```
#include<string.h>
#include <stdio.h>
#include <time.h>
#include<Windows.h>
#include<stdlib.h>
#define _CRT_SECURE_NO_WARNINGS
#pragma warning (disable: 4101)
# define _CRTIMP __declspec(dllimport)
void greeting(void);// this function calls the initial transition runs only once
void Create_account(int);//this create account depending on function arugument either for user
and admin.
void admin_menu();
void user_menu();
int authentication(int);//this function for login of user or admin depending on argument passed
void line_anim(int);//this function prints a line animation size of line depending on the argument
passed
void txt_anim(char*, int);//this function prints the char array passed in a transition
void change_pass(int);//this simpmly changes the password of admin or user
void addMov();//this function is used only for admin to insert moives
void buy_ticket(int);
int seatno(int, int);//to book seat
char name1[20];
int check = 0;
void close(void);//this function exit the program
```

struct book

```
{
       int mnum;
       char mname[20];
       char mtime[10];
       char mday[12];
       char mtype[15];
       int fee;
};
int main()
{
       if (check == 0) {
             greeting();//this function runs only once in the begining
             check += 1;
      }
       int choice = 0, auth = 10;
       char title[] = "\n\tLOG-IN, And GET 30% DISSCOUNT";
      txt_anim(&title[0], sizeof(title));
       while (1 == 1) //this loop goes forever untill 3 is pressed in main menu
       {
             line_anim(38);
             //following 3 lines just print main menu.
             printf("\n\t----\n");Sleep(1000);
             printf("\t| \tMAIN MENU ## \t\t|\n \t| 1. Create Account\t\t|\n \t| 2. Log-in\t\t\t|\n
\t| 3. Buy Ticket Without-login\t|\n\t| 4. Exit\t\t\t|");Sleep(1500);
             printf("\n\t----\n"); Sleep(1000);
             printf("\tEnter YOUR CHOICE :: ");Sleep(1000);
```

```
scanf("%d", &choice); //choice varaiable will selection from menu
               switch (choice) {//switch to make decision
               case 1:
                      system("cls");
                      line_anim(38);
                      printf("\n\t********\n");Sleep(1000);
                      printf("\t| Creater Account As: \t\t|\n \t| 1. Admin\t\t\t|\n \t| 2. User
tt|\nt| 3. Go-to Main Menutt|\nt| 3. Exittt|\nt|");Sleep(1000);
                      printf("\n\t******** \n\tEnter your choioce : ");Sleep(1000);
                      scanf("%d", &choice); //now choice varaiable will selection either user or
admin
                      if (choice == 4)
                              close();
                      else if (choice == 3) {
                              system("cls");
                              main();
                      }
                      else
                              Create_account(choice);
                      break;
              case 2:
                      system("cls");
                      line_anim(38);
                      printf("\n\t********\n");Sleep(500);
                      printf("\t Login-in As: \t 1. Admin\t 1. Admin\t 2. User \t 1. Admin\t 3.
Go-to Main Menu\t\t|\n\t| 4. Exit\t\t\t|");Sleep(500);
```

```
scanf("%d", &choice); //now choice varaiable will selection either user or
               if (choice == 4)
                       close();
               if((choice==2) || (choice == 1))
                       auth = authentication(choice);
               if (auth == 0) {
                       printf("\tYou are logged-In :) \n");
                       system("PAUSE");
                       system("cls");
                       if (choice == 2)
                              user_menu();
                       else if (choice == 1)
                              admin_menu();
               }
               else
                       system("cls");
                       break;
case 3:
       buy_ticket(0);
case 4:
       close();
       break;
default:
       printf("\t\nBad Selection, select from the list again : ");
```

printf("\n\t******** \n\tEnter your choioce : ");Sleep(500);

admin

```
break;
               }
       }
       getchar();
        return 0;
}//end of main function
void greeting(void) {
        int count, i;
       for (int i = 0; i < 9; i++)
       { // A simple animation to show a moving train.
               printf(" ..... o o o o o o o o o");
               for (count = i; count > 0;count--)
                       printf("o o o o o");
               printf("\n");
               for (count = i; count > 0;count--)
                       printf("\t");
               printf("\t\t
                                          o\n");
               for (count = i; count > 0;count--)
                       printf("\t");
               printf("\t \_** ]OO|_n_n_][.\n");
```

```
for (int count = i; count > 0;count--)
                     printf("\t");
             printf("\t\t [__]|_|__)< \n");
             for (int count = i; count > 0;count--)
                     printf("\t");
              printf("\t\ oo\ oo\ OOOO-|\ oo\\n");
             if (i!= 8) {
                     Sleep(190);
                     system("cls");
             }
             else
                     Sleep(1000);
      }
       line_anim(38);
       printf("\t _ _ _ _ _ \n"); Sleep(1200);
       printf("\t / \_( \ ( \ \ ( \ \ / \_( \ ) / ( \ ( \ \ / \_( \ ) / \_( \ ) / \_( \ ( \ \ ) \ ) \ "); Sleep(1200);
       printf("\t((__)() ()_)) (/()\t) (((_) ()_))( \t \t) /\t )()_))
(\n");Sleep(1200);
       printf("\t \\(\_()\(\_(/\\)) ()(_\)()(_/()(_/()(_//\))n"); Sleep(1200);
       char subtitle[] = " (: CINEMA TICKET SYSTEM BY SANJAY KUMAR :). . . .\n ";
       printf("\n \t\t\t");
      txt_anim(subtitle, sizeof(subtitle));
```

```
}//end of greeting function
```

```
//this function is used for allocating seats and deallocating seats for customers
int seatno(int mov_no, int select) {
        int i = 0, j = 0;
        FILE* ptr;
        int seat_no = 0;
        char file_nm[10];
        sprintf(file_nm, "_%d", mov_no);
        strcat(file_nm, ".txt");
        ptr = fopen(file_nm, "r");
        int array[10][10];
        if (ptr == NULL) {
                for (i = 0; i < 10; i++)
                        for (j = 0; j < 10; j++) {
                                if (i == 0)
                                         array[i][j] = j + 1;
                                else
                                         array[i][j] = (10 * i) + (j + 1);
                        }
       }
        else {
```

for (i = 0; i < 10; i++) {

```
fscanf(ptr, " %7d", &array[i][j]);
                        fscanf(ptr, "\n");
                }
                fclose(ptr);
       }
        if (select == 0) {
                printf("\n\t\t\ S C R E E N");Sleep(100);
                printf("\n\t\t\t | | | | | \n");Sleep(100);
                for (i = 0; i < 10; i++) {
                       for (j = 0; j < 10; j++) {
                                if (array[i][j] == 0)
                                        printf(" **");
                                else
                                        printf(" %7d", array[i][j]);
                        }
                        printf("\n\n"); Sleep(50);
                }
                char head[] = "\n\tPositions shown with ** are already reserved.\n\tSelect
Seat.NO from non-reserved seats: ";
                txt_anim(head, sizeof(head));
        Again:
                scanf("%d", &seat_no);
                i = (seat_no / 10);
                j = (seat_no % 10) - 1;
                if (array[i][j] == 0) {
```

for (j = 0; j < 10; j++)

```
printf("\t!! Seat no : %d is alread reserved.\n\tPlease select again : ",
seat_no);
                        goto Again;
                }
                array[i][j] = 0;
       }
       else {
                i = (select / 10);
                j = (select % 10) - 1;
                array[i][j] = select;
       }
        ptr = fopen(file_nm, "w");
       for (i = 0; i < 10; i++) {
                for (j = 0; j < 10; j++)
                        fprintf(ptr, " %7d ", array[i][j]);
                fprintf(ptr, "\n");
       }
        fclose(ptr);
        return seat_no;
}
//but_ticket function can be called directly from main meny or after login as user.
void buy_ticket(int select) {
        system("cls");
        FILE* ptr;
        char c;
        int num = 0, sno, seat;
```

```
char ch;
       float price = 0.0;
       char head1[] = "\n\n\tChoose From Above Movie S.Numbers : ";
       ptr = fopen("Movies.txt", "a+");
       char head[] = "\nS.No TYPE OF MOVIE NAME OF MOVIE
                                                                        DATE
                                                                                   TIME
PRICE(IN RUPESS).\n";
       txt_anim(head, sizeof(head));
       line_anim(30);
              while ((ch = fgetc(ptr)) != EOF) {
                      printf("%c", ch);
                      if (ch == '\n')
                             Sleep(100);
              }
       line_anim(30);
              if (select == 1) {
                      system("PAUSE");
                      admin_menu();
              }
       fclose(ptr);
       ptr = fopen("Movies.txt", "r");
       fseek(ptr, 0, SEEK_END);
              if (ftell(ptr) == 0) {
                      printf("\n\tTheir is no movie in cinema right-now\n\tPLease ask Admin to
ADD Movies.##\n");
                      system("PAUSE");
                      system("cls");
```

```
main();
               }
               else{
                      rewind(ptr);
                      txt_anim(head1, sizeof(head1));
                      scanf("%d", &sno);
                      for (c = getc(ptr); c != EOF; c = getc(ptr)) {
                              if (c == '\n') // Increment count if this character is newline
                                      num = num + 1;
                              if (num == sno - 1)
                                      break;
                      }
                      if (select == 0) {//if function is called directly to buy ticket from main
menu
                              printf("\tENTER YOUR NAME : ");
                              getc(stdin);
                              fgets(name1, 20, stdin);
                      }
               seat = seatno(sno, 0);
               system("PAUSE");
               struct book b;
               fscanf(ptr, "%*5d. %15s %20s ", b.mtype, b.mname);
               fscanf(ptr, "%10s %13s %14d \n", b.mday, b.mtime, &b.fee);
               price = (float)b.fee;
                      if (select == 2)//discount if called from user menu
                              price = 0.7 * price;
```

```
system("cls");
           printf("\n\n");
           time_t t;
           time(&t);
           printf("\t-----\n");
           line_anim(24);
           printf("\n\tTICKET BOOKING DETAILS : %s \n", ctime(&t));Sleep(200);
           : %d \n", b.mname, sno);Sleep(200);
           name1);Sleep(200);
           printf("\t Movie Time : %20s
                                    Seat Number: %d\n", b.mtime, seat);Sleep(200);
           printf("\t Movie Date : %20s
                                    \n\n", b.mday);Sleep(200);
                  if (select == 0) {
                        printf("\t\t\t\t\t
                                       price : %.2f", price);Sleep(200);
                        line_anim(24);
                        system("PAUSE");
                        system("cls");
                        main();
                  }
                  if (select == 2) {
                        printf("\t %s You are logged-in \t \tPrice 30%% OFF: %.2f",name1,
price);Sleep(200);
                        line_anim(24);
                        system("PAUSE");
                        system("cls");
                        user_menu();
```

```
}
               }
}
void addMov()
{
               int num = 1;
               char c;
               struct book b;
               char op;
               FILE* fp;
               char title[] = "\t!! NOTE fill all fields without space.\n";
               txt_anim(title, sizeof(title));
               printf("\n Enter Name of Movie
                                                      : ");
               scanf("%s", b.mname);
               printf(" Enter type Movie
                                                 : ");
               scanf("%s", b.mtype);
               printf("Enter Movie Schedule (DD:MM:YYYY) : ");
               c = getc(stdin);
               scanf("%s", b.mday);
               printf(" Enter Time (eg hh:mm AM ) : ");
               scanf("%s", &b.mtime);
               printf(" Enter Ticket Prize
                                                 : ");
               scanf("%d", &b.fee);
               fp = fopen("Movies.txt", "a+");//above lines just input the required ditails for
movie
```

```
rewind(fp);
                       for (c = getc(fp); c != EOF; c = getc(fp))
                               if (c == '\n') // Increment count if this character is newline
                                      num = num + 1; //num+1 is the 1 more than the total no of
movies already present in data
               fprintf(fp, "%5d. %15s %20s ", num, b.mtype, b.mname);
               fprintf(fp, "%10s %13s %14d \n", b.mday, b.mtime, b.fee);//now inpute fiels are
enterd in the file
               printf("\n\tRecord insert sucessful!");
               line_anim(38);
               fclose(fp);
                       do {
                               printf("\n\tAdd another record (y/n)?: ");
                               c = getc(stdin);
                               scanf("%c", &op);
                               switch (op) {
                               case 'y':
                                      printf("\n");
                                      addMov();
                               case 'n':
                                      printf("\n");
                                      admin_menu();
                               default:
                                      printf("Please select (y) or (n)! \n");
                              }
                       } while (op != 'n');
```

```
admin_menu();
}
int authentication(int select) {
               char password[20], tempname[30], check_pass[20];
               unsigned int length;
              printf("\tENTER YOUR NAME : ");
               getc(stdin);
               fgets(name1, sizeof(name1), stdin);
               strcpy(tempname, name1);
               length = strlen(tempname);
               if (select == 1)
                      strcat(tempname, " admin");
               strcat(tempname, ".txt");
               FILE* ptr;
               if ((ptr = fopen(tempname, "r")) == NULL) { //to check if the account exist
                      printf("\t!!This user/admin account does Not exist.\n Press any key to
continue");
                      getchar();
                      return 0;
               }
               else {//if files exist than it inputs the password
                      fclose(ptr);
                      printf("\tEnter Password : ");
               Again:
```

```
scanf("%s", password);
                      ptr = fopen(tempname, "a+");
                      fseek(ptr, -20, SEEK_END);
                      fscanf(ptr, "%s", check_pass);
                      if (strcmp(password, check_pass) != 0) {
                             printf("\t!!Password does not matche.\n \tENTER AGAIN:\t");
                             goto Again;
                      }
              }
              rewind(ptr);//this function brings the curser in the file to the start of file
              fclose(ptr);
              return 0;
}
void Create_account(int select) {
              char name[20], password[20], choose, tempname[30];
              char admin_pass[20] = "Welcome@1";
              printf("\tENTER YOUR NAME: ");
              getc(stdin);
              fgets(name, sizeof(name), stdin);//this line input name
              strcpy(tempname, name);
                      //
                      if (select == 1) {
                                                                  //if account is created for
admin
                             strcat(tempname, "admin");//then admin is also concatenated
with the name
```

```
pass:
                                                                           //as admin has to be
given more authorites
                              printf("\tEnter Admin authentication password: ");
                              scanf("%s", password);
                              if ((strcmp(password, admin_pass)) != 0) {
                                     printf("\t!!Admin password not matched.!!\n\tWant to re-
enter password (y/n): ");
                                     getc(stdin);
                                     scanf("%c", &choose);
                                     if (choose == 'y')
                                             goto pass;
                                     return;
                             }
                      }
              printf("\tENTER your password: ");
               scanf("%s", password);
              strcat(tempname, ".txt");
              FILE* ptr;
              strcat(name, " ");
              ptr = fopen(tempname, "a+"); //now txt file is created either for for admin or user
              fputs(name, ptr); //in these lines names and password are saved to file
              fprintf(ptr, " %20s", password);
              fclose(ptr);
              char title[] = "Your Account has been created";
              txt_anim(title, sizeof(title));
              line_anim(38);
```

```
system("cls");
               return;
}
//the logic used is that new password is just written at the last 20 spaces of each respective
account file
//and authentication picks the last 20 space of account file as a passowrd.
void change_pass(int select) {
       line_anim(38);
       char file_name[30], new_pass[35];
       strcpy(file_name, name1);
       if (select == 1)
               strcat(file_name, " admin");
       strcat(file_name, ".txt");
       printf("\n\t%s, enter new password :: ", name1);
       scanf("%s", new_pass);
       printf("\n\tPassword changed succesfully\n");
       system("PAUSE");
       FILE* ptr = fopen(file_name, "a+");
       fprintf(ptr, " %20s", new_pass);
       fclose(ptr);
       if (select == 1)
               admin_menu();
       else if (select == 2)
               user_menu();
}
```

//this menu just decide and direct the control to other functions accordingly

```
void admin_menu() {
                           system("cls");
                           int choice = 0;
                           char c;
                           char title[25];
                           printf("\n\n\t********\n");Sleep(500);
                           printf("\t|You are Login-in as admin: \t|\n \t| 1. Add Movies\t\t|\n \t| 2. Show all Movies
t\t 0.5  Delete Movies t\t 0.5  A. Log-out t\t 0.5  Change password 
Exit\t\t|";Sleep(500);
                           printf("\n\t******** \n\tEnter your choioce : ");Sleep(500);
                           scanf("%d", &choice);
                           switch (choice)
                           {
                           case 1:
                                                     addMov();
                                                     break;
                           case 2:
                                                     buy_ticket(1);//this function only shows administrator movie
                                                     break;
                           case 3:
                                                     system("cls");
                                                     char itl[] = "Note :: !!ALL THE MOVIES WILL BE DELETED\n\t Do you stil want to
delete (y/n): ";
                                                     txt_anim(itl, sizeof(itl));
                                                     do {
                                                                                getc(stdin);
                                                                                scanf("%c", &c);
```

```
switch (c) {
               case 'y':
                      remove("Movies.txt");
                      printf("\tDeleted Movies Successfuly : \n");
                       break;
               case 'n':
                      break;
               default:
                      printf("Please select (y) or (n)! ");
               }
       } while (c != 'n' && c != 'y');
       system("PAUSE");
       admin_menu();
case 4:
       system("cls");
       char title[] = "YOU ARE LOGGED-OUT SUCCESFULLY";
       txt_anim(title, sizeof(title));
       main();
case 5:
       change_pass(1);
       break;
case 6:
       close();
default:
       printf("\t!!Selection out of list.");Sleep(1500);
```

```
break;
       }
       return;
}
//this menu just decide and direct the control to other functions accordingly
void user_menu() {
       system("cls");
       line_anim(38);
       int choice = 0, seat = 0;
       printf("\n\n\t********\n");Sleep(500);
       printf("\t|You are Login-in as User: \t|\n \t| 1. Buy Movie ticket\t\t|\n \t| 2. Return Movie
ticket t|\n t| 3. Change password t|\n t| 4. Log-outt|\n t| 5. Exitt|\t|\;Sleep(500);
       printf("\n\t******** \n\tEnter your choioce : ");Sleep(500);
       scanf("%d", &choice);
       switch (choice)
       {
       case 1:
              buy_ticket(2);
       case 2:
               printf("\t%s Please Enter movie number : ", name1);
               scanf("%d", &choice);
               printf("\t%s Please Enter Seat number: ", name1, seat);
              scanf("%d", &seat);
               seatno(choice, seat);
               printf("\t%s, your Seat No %d for Movie No: %d has been cancelled. \n", name1,
```

```
seat, choice);
               system("PAUSE");
               system("cls");
               user_menu();
        case 3:
               change_pass(2);//the control is again directed to the user menu after changing
passowrd
        case 4:
               system("cls");
               main();
        case 5:
               close();
        default:
               break;
       }
}
void line_anim(int num) {
       printf("\n");
       for (int i = 0; i < num; i++) {
               printf("+--"); Sleep(80);
       }
       printf("\n");
}
void txt_anim(char* ptr, int size) {
```