Siddaganga Institute of Technology, Tumakuru

A Report on Open Ended Problem titled
"Online Movie Ticket Booking"

submitted
in the partial fulfillment of the requirements for III semester
Bachelor of Engineering
In
Computer Science and Engineering

by

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Siddaganga Institute of Technology, Tumakuru

(An Autonomous Institution affiliated to Visvesvaraya Technological University, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and ISO 9001:2015 certified)

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CERTIFICATE

This is to certify that open ended problem titled "Online Movie Ticket Booking" is a bonafide work carried out by **Sameer Kumar Kalyanshetti (1SI20CS099) Sudesh S Kini (1SI20CS114) Sathvik K R (1SI20CS101)** of III semester **Bachelor of Engineering in Computer Science and Engineering** of the **SIDDAGANGA INSTITUTE OF TECHNOLOGY** (An Autonomous Institution, affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC and ISO 9001:2015 certified) during the academic year 2021-2022.

Name of the Panel Members   **Signature with Date**

1.   **Mrs. Kavitha M**
2.   **Mrs. Nousheen Taj**

ABSTRACT

Cinema has been a part of the entertainment industry for a long time it creates a massive impact on people all over the world. People love to watch their favorite hero on big screen for this they have to reserve movie tickets. If they go with traditional offline movie ticket booking, they have to stand and wait in long queues and there is even chance of tickets being sold out before turn come. To solve this problem the best solution is to book tickets online theater with. popcorn horizon is a movie ticket reservation system that can be easily accessed by people to book tickets This system will automate the reservation of tickets and enquiries about availability of tickets. This system includes email conformation for the tickets.

Data structures used:

- Structure
- Arrays
- Linked list

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CHAPTER 1

INTRODUCTION

Online movie tickets booking is an application which allows users to book movie tickets. It is user friendly application the code is written in C programming language

In the main menu user can select one of the following options

1 Display available tickets

2 Book tickets

3 Cancel tickets

4 Exit

Firstly, the user needs to create name and email id and select one of the above options
When the user selects the first option the application will display available tickets user can see which tickets have not yet been booked and can proceed with booking option

When user selects this option, firstly they have to enter their name and valid email id. After that user can select seat number from available seats. Booked seats be marked with symbol (X_0_X) in the display. User can book at most 5 seats at a time once the seats are booked the confirmation will be sent to registered email id.

If user wants to cancel his tickets, they can select third option. User have to enter the seat number for cancelling the tickets. Then the system will cancel that ticket and make sure that seat available for other users.

CHAPTER 2

PROBLEM STATEMENT

To build an application for online movie ticket booking using users can book movie tickets easily and can cancel tickets if they wish to . the code is written using functions , array , linked list through C programming language in codeblocks compiler

OBJECTIVES

- **To** create an application which will help users to book online movie tickets easily
- Book tickets by entering name and valid email id
- Select the preferred seat among available seats
- Cancel ticket easily by entering seat number

CHAPTER 3

DESIGN OF ALGORITHM

WELCOME

CURRENT SHOW
MOVIE NAME

1.DISPLAY
2.BOOK TICKET
3.CANCEL TICKET
4.EXIT

DISPLAY AVAILABLE SEATS

BOOK TICKETS

EXIT

ENTER NAME AND EMAIL ID

ENTER SEAT NUMBER

BILLING SECTION

CANCEL TICKET

ENTER SEAT NUMBER
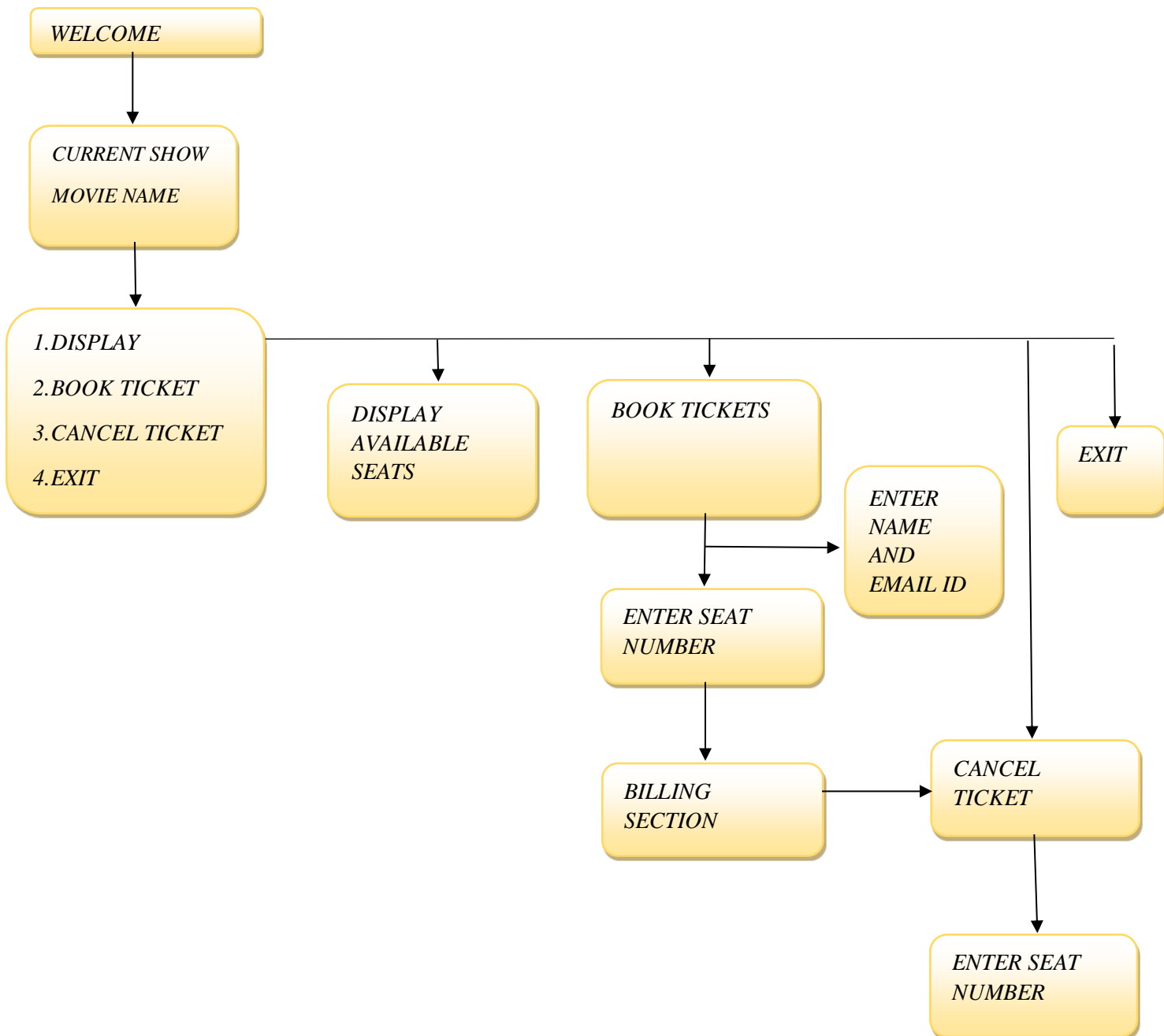
IMPLEMENTATION OF CODE

```c
#include <stdio.h>

#include <stdlib.h>

#include <string.h>

#include<ctype.h>

typedef struct node
{
    int info;
    char d[5];
    struct node *next;
} NODE;

int i, j;
int t[4];
float price = 150;
int flag;

NODE *inslast(NODE *first, int data)
{
    NODE *temp, *newnode;
    newnode = (NODE *)malloc(sizeof(NODE));
    newnode->info = data;
    strcpy(newnode->d, "|");
    newnode->next = NULL;
    if (first == NULL)
    {
        first = newnode;
    }
    else
    {
```

```c
      temp = first;
      while (temp->next != NULL)
        temp = temp->next;
      temp->next = newnode;
   }
   return first;
}


void display(NODE *first)
{

   NODE *temp;
   temp = first;
   while (temp != NULL)
   {
     for (i = 0; i < 10; i++)
     {
       for (j = 0; j < 10; j++)
       {
         printf("\t%s_%d_%s     ", temp->d, temp->info, temp->d);
         temp = temp->next;
       }
       printf("\n\n");
     }
   }
}


void bill(int t[], int n)
{
   int k;

   printf("\n\n\t\t\t\t\t\tPirates of the Caribbean : Salazar's Revenge (ENGLISH)\t\t@ 6 PM\n\n\n");

   printf("\n\t\t\t\t\t\tSeat numbers:\n\n");
   printf("\t\t\t\t\t\t");
   for (k = 0; k < n; k++)
     printf("\t%d\t", t[k]);
   printf("\n\n\t\t\t\t\t\tAmount  : \t\t %d x %.2f : %.2f\n", n, price, n * price);
```

```c
    printf("\n\t\t\t\t\t\t\t\t\t\t\t + gst(10%c)\n\n",37);
    printf("\n\n\t\t\t\t\t\tPayable amount : %.2f\n\n", n * price + .1 * (n * price));
    printf("\n\n\t\t\t\t\t\t\tBooking confirmation has been sent your mail.\n");


    printf("\n\n\t\t\t\t\t\t\t....Enjoy the movie....\n\n\n");
}


NODE *update(NODE *first, int t[], int n)
{
    int c;
    NODE *temp;


    temp = first;


    while (temp != NULL)
    {
        for (c = 0; c < n; c++)
        {
            if (temp->info == t[c])
            {
                temp->info = '\0';
                strcpy(temp->d, "X");
            }
        }


        temp = temp->next;
    }


    return first;
}


int check(NODE *first, int t[], int n)
{
    int g = 0;
    // int g,sp;


    NODE *temp;
    temp = first;
```

```c
while (g < n)

{
    temp = first;
    while (temp != NULL)
    {
        if (temp->info == t[g])
        {
            g++;
            break;
        }
        else if (temp->next != NULL)
        {
            temp = temp->next;
        }
        else
            return 1;
    }
}
// Alternate code....
/*

    while (temp != NULL)
    {

        for (g = 0; g < n; g++)
        {
            temp = first;
            for (sp = 1; sp < t[g]; sp++)
            {
                temp = temp->next;
            }
            if (temp->info != sp)
                return 1;
        }
    }
*/
return 0;
```

```c
}


NODE *cancel(NODE *first, int s)
{

   int pos = 1;
   NODE *temp;
   temp = first;
   while (pos < s)
   {
      temp = temp->next;
      pos++;
   }
   if (strcmp(temp->d, "X") == 0)
   {

      temp->info = pos;
      strcpy(temp->d, "|");
      flag = 1;
   }
   else
   {

      printf("\n\n\n\t\t\t\t\t\tInvalid seat number...\tEntered seat number is not booked...\n\n\n");
      flag = 0;
   }
   return first;
}

int main()
{
   int data, k, b = 100, n, choice, s,h=0,l;
   system("COLOR 70");
   char person[20];
   char mail[20];
```

```c
  NODE *first = NULL;

  for (i = 1; i <= 100; i++)
  {
     data = i;
     first = inslast(first, data);
  }
  printf("\n\t\t\t\t\t\t**********\n");
  printf("\t\t\t\t\t\t   POPCORN - HORIZON\n");
  printf("\t\t\t\t\t\t**********\n\n\n");
  printf("\n\n\t\t\t\t\tCURRENT SHOW :\n");

  printf("\n\n\t\t\t\t\t\tPirates of the Caribbean : Salazar's Revenge (ENGLISH)\t\t@ 6 PM\n\n\n");
name:
  printf("\n\n\t\t\t\t\t\tEnter your name:");


  scanf("%s",person);
  printf("\n\n\t\t\t\t\t\tEnter your mail id:");
  scanf("%s",mail);

  while (1)
  {

     printf("\n\n\t\t\t\t\t\t1.DISPLAY AVAILABLE TICKETS\n\n\t\t\t\t\t\t2.BOOK
TICKETS\n\n\t\t\t\t\t\t3.CANCEL TICKETS\n\n\t\t\t\t\t\t4.EXIT\n\n");
     printf("\n\t\t\t\t\t\tEnter your choice:");
     scanf("%d", &choice);
     switch (choice)
     {
     case 1:
        printf("\n\n\n\t\t\t\t\t   --------------------------------------------\n");
        printf("\t\t\t\t\t\t   AVAILABLE TICKETS\n");
        printf("\t\t\t\t\t   --------------------------------------------\n\n\n");

        display(first);
        printf("\n\t\t\t\t\t\tAvailable tickets: %d\n", b);
        break;
```

case 2:

```
        printf("\n\n\n\t\t\t\t\t   -----------------------------------------------\n");
        printf("\t\t\t\t\t\t   BOOKING SECTION\n");
        printf("\t\t\t\t\t   ---------------------------------------------\n\n\n");


        if(h==1)
        {

            printf("\n\n\t\t\t\t\t\tEnter your name:");



            scanf("%s",person);
            printf("\n\n\t\t\t\t\t\tEnter your mail id:");
            scanf("%s",mail);


        }
        display(first);
        printf("\n\n\t\t\t\t\t\tAvailable tickets: %d\n", b);
u:
        printf("\n\n\n\t\t\t\t\t\tEnter number of tickets you wish to book(MAX 5 tickets per person):");
        scanf("%d", &n);
        if (n > 5)
        {
            printf("\n\n\n\t\t\t\t\t\tExceeding max number of seats per person allowed to book.\n");
            goto u;
        }
GO:
        printf("\n\n\t\t\t\t\t\tEnter the seat numbers to book tickets:");
        for (k = 0; k < n; k++)
        {
            scanf("%d", &t[k]);

            if (t[k] > 100 || t[k] < 1)
            {
                printf("\n\t\t\t\t\t\tInvalid seat number");
                printf("\n\t\t\t\t\t\tTry again.\n");
                goto GO;
```

```
            }
        }

        if (check(first, t, n) > 0)
        {
            printf("\n\n\t\t\t\t\t\tSome of the entered seats are already booked..\n\n\t\t\t\t\t\tPlease select
available seats...\n\n");
            goto GO;
        }
        printf("\n\n\t\t\t\t\t\tTickets with seat numbers:\n");
        printf("\n\t\t\t\t\t\t");
        for (k = 0; k < n; k++)
            printf("\t%d\t", t[k]);
        printf("\n\t\t\t\t\t\t booked successfully...\n\n\t\t\t\t\t\tPlease proceed with payment to confirm your
booking.\n");
        printf("\n\n\t\t\t\t\t\tPress ENTER to proceed with the payment\n\n\n");
        fflush(stdin);
        printf("\n\n\n\t\t\t\t\t   ---------------------------------------------\n");
        printf("\t\t\t\t\t\t   BILLING SECTION\n");
        printf("\t\t\t\t\t   ---------------------------------------------\n\n\n");
        for(l=0; person[l]!='\0'; l++)
            person[l]=toupper(person[l]);
        printf("\n\n\t\t\t\t\t\tTickets are booked under the name of %s\n\n\n\n",person);
        bill(t, n);
        first = update(first, t, n);

        display(first);
        b = b - n;
        h=1;
        break;

    case 3:
        system("COLOR 74");
        printf("\n\n\n\t\t\t\t\t   ---------------------------------------------\n");
        printf("\t\t\t\t\t\t   CANCELATION SECTION\n");
        printf("\t\t\t\t\t   ---------------------------------------------\n\n\n");
        printf("\n\t\t\t\t\t\tEnter the seat number you wish to cancel the booking for:");
        scanf("%d", &s);
        if (s <= 0 || s > 100)
```

```
                {

                    printf("\n\n\n\t\t\t\t\t\tInvalid seat number\n\n\n");
                }
                else
                {
                    first = cancel(first, s);
                    if (flag == 1)
                        b = b + 1;
                }


                system("COLOR 70");
                break;


            case 4:
system("COLOR 02");
                printf("\n\t\t\t\t\t   ----------------------------------------------\n");
                printf("\t\t\t\t\t\t    TEAM :  RUN TIME TERROR\n");
                printf("\t\t\t\t\t   ----------------------------------------------\n\n\n");
                printf("\n\t\t\t\t\t\tDATA STRUCTURE OPEN ENDED PROJECT\n\n\n\t\t\t\t\t\t1SI20CS099
SAMEER KUMAR KALYANSHETTI\n\n\t\t\t\t\t\t1SI20CS114 SUDESH S
KINI\n\n\t\t\t\t\t\t1SI20CS101 SATHVIK K R\n\n");
                exit(0);
            default:
                printf("\n\t\t\t\t\t\tInvalid choice\n");
            }
        }
    return 0;
}
```

CHAPTER 4

RESULT ANALYSIS DETAILS


```
***************************
      POPCORN - HORIZON
***************************


CURRENT SHOW :

Pirates of the Caribbean : Salazar's Revenge (ENGLISH)        @ 6 PM



Enter your name:
```
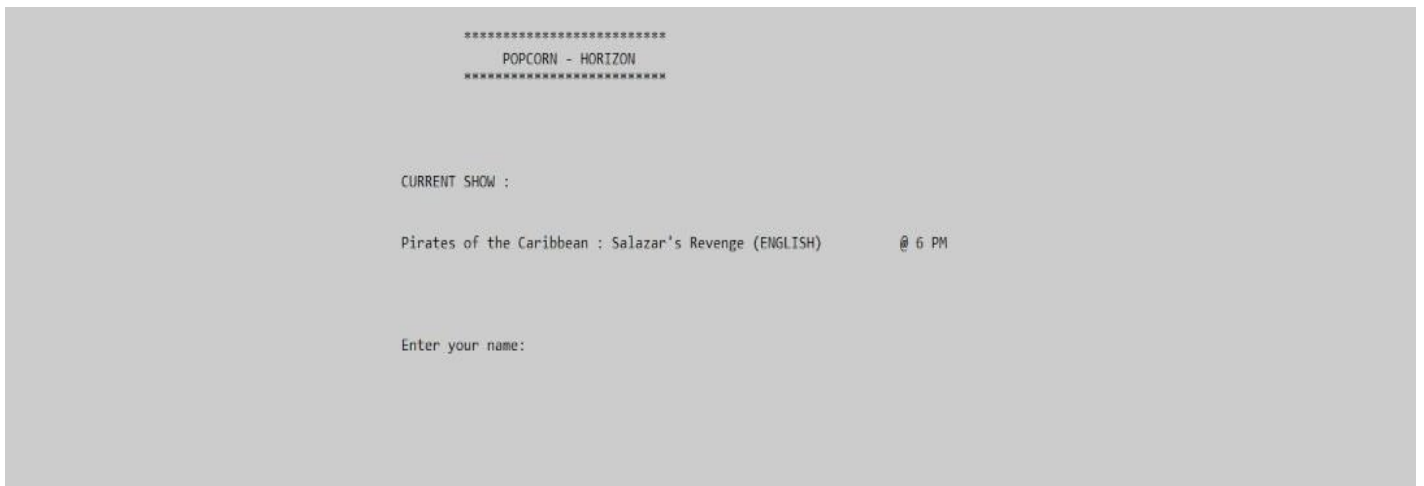
Figure 5.1: Welcome screen

Figure 5.1 shows the welcome screen: Here in welcome screen we get input prompt to enter name and mail id

```
*****************************
        POPCORN - HORIZON
*****************************


CURRENT SHOW :

Pirates of the Caribbean : Salazar's Revenge (ENGLISH)        @ 6 PM



Enter your name:sameer

Enter your mail id:kalyanshettisameer@gmail.com

1.DISPLAY AVAILABLE TICKETS

2.BOOK TICKETS

3.CANCEL TICKETS

4.EXIT

Enter your choice:
```

Figure 5.2: Main menu screen

Figure 5.2 Here user enter the details such as name and email id

```
                              1.DISPLAY AVAILABLE TICKETS

                              2.BOOK TICKETS

                              3.CANCEL TICKETS

                              4.EXIT

                              Enter your choice:1


                         ----------------------------------------
                                   AVAILABLE TICKETS
                         ----------------------------------------

   |_1_|      |_2_|      |_3_|      |_4_|      |_5_|      |_6_|      |_7_|      |_8_|      |_9_|      |_10_|
   |_11_|     |_12_|     |_13_|     |_14_|     |_15_|     |_16_|     |_17_|     |_18_|     |_19_|     |_20_|
   |_21_|     |_22_|     |_23_|     |_24_|     |_25_|     |_26_|     |_27_|     |_28_|     |_29_|     |_30_|
   |_31_|     |_32_|     |_33_|     |_34_|     |_35_|     |_36_|     |_37_|     |_38_|     |_39_|     |_40_|
   |_41_|     |_42_|     |_43_|     |_44_|     |_45_|     |_46_|     |_47_|     |_48_|     |_49_|     |_50_|
   |_51_|     |_52_|     |_53_|     |_54_|     |_55_|     |_56_|     |_57_|     |_58_|     |_59_|     |_60_|
   |_61_|     |_62_|     |_63_|     |_64_|     |_65_|     |_66_|     |_67_|     |_68_|     |_69_|     |_70_|
   |_71_|     |_72_|     |_73_|     |_74_|     |_75_|     |_76_|     |_77_|     |_78_|     |_79_|     |_80_|
   |_81_|     |_82_|     |_83_|     |_84_|     |_85_|     |_86_|     |_87_|     |_88_|     |_89_|     |_90_|
   |_91_|     |_92_|     |_93_|     |_94_|     |_95_|     |_96_|     |_97_|     |_98_|     |_99_|     |_100_|

                              Available tickets: 100

                              1.DISPLAY AVAILABLE TICKETS

                              2.BOOK TICKETS

                              3.CANCEL TICKETS

                              4.EXIT

                              Enter your choice:_
```

Figure 5.3 Available Tickets

Figure 5.3 Here system shows the initial available tickets.

```
---------------------------------------------
                    BOOKING SECTION
---------------------------------------------

|_1_|      |_2_|      |_3_|      |_4_|      |_5_|      |_6_|      |_7_|      |_8_|      |_9_|      |_10_|

|_11_|     |_12_|     |_13_|     |_14_|     |_15_|     |_16_|     |_17_|     |_18_|     |_19_|     |_20_|

|_21_|     |_22_|     |_23_|     |_24_|     |_25_|     |_26_|     |_27_|     |_28_|     |_29_|     |_30_|

|_31_|     |_32_|     |_33_|     |_34_|     |_35_|     |_36_|     |_37_|     |_38_|     |_39_|     |_40_|

|_41_|     |_42_|     |_43_|     |_44_|     |_45_|     |_46_|     |_47_|     |_48_|     |_49_|     |_50_|

|_51_|     |_52_|     |_53_|     |_54_|     |_55_|     |_56_|     |_57_|     |_58_|     |_59_|     |_60_|

|_61_|     |_62_|     |_63_|     |_64_|     |_65_|     |_66_|     |_67_|     |_68_|     |_69_|     |_70_|

|_71_|     |_72_|     |_73_|     |_74_|     |_75_|     |_76_|     |_77_|     |_78_|     |_79_|     |_80_|

|_81_|     |_82_|     |_83_|     |_84_|     |_85_|     |_86_|     |_87_|     |_88_|     |_89_|     |_90_|

|_91_|     |_92_|     |_93_|     |_94_|     |_95_|     |_96_|     |_97_|     |_98_|     |_99_|     |_100_|


Available tickets: 100


Enter number of tickets you wish to book(MAX 5 tickets per person):4

Enter the seat numbers to book tickets:2



Tickets with seat numbers:
        2           4           6           8
booked successfully...

Please proceed with payment to confirm your booking.

Press ENTER to proceed with the payment
```

Figure 5.4 Booking Section

Figure 5.4 Here user can book the tickets by entering the seat number.

```
                    Please proceed with payment to confirm your booking.

                    Press ENTER to proceed with the payment




                    ----------------------------------------------
                                    BILLING SECTION
                    ----------------------------------------------



                    Tickets are booked under the name of SAMEER



                    Pirates of the Caribbean : Salazar's Revenge (ENGLISH)          @ 6 PM


                    Seat numbers:
                            2              4              6              8
                    Amount   :            4 x 150.00 : 600.00

                                                            + gst(10%)


                    Payable amount : 660.00


                    Booking confirmation has been sent your mail.

                        ....Enjoy the movie....
```

|_1_|	X_0_X	|_3_|	X_0_X	|_5_|	X_0_X	|_7_|	X_0_X	|_9_|	|_10_|
|_11_|	|_12_|	|_13_|	|_14_|	|_15_|	|_16_|	|_17_|	|_18_|	|_19_|	|_20_|
|_21_|	|_22_|	|_23_|	|_24_|	|_25_|	|_26_|	|_27_|	|_28_|	|_29_|	|_30_|
|_31_|	|_32_|	|_33_|	|_34_|	|_35_|	|_36_|	|_37_|	|_38_|	|_39_|	|_40_|

Figure 5.5 Billing Section

Figure 5.5 After the tickets are booked the system will generate the bill for user confirmation.

```
                              Enter your choice:3


          ------------------------------------------------
                          CANCELATION SECTION
          ------------------------------------------------


                Enter the seat number you wish to cancel the booking for:2

                1.DISPLAY AVAILABLE TICKETS

                2.BOOK TICKETS

                3.CANCEL TICKETS

                4.EXIT

                Enter your choice:3



          ------------------------------------------------
                          CANCELATION SECTION
          ------------------------------------------------


                Enter the seat number you wish to cancel the booking for:
```
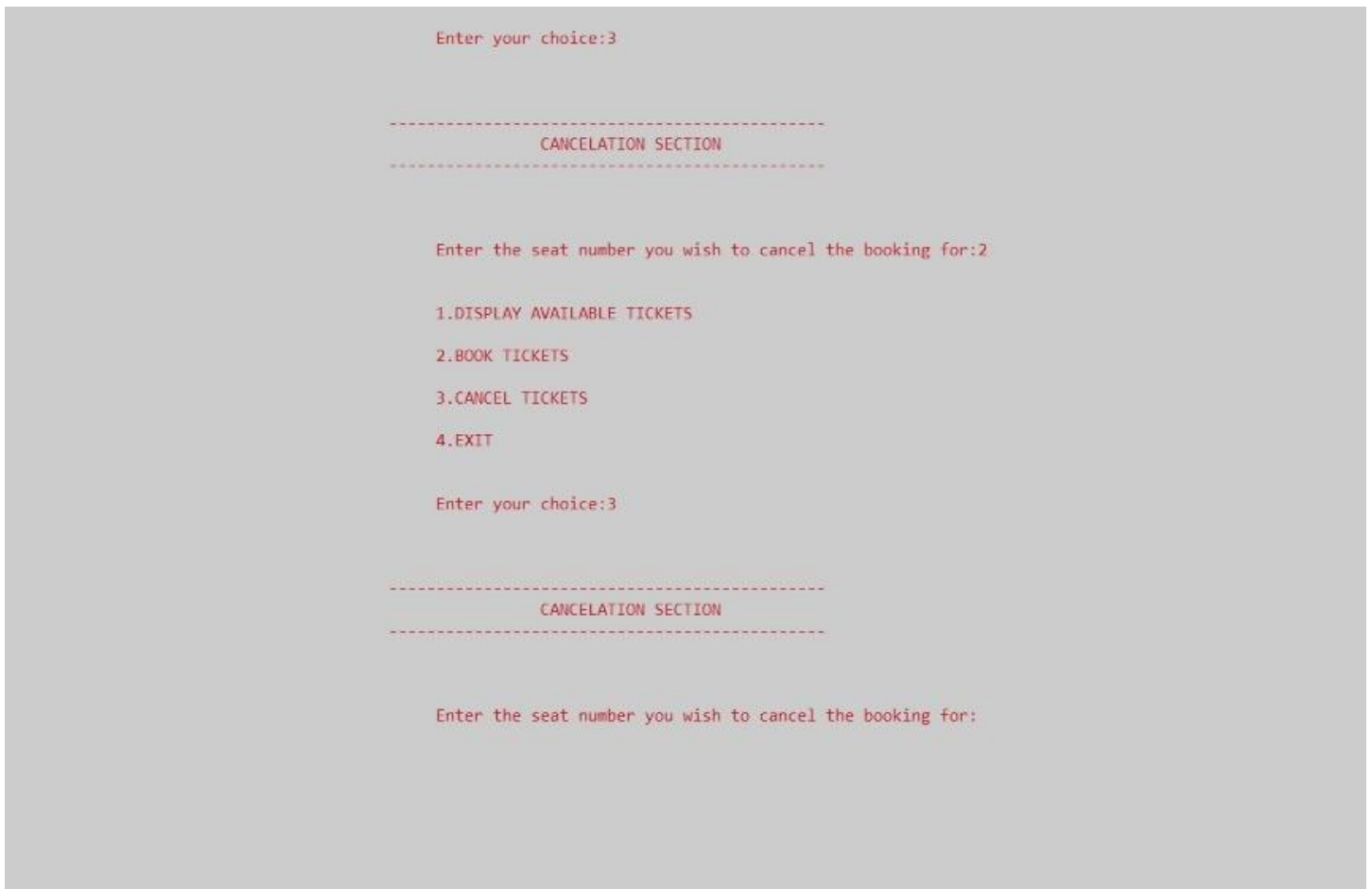
Figure 5.6 Ticket Cancellation

Figure 5.6 If the user wishes to cancel the tickets then they can cancel the tickets by entering the seat numbers.

```
                            4.EXIT

                            Enter your choice:1


                                   ---------------------------------------------
                                              AVAILABLE TICKETS
                                   ---------------------------------------------

    |_1_|          |_2_|         |_3_|         |_4_|         |_5_|        X_0_X         |_7_|        X_0_X        |_9_|       |_10_|

    |_11_|         |_12_|        |_13_|        |_14_|        |_15_|       |_16_|        |_17_|       |_18_|       |_19_|      |_20_|

    |_21_|         |_22_|        |_23_|        |_24_|        |_25_|       |_26_|        |_27_|       |_28_|       |_29_|      |_30_|

    |_31_|         |_32_|        |_33_|        |_34_|        |_35_|       |_36_|        |_37_|       |_38_|       |_39_|      |_40_|

    |_41_|         |_42_|        |_43_|        |_44_|        |_45_|       |_46_|        |_47_|       |_48_|       |_49_|      |_50_|

    |_51_|         |_52_|        |_53_|        |_54_|        |_55_|       |_56_|        |_57_|       |_58_|       |_59_|      |_60_|

    |_61_|         |_62_|        |_63_|        |_64_|        |_65_|       |_66_|        |_67_|       |_68_|       |_69_|      |_70_|

    |_71_|         |_72_|        |_73_|        |_74_|        |_75_|       |_76_|        |_77_|       |_78_|       |_79_|      |_80_|

    |_81_|         |_82_|        |_83_|        |_84_|        |_85_|       |_86_|        |_87_|       |_88_|       |_89_|      |_90_|

    |_91_|         |_92_|        |_93_|        |_94_|        |_95_|       |_96_|        |_97_|       |_98_|       |_99_|      |_100_|

                            Available tickets: 98

                            1.DISPLAY AVAILABLE TICKETS

                            2.BOOK TICKETS

                            3.CANCEL TICKETS

                            4.EXIT

                            Enter your choice:_
```

Figure 5.7 Available Tickets After Cancellation

Figure 5.7 Here the remaining seats will be displayed once the user cancel the tickets.

```
Available tickets: 98

1.DISPLAY AVAILABLE TICKETS

2.BOOK TICKETS

3.CANCEL TICKETS

4.EXIT

Enter your choice:2


-------------------------------------------------
                   BOOKING SECTION
-------------------------------------------------



Enter your name:sagar

                    Enter your mail id:mnsagar@gmail.com
|_1_|        |_2_|        |_3_|        |_4_|        |_5_|        X_0_X        |_7_|        X_0_X        |_9_|        |_10_|
|_11_|       |_12_|       |_13_|       |_14_|       |_15_|       |_16_|       |_17_|       |_18_|       |_19_|       |_20_|
|_21_|       |_22_|       |_23_|       |_24_|       |_25_|       |_26_|       |_27_|       |_28_|       |_29_|       |_30_|
|_31_|       |_32_|       |_33_|       |_34_|       |_35_|       |_36_|       |_37_|       |_38_|       |_39_|       |_40_|
|_41_|       |_42_|       |_43_|       |_44_|       |_45_|       |_46_|       |_47_|       |_48_|       |_49_|       |_50_|
|_51_|       |_52_|       |_53_|       |_54_|       |_55_|       |_56_|       |_57_|       |_58_|       |_59_|       |_60_|
|_61_|       |_62_|       |_63_|       |_64_|       |_65_|       |_66_|       |_67_|       |_68_|       |_69_|       |_70_|
|_71_|       |_72_|       |_73_|       |_74_|       |_75_|       |_76_|       |_77_|       |_78_|       |_79_|       |_80_|
|_81_|       |_82_|       |_83_|       |_84_|       |_85_|       |_86_|       |_87_|       |_88_|       |_89_|       |_90_|
|_91_|       |_92_|       |_93_|       |_94_|       |_95_|       |_96_|       |_97_|       |_98_|       |_99_|       |_100_|


Available tickets: 98


Enter number of tickets you wish to book(MAX 5 tickets per person):
```

Figure 5.8 Booking Section Of Remaining Tickets

Figure 5.8 Here another user can book the tickets for the same show.

CONCLUSION

Popcorn horizon - an online movie ticket booking application helps the user to book the movie tickets online in much easier way. It prevents the user from standing in a long queue to book the tickets in offline in front of the theaters or in the malls. Her the user can book or cancel the tickets by just entering the seat number.

REFERENCES

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