
        printf("Please enter the number of tickets\n");
        printf("----\n");
        scanf("%d", &nt);
        (t == 1) ? book(nt, seata) : book(nt, seatb);
        (t == 1) ? DisplaySeatArrangement(seata) : DisplaySeatArrangement(seatb);
```



```
DisplaySeatCategories();
  printf("\n======(n"):
  printf("Please enter the number of tickets\n");
  printf("----\n");
  scanf("%d", &nt);
   (t -- 1) ? book(nt, seata) : book(nt, seatb);
   (t == 1) ? DisplaySeatArrangement(seata) : DisplaySeatArrangement(seatb);
void hall3(char seata[][10], char seatb[][10])
  printf("\nYour selected movie is The Kashmir Files\n");
   TimeSlot();
   int t;
   scanf("%d", &t);
     printf("\nYour selected time slot is 13.00-15.00\n");
  else if (t == 2)
     printf("\nYour selected time slot is 17.00-20.00\n");
     printf("Invalid input. Enter time slot again : \n");
     goto time;
  printf("\n");
  printf("\n----\n");
  printf("The following seats are currently available\n");
  printf("----\n");
   (t == 1) ? DisplaySeatArrangement(seata) : DisplaySeatArrangement(seatb);
  printf("----\n");
  DisplaySeatCategories();
  printf("\n-----\n");
  printf("Please enter the number of tickets\n");
  printf("----\n");
  scanf("%d", &nt);
   (t == 1) ? book(nt, seata) : book(nt, seath);
   (t -- 1) ? DisplaySeatArrangement(seata) : DisplaySeatArrangement(seatb);
```



```
245 Int main()
         char seatla[10][10]; char seatlb[10][10]; //Here seatla refers to seat arrangement of movie 1 time 1(13.00-16.00), seat2b refers to seat
         char seat2a[10][10]; char seat2b[10][10]; //arrangement of movie 2 time 2(17.00-20.00).
        char seat3a[10][10]; char seat3b[10][10];
         SeatArrangement(seat1a); SeatArrangement(seat2a); SeatArrangement(seat3a);
         SeatArrangement(seat1b); SeatArrangement(seat2b); SeatArrangement(seat3b);
         change('A', 6, seatla); change('F', 1, seatla); change('D', 5, seatla); change('G', 3, seatla); //Pre-booking some random seats
         change('A', 6, seat2a); change('C', 1, seat2a); change('G', 5, seat2a);
         change('D', 6, seat3a); change('G', 1, seat3a); change('I', 5, seat3a); change('B', 3, seat3a);
         change('D', 6, seat1b); change('G', 1, seat1b); change('I', 5, seat1b);
         change('A', 6, seat2b); change('F', 1, seat2b); change('D', 5, seat2b); change('G', 3, seat2b);
         change('A', 6, seat3b); change('C', 1, seat3b); change('G', 5, seat3b);
         while (1)
            printf("\n\n\n=----\n");
            printf("Welcome to our movie ticket booking system!!\n");
            printf("----\n\n"):
            printf("======\\n");
            printf("Movies screening currently\n");
                                                                                  //Displying currently screening movies
            printf("----\n");
            printf("Hall 1-Gehraiyaan\n");
            printf("Hall 2-RRR\n");
            printf("Hall 3-The Kashmir Files\n");
            printf("====-\n\n");
            printf("Choose the movie you want to book\n");
                                                                                   //take input for movie of user's choice
            scanf("%d", &m);
            switch (m)
            case 1:
               hall1(seat1a, seat1b);
                                                                               //If movie chosen 1, redirect to function hall1()
            case 2:
               hall2(seat2a, seat2b);
                                                                              //If movie chosen 2, redirect to function hall2()
               hall3(seat3a, seat3b);
               printf("Invalid input\n");
                                                                             //If invalid input, redirecting to pragram start
               goto restart:
            printf("\n-----\n");
```



```
printf("Welcome to our movie ticket booking system!!\n");
                                                            //Program Start
printf("----\n\n"):
printf("======\n");
printf("Movies screening currently\n");
                                                            //Displying currently screening movies
printf("----\n");
printf("Hall 1-Gehraiyaan\n");
printf("Hall 2-RRR\n");
printf("Hall 3-The Kashmir Files\n");
printf("Choose the movie you want to book\n");
                                                            //take input for movie of user's choice
scanf("%d", &m);
switch (m)
case 1:
   hall1(seatla, seatlb);
                                                         //If movie chosen 1, redirect to function hall1()
case 2:
  hall2(seat2a, seat2b);
case 3:
  hall3(seat3a, seat3b);
                                                       //If movie chosen 3, redirect to function hall3()
   printf("Invalid input\n");
                                                       //If invalid input, redirecting to pragram start
   goto restart;
printf("\n=====\n");
           Thanks | \n Enjoy your movie experience");
printf("\n----\n");
char cont[100];
printf("\nENTER any key to Continue ");
scanf("%s", &cont);
printf("\n----\n");
printf("1- Continue for next booking\n");
printf("0- Exit and reset the System\n");
printf("----\n");
printf("Enter value:-");
                                         //If input 1, pramgram runs again with seat booked in storage
int reset;
                                         //If input 0, loops break and all data resets.
scanf("%d", &reset);
printf("-----\n\n");
if (!reset)
```



Screenshots of Output









```
Welcome to our movie ticket booking system!!
Movies screening currently
Hall 1-Gehraiyaan
Hall 2-RRR
Hall 3-The Kashmir Files
Choose the movie you want to book
Your selected movie is Gehraiyaan
Please enter your preferred time slot
1- 13.00- 16.00
Your selected time slot is 13.00-16.00
_____
The following seats are currently available
 1 2 3 4 5 6 7 8 9
      SCREEN
```



```
SCREEN
Seat slots and their prices
1 - VIP (Fare - 600 per ticket)
2 - Premium (Fare - 400 per ticket)
3 - Normal (Fare - 200 per ticket)
Please enter the number of tickets
Please enter the category of seat 1 you want : 1
Please enter your preferred seat no. : A1
Your seats are booked.
Total Fare : Rs600
 123455789
 B * * * * B * * *
       NORMAL
       SCREEN
      Thanks!!
Enjoy your movie experience
```



SCREEN

```
______
      Thanks!!
Enjoy your movie experience
ENTER any key to Continue a
1- Continue for next booking0- Exit and reset the System
Enter value: -1
Welcome to our movie ticket booking system!!
Movies screening currently
Hall 1-Gehraiyaan
Hall 2-RRR
Hall 3-The Kashmir Files
Choose the movie you want to book
Your selected movie is Gehraiyaan
Please enter your preferred time slot
1- 13.00- 16.00
2- 17.00 - 20.00
Your selected time slot is 13.00-16.00
```



```
The following seats are currently available
 1 2 3 4 5 6 7 8 9
A B * * * * B * * *
B * * * * * * * * *
     PREMIUM
D * * * * B * * * *
      SCREEN
Seat slots and their prices
1 - VIP (Fare - 600 per ticket)
2 - Premium (Fare - 400 per ticket)
3 - Normal (Fare - 200 per ticket)
Please enter the number of tickets
Please enter the category of seat 1 you want : 2
Please enter your preferred seat no. : C8
Please enter the category of seat 2 you want : 3
Please enter your preferred seat no. : I9
Your seats are booked.
Total Fare : Rs600
______
```





```
Please enter the number of tickets
Please enter the category of seat 1 you want : 2
Please enter your preferred seat no. : C8
Please enter the category of seat 2 you want : 3
Please enter your preferred seat no. : 19
Your seats are booked.
Total Fare : Rs600
_____
 123456789
A B * * * * B * * *
C * * * * * * B *
F B * * * * * * * *
      SCREEN
     Thanks!!
Enjoy your movie experience
ENTER any key to Continue c
_____

    Continue for next booking

0- Exit and reset the System
Enter value:-
```



The program works on a very simple logic and queries.

02

The code contains many predefined functions which makes overall code efficient. Programming

03

The code contains and use many features of C language.

04

The program caters to all possible cases and their consequent working.

