UNIVERSITI TUNKU ABDUL RAHMAN

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UCCD 1004 PROGRAMMING CONCEPTS AND PRACTICES

ASSIGNMENT 2

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Task Division

	Name	Modules	Description	*A2 Contributio n	
1.	1. TAN KIA YEE Show Movie Show Movie L		Show Movie List for admin	(Overall, %)	
		Add Movie	Allow admin to add new movie for the cinema.	2	
		Edit Movie	Allow admin to edit the movie available	3	
		Book Movie	Allow users to book their favourite movie	4	
2.	TAN QI YANG	Admin Login	Allow admin to login to admin interface	1	
		Delete Movie	Allow admin to edit the movie available	2	
		Cancel Booking	Allow the users to cancel their booking.	3	
		View Transaction	Allow admin to view the transaction of the users	4	
3.	OOI KHAI SHEN	User Login/ Register	Allow users to register new account and use it to login user interface	1	
		Movie Description	Show Movie List with description to users	2	
		Show History	Show the booking history of the users	3	
		Payment	Allow users to make payment for their booking.	4	

 $^{/\!/}$ All the modules we discuss and did it together.

Objective

The application program chosen to design and develop is Cinema Ticketing System. The objective of this program is to allow admin to manage movie setting and users to book the movie. Admin's interface should have the functions including Show Movie, Add Movie, Edit Movie, Delete Movie and View Transaction while the users' interface should have some functions including Show Movie Description, Book Movie, Show History, Cancel Booking and Payment.

Pseudocode

Declare function prototype:

userUI(), logadmin(), admin(), home(), mainpage(), addMovie(), editMovie(), deleteMovie, ViewTrans(), adminShowMovie), LoginRegister(), Register(), Login(), userExist(string email_1), showMovie(), bookMovie(), showHistory(), paybill(), storeInfoInArray(int&), storeBookedInfoInArray(int&)

Using appropriate data type declare global array variables:

MovieTitle[100], MovieDesc[100], MoviePrice[100]={0}, MovieSeat[100], startTime[100], endTime[100], bMovietitle[100], bMovieStartTime[100], bMovieEndTime[100], bNumMovieSeat[100], bMoviePrice[100]

Using appropriate data type declare global variables:

i=0, title, describe, price, seat, sTime, eTime, totalPrice=0, totalBookedMovie=0, btitle, bSeat, bPrice, bStartTime, bEndTime, paidStatus="No Paid", totalMovie=0, username

Function: main()

Call function mainpage()
Call function homepage()

Function: mainpage()

Output mainpage() interface Pause

Function: home()

Clear screen

Output home() interface

Declare character array interfaceChoose[10]

Ask user to choose the desire interface and store in interfaceChoose array

Dο

If interfaceChoose != 1 character

Output error, ask user to enter one character only.

Continue loop

Else if interfaceChoose = "A" or "a"

Call function logadmin()

Else if interfaceChoose = "G" or "g"

Call function LoginResgister()

Call function userui()

Else if interfaceChoose = "E" or "e"

Output goodbye word

Terminate

Pause

Else

Output error, ask user to enter valid input

As long as the input is not "A", "a", "G", "g", "E" or "e"

Function: loginadmin()

Declare character array id[50]

Declare character array pass[50]

Declare correct = true as boolean

Do

Clear screen

Output login() interface

Ask user to enter username and store in variable id

if id = "admin"

```
ask user enter password and store in pass
                if pass = "admin"
                        Output username and password correct
                        Correct = false
                        Pause
                        Call function admin()
               Else
                        Output password is wrong and hint given
                        Pause
                Output username is wrong and hint given
               Pause
As long as correct = true
Set character array choice[20]
Declare stop = true as boolean
Output Admin() interface
        Ask user enter their choice and store in choice array
       If the choice != one character
                Output ask user to input one character only
                Continue loop
                If choice = 1
                        Call function adminShowMovie()
                        End loop
                Else if choice = 2
                        Call function addMovie()
                        End loop
               Else if choice = 3
                        Call function editMovie()
                        End loop
                Else if choice = 4
                        Call function deleteMovie()
                        End loop
               Else if choice = 5
                        Call function ViewTrans()
                        End loop
               Else if choice = 6
                       Call function home()
                       End loop
               If choice = 7
                        Terminate
                        Pause
                Else
                        Output ask user enter input 1-7 only
                        Continue loop
```

As long as stop = true

Else

Else

Function: admin()

Do

Clear screen

Function: adminShowMovie()

Clear screen

Output adminShowMovie() interface

Call function storeInfoInArray(totalMovie)

 $\begin{aligned} \text{Declare } i &= 0 \text{ as integer} \\ \text{For } i \text{ in the range } i &< \text{totalMovie - 1} \\ i++ \\ & \text{Output movie title = MovieTitle[i]} \\ & \text{Output movie description = MovieDesc[i]} \\ & \text{Output price = MoviePrice[i]} \\ & \text{Output available seat = MovieSeat[i]} \\ & \text{Output start time = startTime[i]} \\ & \text{Output end time = endTime[i]} \\ \end{aligned}$

Call function admin()

Function: addMovie()

Clear screen

Declare newMovieTitle and MovieDesc as string

Declare price as double

Declare seat, addedM = 0 as integer

Declare sTime, eTime as string

Declare outMovieFile as ofstream

Open txt file named "MovieList" to append data inside

Declare character array choice[20]

Output addMovie() interface

Declare again = true as boolean

Declare yes = true as boolean

Do

Ask user for new movie title

Read user input into newMovieTItle variable using getline function Store the newMovieTitle into outMovieFile

Ask user for new movie price and store into price variable Store the price into outMovieFile

Ask user for new total seat and store into seat variable Store the seat into outMovieFile

Ask user for new movie description

Read user input into MovieDesc variable using getline function

Store the MovieDesc into outMovieFile

Ask user for new movie starting time

Read user input into sTime variable using getline function

Store the sTime into outMovieFile

Ask user for new movie ending time

Read user input into eTime variable using getline function

Store the eTimeinto outMovieFile

addedM++

Dο

Ask user whether to continue add movie and store into choice If choice != one character

Output asks the user to enter one character only.

Else

If choice = "Y" or "y"
Break loop

```
Else if choice = "N" or "n"
                                        again = false
                                        yes = false
                                        Output user total movie they added
                                        Pause
                                Else
                                         Output ask user to enter "y" or "n" only
                As long as yes = true
        As long as again = true
        Close outMovieFile
        Clear screen
        Call function admin()
Function: editMovie()
        Clear screen
        Call function storeInfoInArray(totalMovie)
        Display editMovie interface
        Declare i = 0 as integer
        For i < totalMovie - 1
        i++
                Output movie title = MovieTitle[i]
                Output description = MovieDesc[i]
                Output price = MoviePrice[i]
                Output Total seat = MovieSeat[i]
                Output start time = startTime[i]
                Output end time = endTime[i]
        Declare check = false as boolean
        Declare choice as integer
        Do
                Ask user to input the number of movie to be edit and store in choice variable
                If choice > totalMovie -1 or choice < totalMovie -1
                        Output invalid. Ask user only input number in range
                Else
                        Check = true
        As long as check = false
        Declare i = 0 as integer
        For i in the range i < totalMovie - 1
        i++
                If i = \text{choice} - 1
                        Output editMovie() interface
                        Declare character array editChoice[20]
                        Declare stop = true as boolean
                        Dο
                                Ask user which part to edit and store in editChoice array
                                If editChoice = "A" or "a"
                                        Declare newTitile as string
                                         Ask user to input new title and store in newTitle variable
                                         using getline function
                                         Update newTitle to MovieTitle[i] array
                                         Output new title has updated
                                        Stop = false
                                Else if editChoice = "B" or "b"
                                        Declare newDescription as string
                                         Ask user to input new description and store in
                                         newDescription variable using getline function
```

Update newDescription to MovieDesc[i] array

Output new description has updated

Stop = false

Else if editChoice = "C" or "c"

Declare newPrice as double

Ask user to input new price and store in newPrice variable

Update newPrice to MoviePrice[i] array

Output new price has updated

Stop = false

Else if editChoice = "D" or "d"

Declare newSeat as integer

Ask user to input new seat and store in newSeat variable

Update newSeat to MovieSeat[i] variable

Output new seat has updated

Stop = false

Else if editChoice = "E" or "e"

Declare newStartTime as string

Ask user to input new starting time and store in

newStartTime variable

Update newStartTime to startTime[i] array

Output new starting time has updated

Stop = false

Else if editChoice = "F" or "f"

Declare newEndTime as string

Ask user to input new ending time and store in newEndTime

Update newEndTime to endTime[i] array

Output new ending time has updated

Stop = false

Else

Output invalid. Ask user to try again

As long as stop = true

Declare outMovieFile as ofstream

Open txt file named "MovieList"

Declare i = 0 as integer

For all element i in the range i < totalMovie -1

i++

Update the MovieTitle[i] into outMovieFile

Update the MoviePrice[i] into outMovieFile

Update the MovieSeat[i] into outMovieFile

Update the MovieDesc[i] into outMovieFile

Update the startTime[i] into outMovieFile

Update the endTime[i] into outMovieFile

Pause

Call function admin()

Function: deleteMovie()

Declare n as integer

Clear screen

Output deleteMovie interface

Declare DeleteMovieFile as ofstream

Call function storeInfoInArray(totalMovie)

n = totalMovie

Declare i = 0 as integer

For each element of i in range of i < n - 1

```
i++
                Output the movie title = MovieTitle[i]
        Ask user which movie to be delete and store into i variable
        Output the movie has been deleted
        Update i = i
        For each element i in the range of i until n-1
        i++
                Update the data of MovieTitle[i] to MovieTitle[i – 1]
                Update the data of MoviePrice[i] to MoviePrice[i – 1]
               Update the data of MovieSeat[i] to MovieSeat[i – 1]
                Update the data of MovieDesc[i] to MovieDesc[i – 1]
               Update the data of startTime[i] to startTime[i - 1]
                Update the data of endTime[i] to endTime[i-1]
        Open txt file named "MovieList"
        Declare i = 0 as integer
        For each element i in range i < n - 1
        i++
                Update the MovieTitle[i] into DeleteMovieFile
               Update the MoviePrice[i] into DeleteMovieFile
                Update the MovieSeat[i] into DeleteMovieFile
                Update the MovieDesc[i] into DeleteMovieFile
                Update the startTime[i] into DeleteMovieFile
                Update the endTime[i] into DeleteMovieFile
        Pause
        Call function admin()
Function: ViewTrans()
        Clear screen
        Output ViewTrans() interface
        Declare line as string
        Declare adminview as ifstream
        Open txt file named "AdminView"
        If file is open
                As long as there are line inside the txt file, read into line variable using getline
function
                        Output line
                Close the file
        Pause
        Call function admin()
Function: LoginRegister
        Clear screen
        Declare character array choose[100]
        Declare check = false as boolean
        Do
                Ask user have account before or not and store in choose array
               If choose != one character
                        Output Error. Ask user to input one character only
               Else if yes
                        Check = true
                        Call function Login()
               Else if not
                        Check = true
                        Call function Register
```

Else

Output error. Ask user to input valid input only

Pause

Call function LoginRegister()

As long as check = true

Function: userExist(string email)

Declare userregister("usseregister.txt") as ifstream

If "usseregister.txt" file is open

Declare username, password, email as string

As long as not until the end of the file

Read the data in the file in following sequence: email, password, username

If the user input email_1 = email variable

Close userregister file

Return true

Break while loop

Close userregister file

Return false

Function: Register()

Clear screen

Declare email_1, email_2, password_1, password_2 as string

Open "userresgister.txt" file

If "userresgister.txt" file is open

Ask user to enter email and store in email 1 variable

Ask user to re enter email and store in email 2 variable

While email_1 not equal to email_2

Output "email do not match" and ask user to enter again email

If function userExist return true

Output "Account already exist, proceed to login interface"

Call function Login();

Ask user to enter password and store in password 1

Ask user to re-enter password and store in password_2

While password_1 not equal to password_2

Output "Password do not match" and ask user to enter again password

Ask user to set a username and store into username variable

Write the email_1, password_1 and username into "userregister.txt"

Thanks the user to register an account

Close the file "userregister.txt".

Function call Login().

Else

Output"Cannot open the file"

Function: Login()

Clear screen

Declare _password and _input as a string

Declare loggedIn as a boolean and equal to false

Ask user to enter registered email or username and store into _input

Ask user to enter password and store into _password

Open file "userregister.txt"

If "userregister.txt" is open

Declare email, username and password as string

While not end of file

Read the line and store into email variable

Read the line and store into password variable

Read the line and store into username variable

If email = _input and password = _password

loggedIn = true

Store the input into "username.txt" file

Else if username = _input and password = _password

loggedIn = true

Else loggedIn = false;

Close the "userregister.txt" file

If loggedIn=true

Output "Login successful"

Call function userUI()

Else

If password not equal to _password

Output "Password incorrect"

Else

Output "User no found"

While loggedIn = false

Let user choose to proceed to login or register

If user choose login

Call function Login();

If user choose register

Call function Register();

Else

Output "Fail to open the user file" Call function LoginResgister();

Function: userUI()

Clear screen

Show the main menu

- 1. Movie description
- 2. Book movie
- 3. Show history
- 4. Cancel booking
- 5. Payment

Let user to choose the interface

If user choose 1

Call function showMovie()

If user choose 2

Call function bookMovie()

If user choose 3

Call function showHistory()

If user choose 4

Call function cancelBooking()

If user choose 5

Call function paybill()

If user choose 6

Call function homel()

Function: showMovie()

Call function storeInfoInArray(totalMovie);

For i less than totalMovie -1

Output Movietitle[i]

Output MovieDesc[i]

Output MoviePrice[i]

```
Output MovieSeat[i]
                Output startTime[i]
               Output endTime[i]
               i + 1
        Function call userUI()
Function: bookMovie()
        Declare noSeat as integer
        Function call storeInfoInArray(totalMovie);
        Let i = 0, for i less than totalMovie -1
                Output Movietitle[i]
                Output MovieDesc[i]
               Output MoviePrice[i]
                Output MovieSeat[i]
               Output startTime[i]
               Output endTime[i]
        Declare integer movieChoice and bookedMovieNo;
        Ask user whether want to continue to book movie
        If yes
                Ask user to select the movie that they want to book.
               If the MovieSeat for the movie chosen less than or equal to 0
                        Output "The movie was sold out"
               Else
                        Ask user to select the number of seat they want to book and store in noSeat
        variable
                        If noSeat more than the MovieSeat
                                Output "The seat no enough"
                        Else
                                Let user know the booking of seat was success
                        MovieSeat of the movie = MovieSeat of the movie - noSeat
                        Declare n = totalMovie
                        Open "MovieList.txt"
                        Let i = 0, for i less than totalMovie -1
                                Write Movietitle[i] into file
                                Write MovieDesc[i] into file
                                Write MoviePrice[i] into file
                                Write MovieSeat[i] into file
                                Write startTime[i] into file
                                Write endTime[i] into file
                               i + 1
                        Close "MovieList" file
                        Open (""temp booked movie info.txt"") file
                        Store MovieTitle of the user choice
                        Store noSeat of the user choice
                        Store MoviePrice of user choice
                        Store startTime of user choice
                        Store endTime of user choice
                        Close file
        If no
               Function call userUI()
        Otherwise
               Output "Invalid input"
               Function call bookMovie();
        Function call userUI()
```

```
Function: showHistory()
       Declare totalPrice as double and initialize to 0
       Clear screen
       Function call storeBookedInfoArray(totalBookedMovie)
       Open "username.txt" file
       While not end of the file
               read the line and store in username variable
       Close file
       If totalMovie less than or equal to 0
               Let user choose Y to book ticket or leave
               If user choose = Y
                       Function call bookMovie()
               Otherwise
                       Function call userUI()
       Otherwise
               Output "This is your history"
               Let i = 0, for i less than totalBookedMovie -1
                       Output bMovietitle[i]
                       Output bNumMovieSeat[i]
                       Output bMoviePrice[i]
                       Output MovieSeat[i]
                       Output bstartTime[i]
                       Output endTime[i]
                       i + 1
               Let i = 0, for i less than totalBookedMovie -1
                       totalPrice = totalPrice + (bMoviePrice[i] * bNumMovieSeat[i])
               Output totalPrice
               Output paidStatus
               Ask user want to make payment or not?
                       If yes
                               Function call paybill()
                       If not
                               Function call userUI()
                       Otherwise
                               Function call showHistory()
Function: cancelBooking
       Clear screen
       Output "Cancel Booking"
       Function call storeBookedInfoInArray(totalBookedMovie)
       If totalBookedMovie less than or equal to 0
               Output "Empty"
               Output "You have no book any movie"
               Function call userUI()
       Let i = 0, for i less than totalBookedMovie -1
                       Output bMovietitle[i]
                        Output bNumMovieSeat[i]
                       Output bMoviePrice[i]
                       Output MovieSeat[i]
                       Output bstartTime[i]
                       Output endTime[i]
                       i + 1
```

```
Ask user to choose the movie that want to cancel and store the variable into choice
        If choice more than totalBookedMovie or less than equal to zero
                Output "Please key in movie in range only"
               Function call cancelBooking()
        Otherwise
                Output "The movie was deleted"
               Initialize i = choice, for i less than totalBookedMovie -1
                        bMovietitle[i - 1] = bMovietitle[i];
                        bNumMovieSeat[i - 1] = bNumMovieSeat[i];
                        bMoviePrice[i - 1] = bMoviePrice[i];
                        bMovieStartTime[i - 1] = bMovieStartTime[i];
                        bMovieEndTime[i - 1] = bMovieEndTime[i];
                        i + 1
               Open "temp booked movie info.txt" file
               Initialize i = 0, for i less than totalBookedMovie - 2
                        store bMovietitle[i] into file;
                        store bNumMovieSeat[i] into file;
                        store bMoviePrice[i] into file;
                        store bMovieStartTime[i] into file;
                        store bMovieEndTime[i] into file;
                        i+1
               Close the file
               Function call userUI()
Function: paybill()
        Clear screen
        storeBookInfoInArray(totalBookedMovie)
        Ask user whether want to make payment or not
        If yes
               Initialize i = 0, for i less than totalBookedMovie - 1
                        totalPrice = totalPrice + (bMoviePrice * bNumMovieSeat)
                       i + 1
                Output totalPrice
                Ask user to confirm the payment
               If yes
                        Output "Payment done"
                        Open "username.txt" file
                        Read line from the file and store in username variable
                        Close file
                        Open ("adminView.txt")
                        Write username into the file
                        Close file
                        Initialize i = 0, for i less than totalBookedMovie - 1
                                Write bMovietitle[i] into file
                                Write bNumMovieSeat[i] into file
                                Write bMoviePrice[i] * bNumMovieSeat[i] into file
                        Write totalPrice into the file
                        Write "Payment: paid" into file
                        Close the file
                        Open "temp_booked_movie_info.txt" file
                        Over write "" into file
                        Close the file
                        Function call userUI()
                Otherwise output "Exit the payment"
```

Function call userUI()

Function: storeBookedInfoInArray(int& totalBookedMovie)

Declare total = 0 as integer

Declare i = 0 as integer

Open "temp_booked_movie_info.txt" file

If file is open

While not end of the file

Read line of the file and store in btitle variable

bMovietitle[i] = btitle

Read line of the file and store in bSeat variable

bNumMovieSeat[i] = bSeat

Read line of the file and store in bprice variable

bNumMoviePrice[i] = bprice

Read line of the file and store in bStartTime variable

bStartTime[i] = bStartTime

Read line of the file and store in bEndTime variable

bEndTime[i] = bEndTime

i = i + 1

total = total + 1

totalBookedMovie = total

Close file

Function: storeInfoInArray(int& totalMovie)

Declare total = 0 as integer

Declare i = 0 as integer

Open "MovieList.txt" file

If file is open

While not end of the file

Read line of the file and store in title variable

Movietitle[i] = title

Read line of the file and store in price variable

MoviePrice[i] = price

Read line of the file and store in seat variable

MovieSeat[i] = seat

Read line of the file and store in describe variable

MovieDesc[i] = describe

Read line of the file and store in sTime variable

startTime[i] = sTime

Read line of the file and store in eTime variable

endTime[i] = eTime

i = i + 1

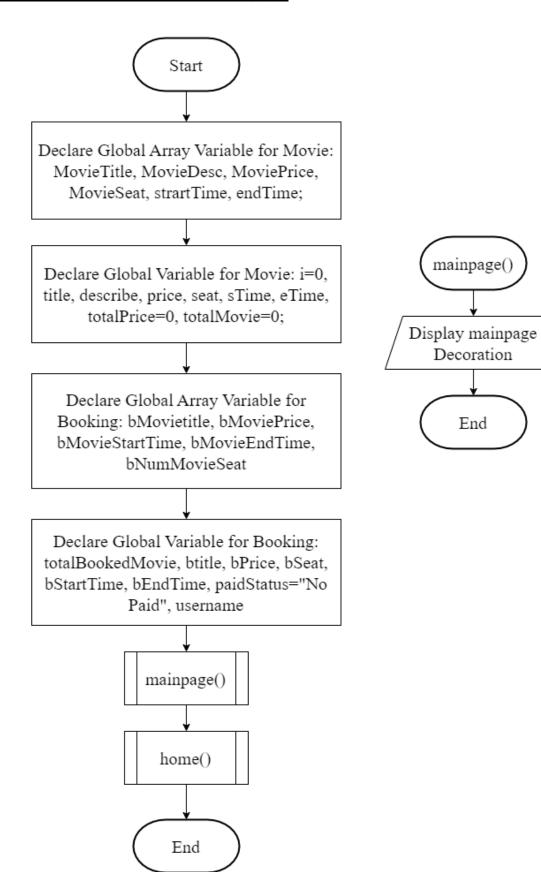
total = total + 1

totalMovie = total

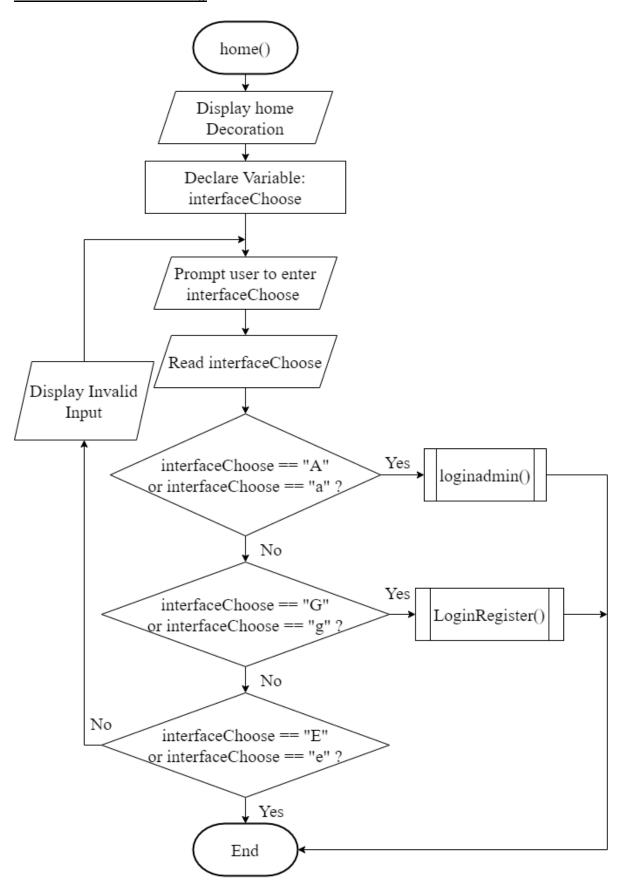
Close file

Flowchart

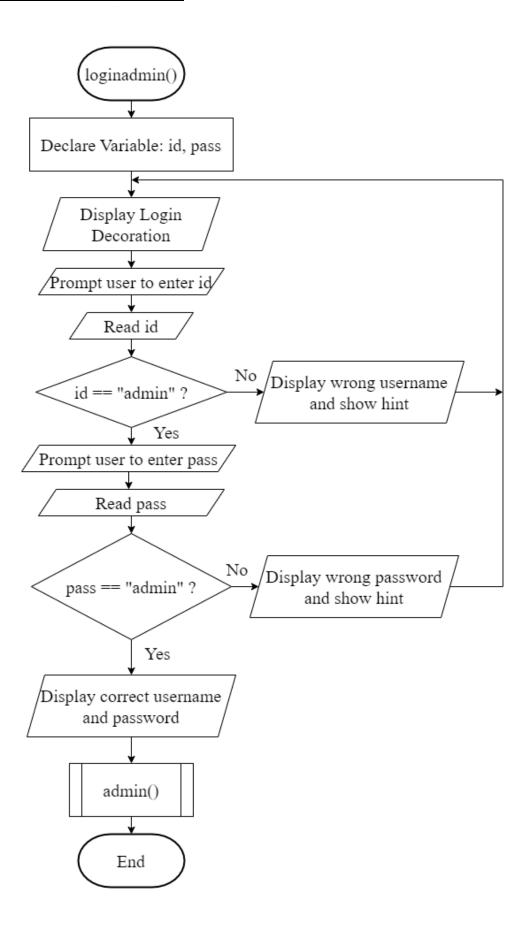
Flowchart of Function: main() and mainpage()



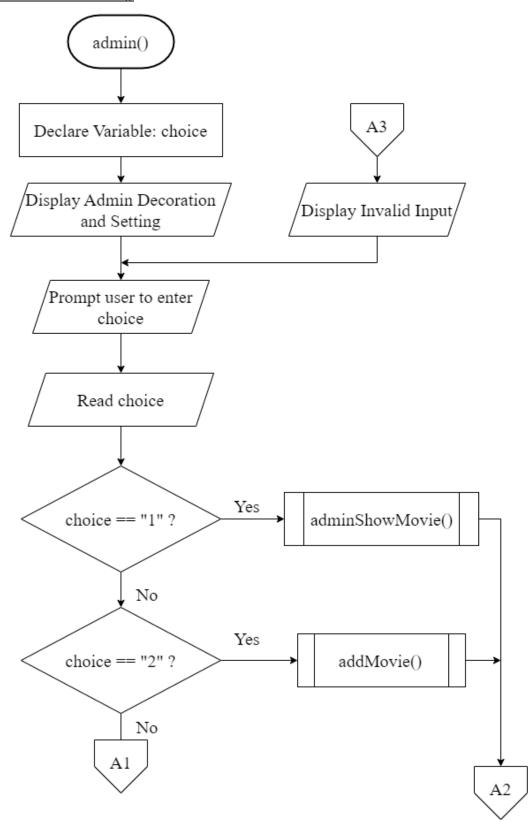
Flowchart of Function: home()

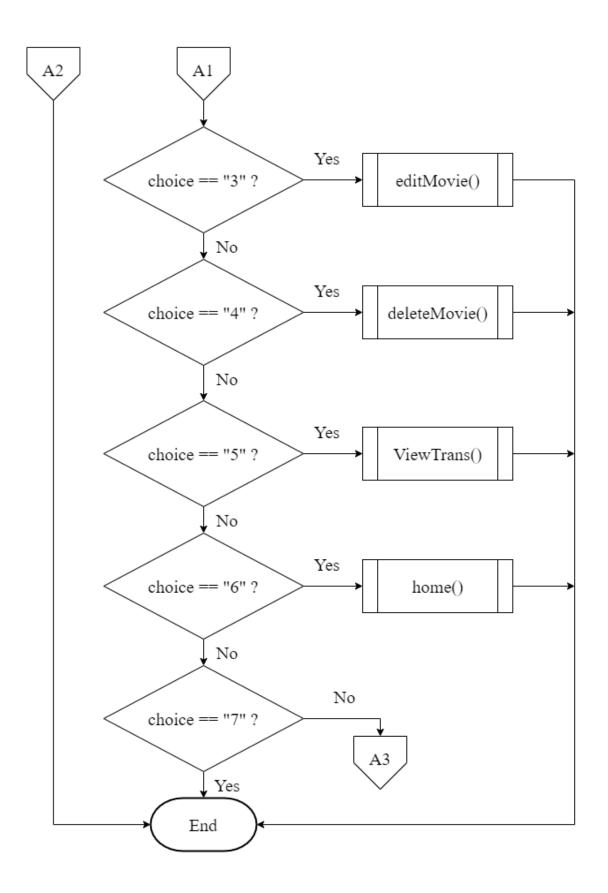


Flowchart of Function: loginadmin()

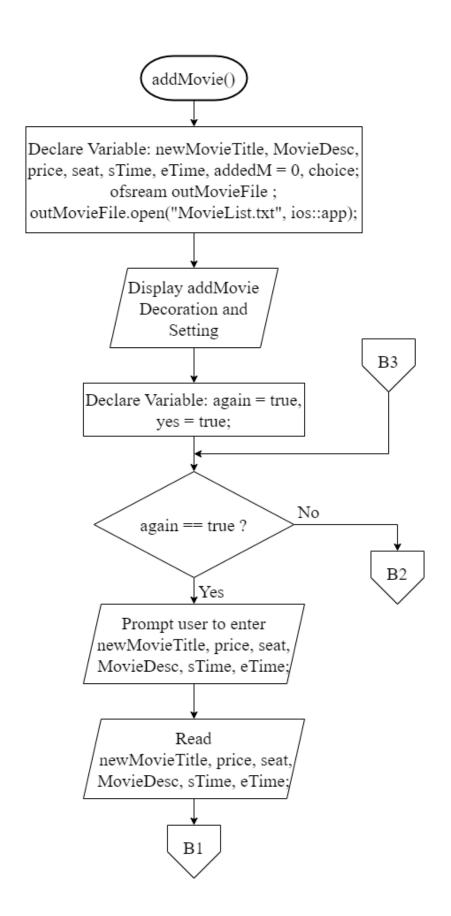


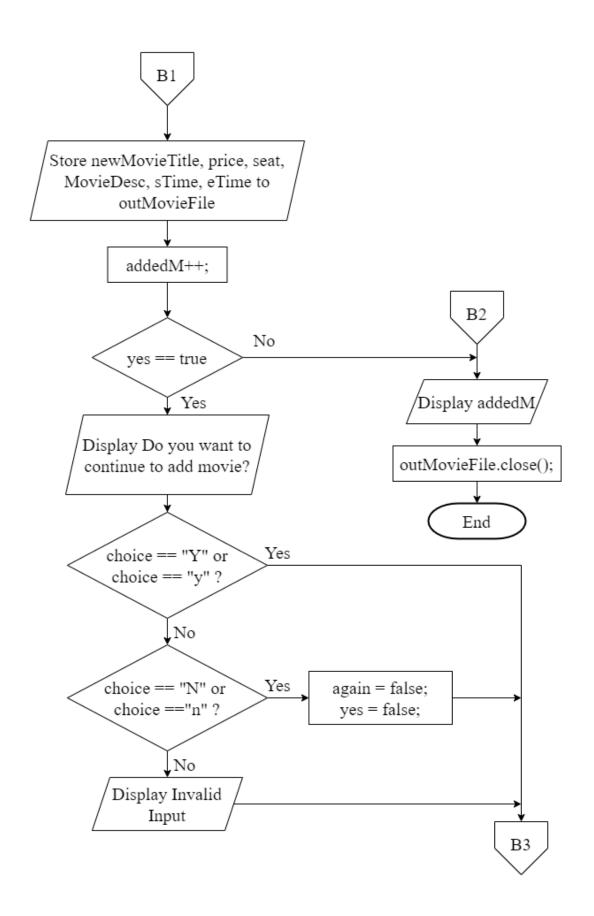
Flowchart of Function: admin()



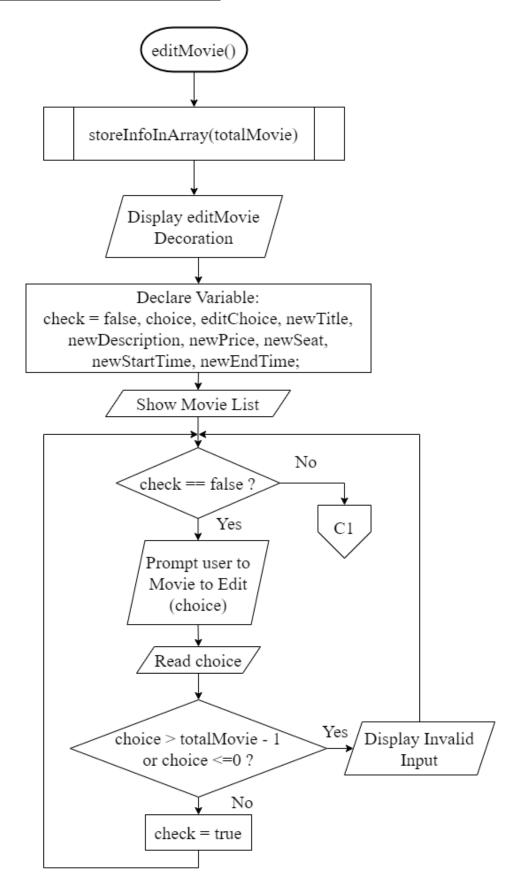


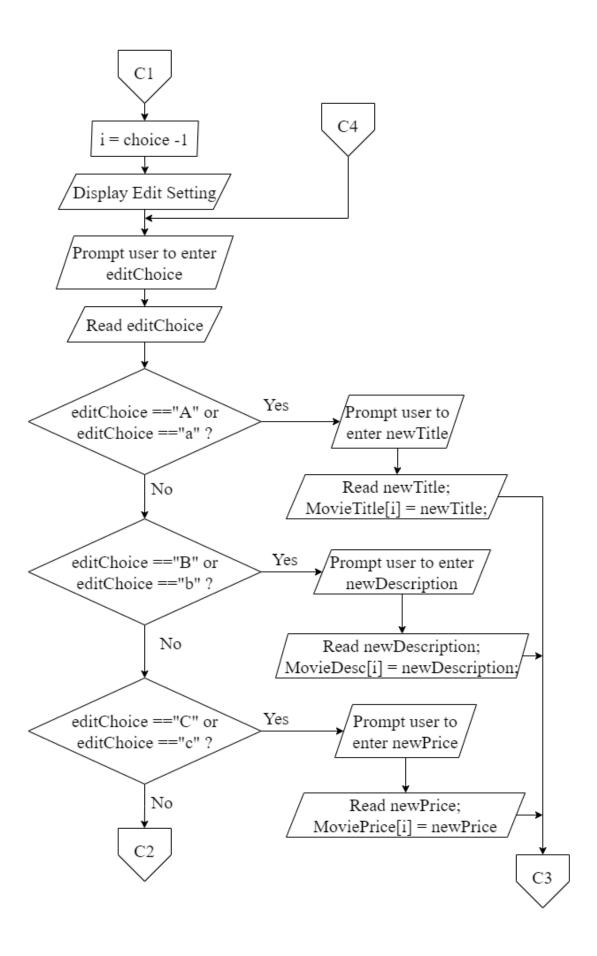
Flowchart of Function: addMovie()

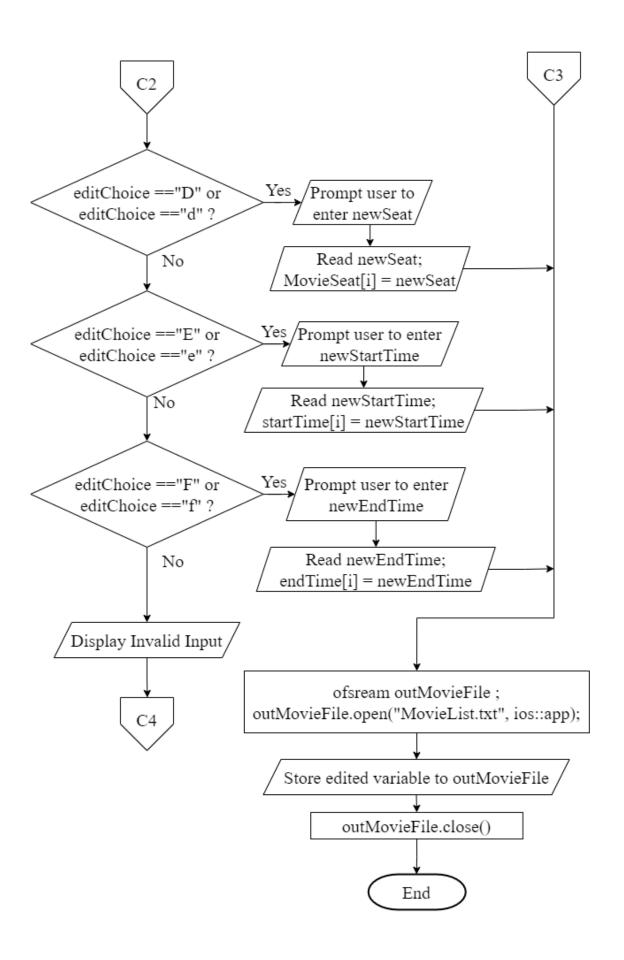




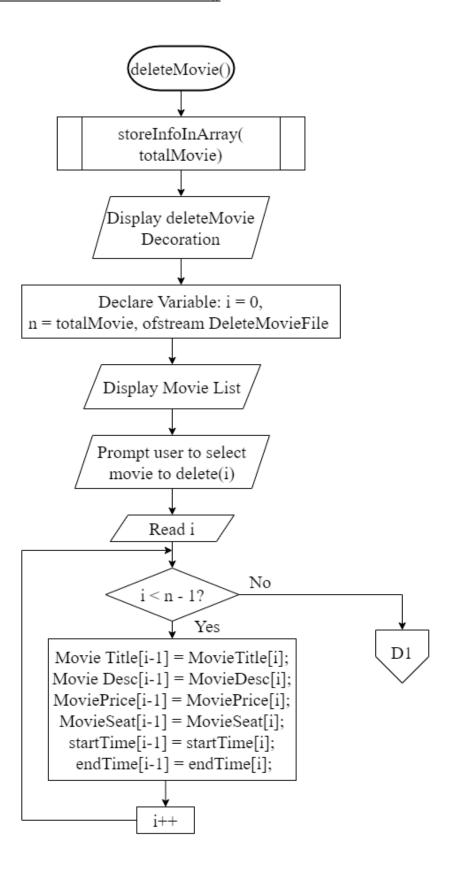
Flowchart of Function: editMovie()

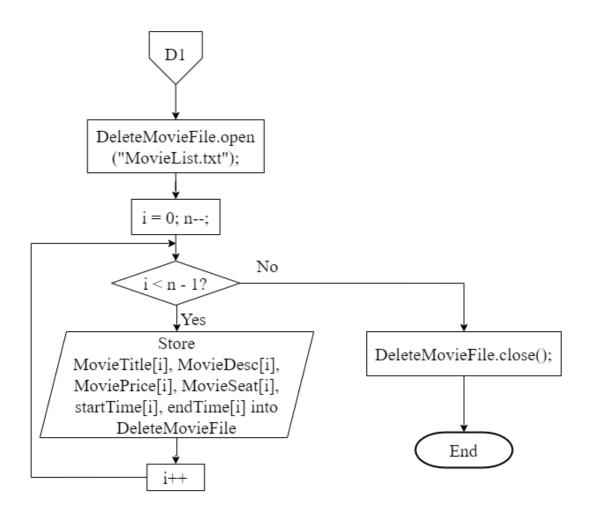




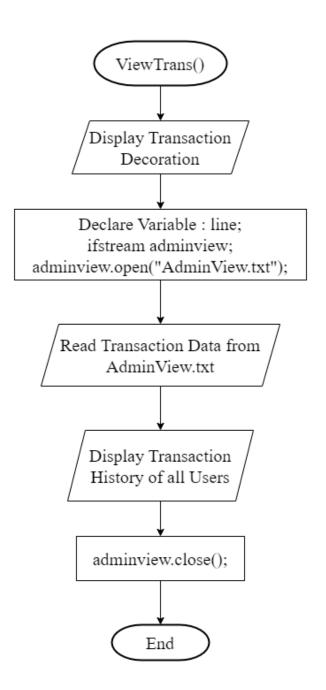


Flowchart of Function: deleteMovie()

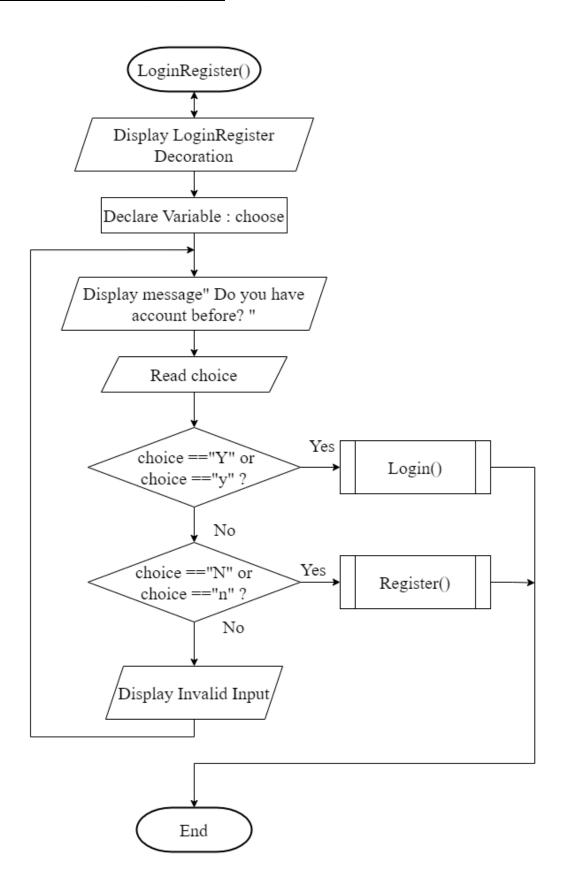




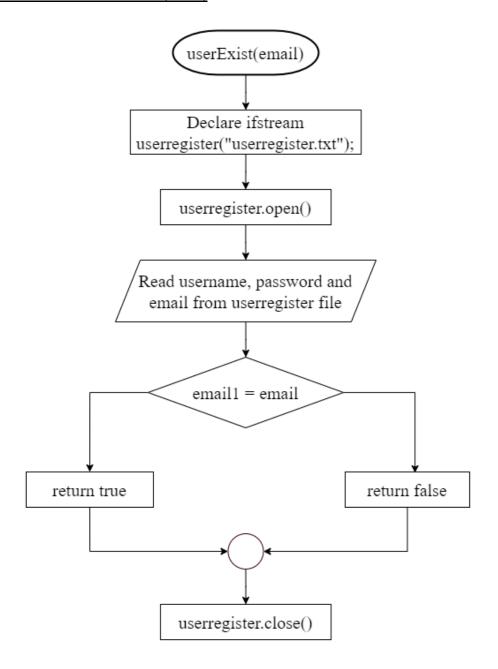
Flowchart of Function: ViewTrans()



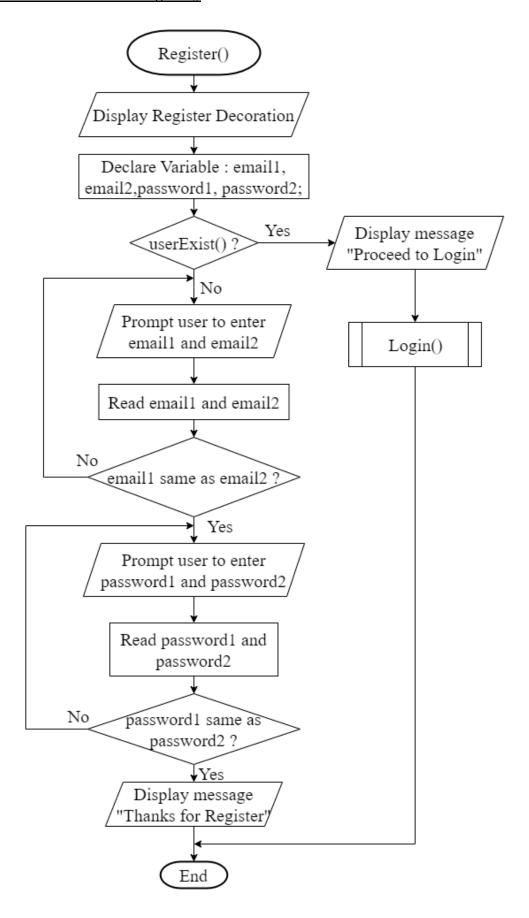
Flowchart of Function: LoginRegister()



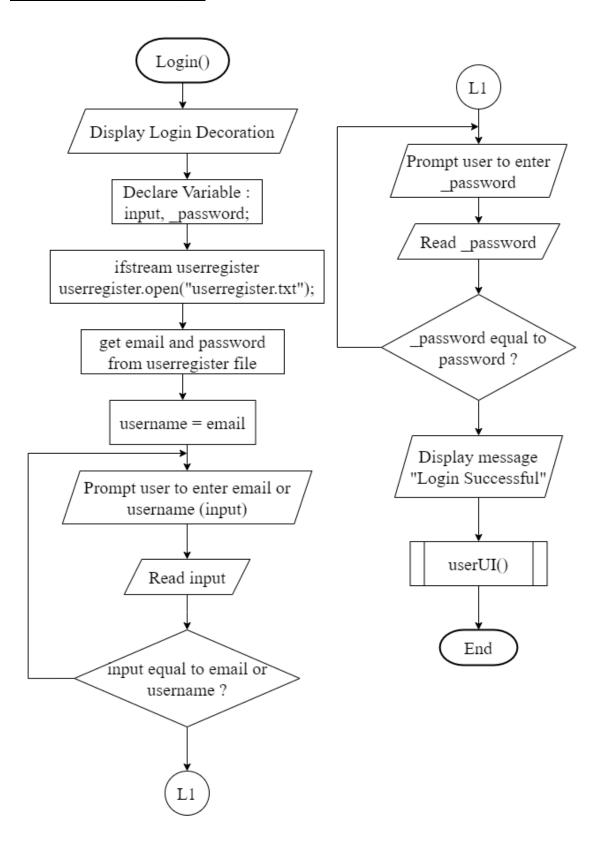
Flowchart of Function: userExist(email)



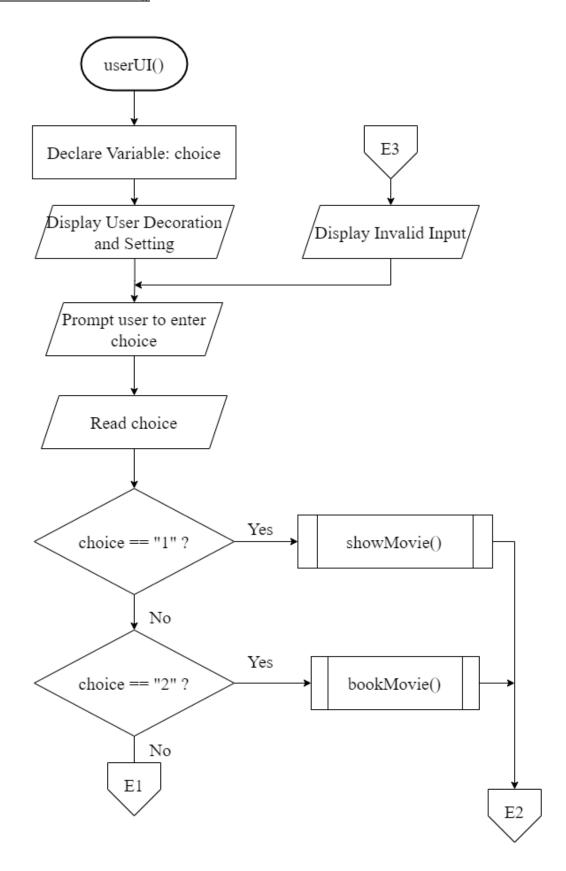
Flowchart of Function: Register()

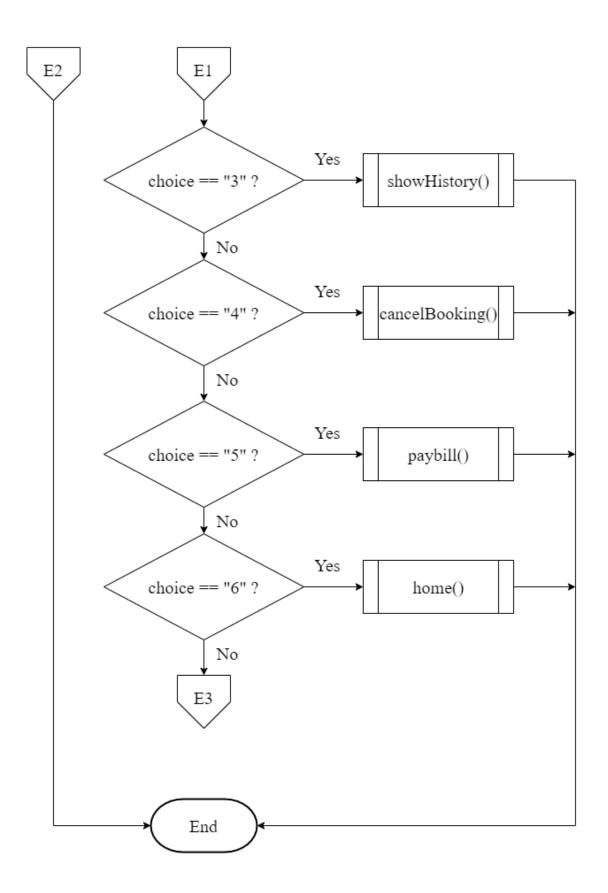


Flowchart of Function: Login()

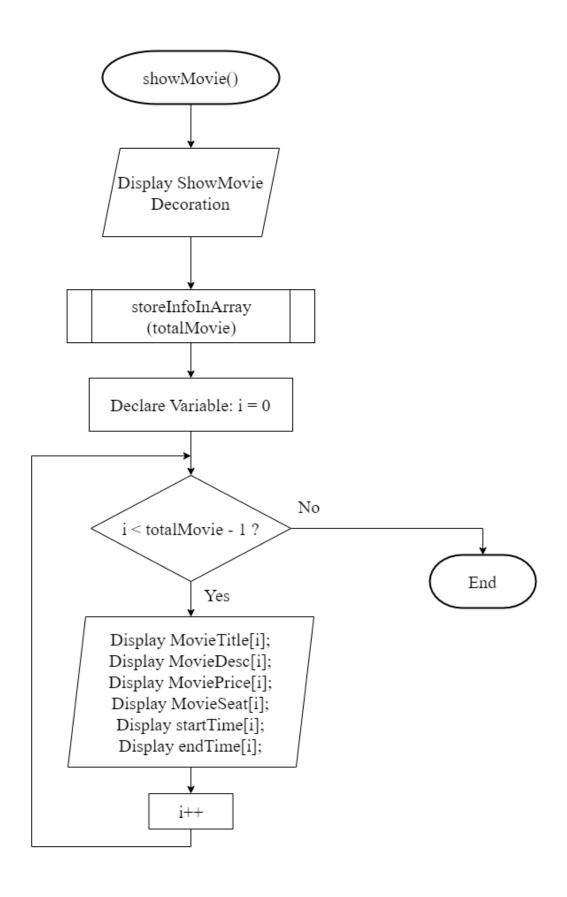


Flowchart of Function: userUI()

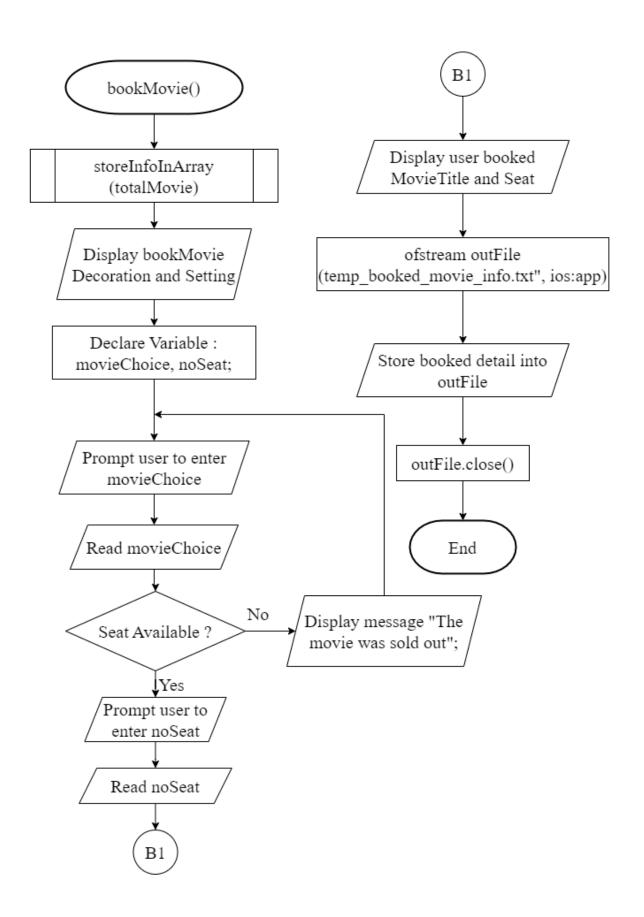




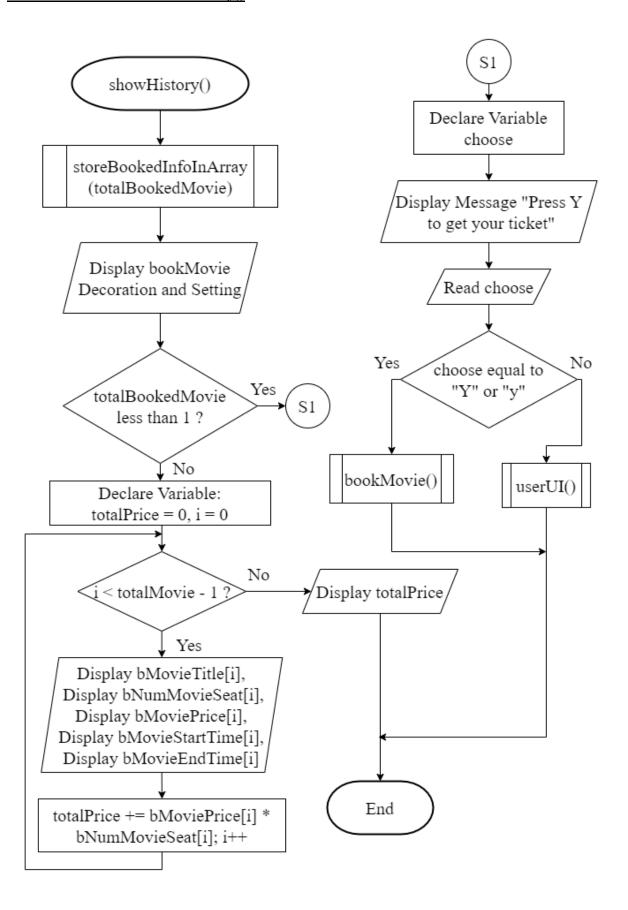
Flowchart of Function: showMovie()



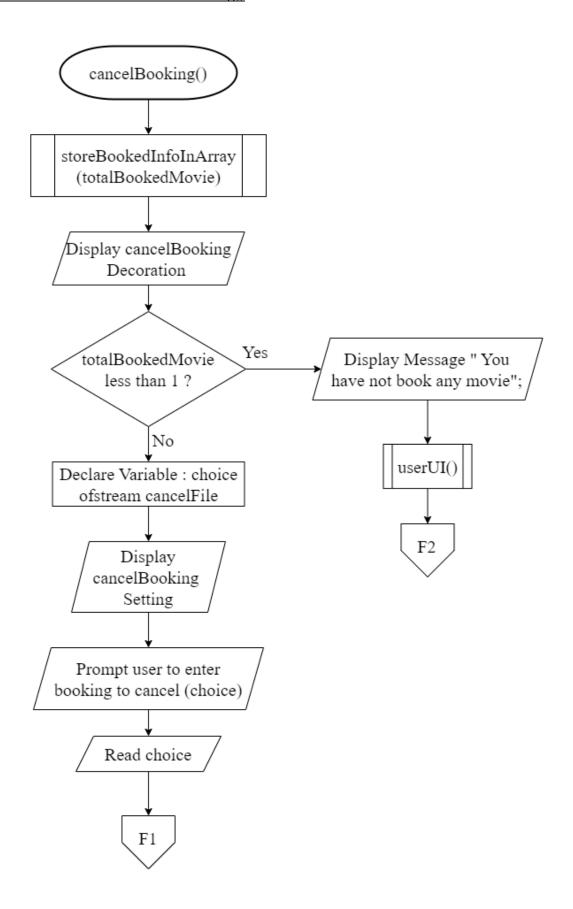
Flowchart of Function: bookMovie()

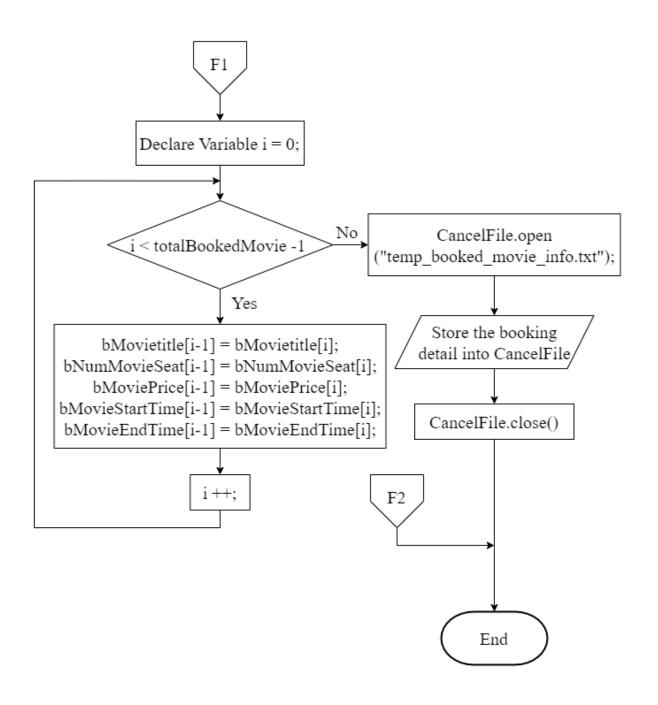


Flowchart of Function: showHistory()

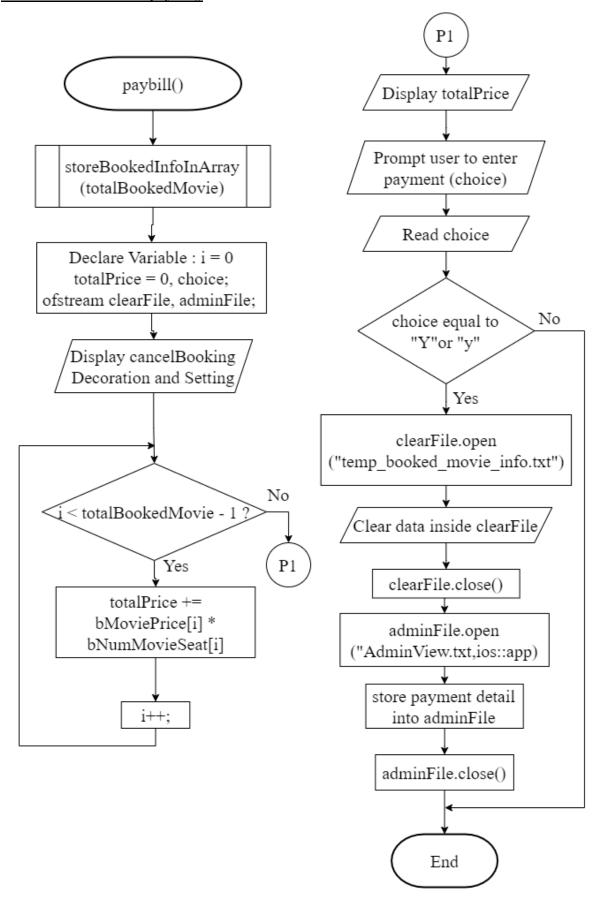


Flowchart of Function: cancelBooking()

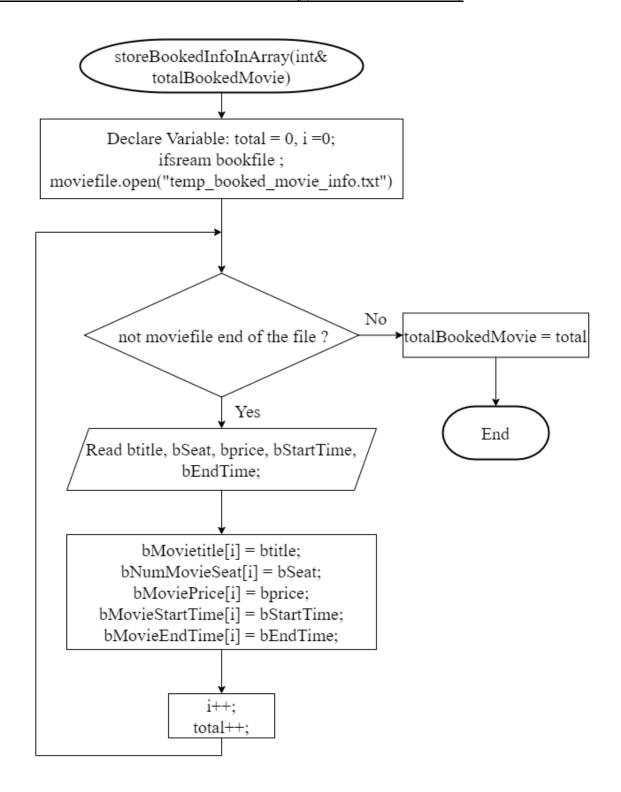




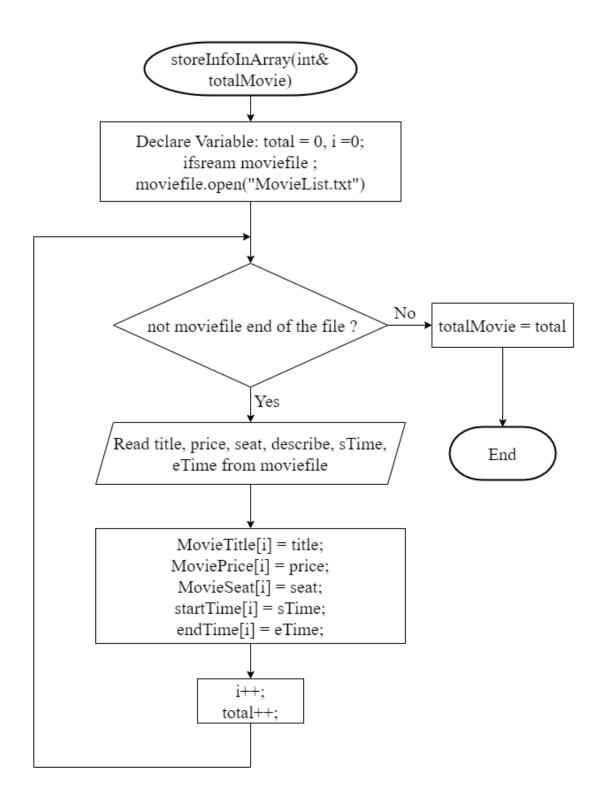
Flowchart of Function: paybill()



<u>Flowchart of Function: storeBookedInfoInArray(int& totalBookedMovie)</u>



Flowchart of Function: storeInfoInArray(int& totalMovie)

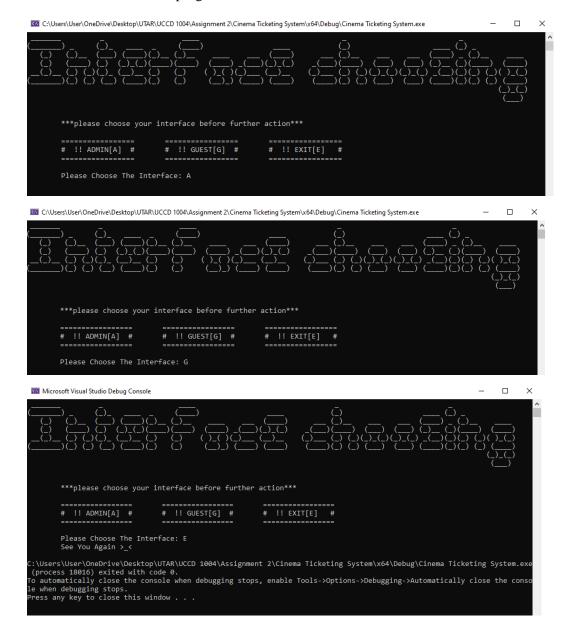


Testcases

<u>Test Cases for Interface Choosing – function home()</u>

Valid Input:

- 1. A or a to proceed admin login interface loginadmin()
- 2. G or g to proceed login register interface LoginRegister()
- 3. E or e to exit the program



Invalid Input:

1. Any input except uppercase and lowercase of "A", "G" and "E". System will display Invalid Input and prompt user to choose interface again.



Test Cases for Admin Login Interface – function loginadmin()

Valid Input:

- 1. Key in admin for username
- 2. Key in admin for password

Proceed to admin interface login

Invalid Input:

1. Any input except "admin" for both username and password Hint for username and password will be shown and request to key in username and password again.

<u>Test Cases for Admin Interface – function admin()</u>

Valid Input:

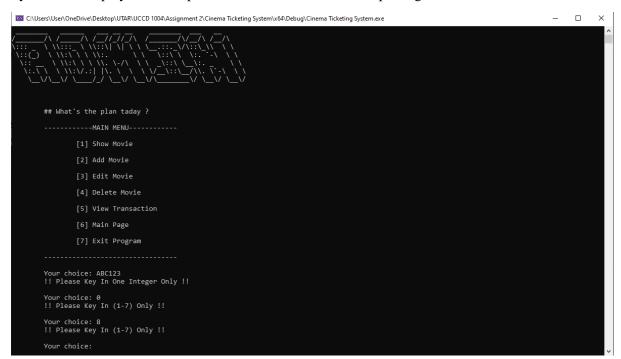
1. Integer within the range 1-7 System will proceed to respective modules based on admin's choice.



Invalid Input:

- 1. Integer not in the range 1-7.
- 2. Input is more than 1 character

System will display Invalid Input and ask for admin to choose plan again.

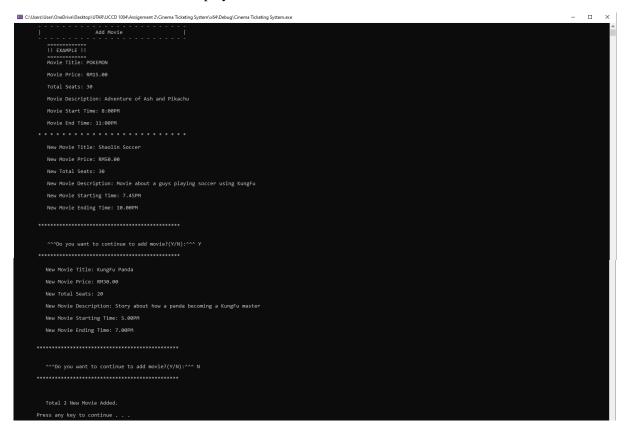


<u>Test Cases for Add Movie module – function addMovie()</u>

Valid Input:

- 1. Correct format when adding new movie.
- 2. "Y", "y", "N" and "n" to continue.

Total New Movie added will display and back to admin interface.



Invalid Input:

- 1. Character except uppercase or lowercase of "Y" and "N" to continue
- 2. More than one character to continue

System will display Invalid Input and prompt admin to type again.

```
New Movie Title: The Karate Kid

New Movie Price: RM25.80

New Total Seats: 70

New Movie Description: A boy Dre Parker learn Kung Fu with Jackie Chan

New Movie Starting Time: 9.30AM

New Movie Ending Time: 12.00PM

And Do you want to continue to add movie?(Y/N):^^ A

!! Please Key In (Y/N) Only !!

The sease Key In One Character Only !!

And Do you want to continue to add movie?(Y/N):^^ 123

**Please Key In One Character Only !!
```

<u>Test Cases for Edit Movie module – function editMovie()</u>

Valid Input:

- 1. Select the Number of Movie that in range.
- 2. Select the correct part of movie to edit -- uppercase or lowercase (A-F) System will display edited setting and back to admin interface.

Invalid Input:

1. Select the Number of Movie that are not in range System will display Invalid Input and prompt admin to select movie to edit again.

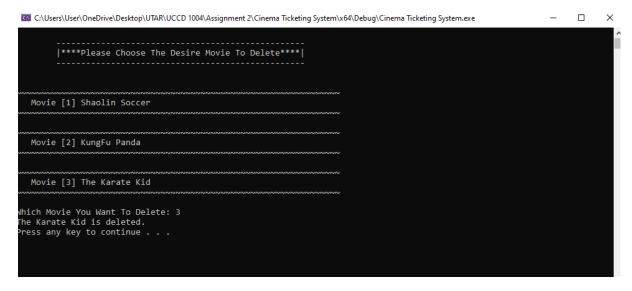
2. Character except uppercase or lowercase for "A", "B", "C", "D", "E" and "F" for edit setting

System will display Invalid Input and prompt admin to select the part of movie to edit again.

<u>Test Cases for Delete Movie module – function deleteMovie()</u>

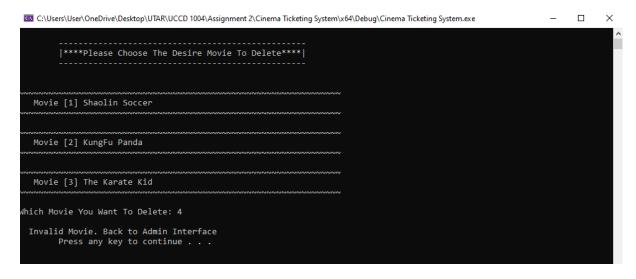
Valid Input:

1. Movie to delete is in range System will display movie deleted and back to admin interface.



Invalid Input:

1. Movie to delete out of range. System will display Invalid Movie and back to admin interface.



<u>Test Cases for View Transaction module – function ViewTrans()</u>

No need input. System will direct display transaction of all the users. Will show nothing if there is no transaction done.

```
■ C:\User\User\OneDrive\Desktop\UTAR\UCCD 1004\Assignment 2\Cinema Ticketing System\x64\Debug\Cinema Ticketing System.exe

 ## Here the transaction all the time ##
ress any key to continue . . .
🚾 C:\User\User\OneDrive\Desktop\UTAR\UCCD 1004\Assignment 2\Cinema Ticketing System\x64\Debug\Cinema Ticketing System.exe
                                                  ## Here the transaction all the time ##
      USERNAME: John
      BOOKED MOVIE: The Karate Kid
      BOOKED SEAT: 2
      PRICE FOR THE SEAT: RM50
      BOOKED MOVIE: KungFu Panda
      BOOKED SEAT: 5
      PRICE FOR THE SEAT: RM150
      TOTAL PRICE: RM200
      PAYMENT: PAID
      USERNAME: Lee
      BOOKED MOVIE: KungFu Panda
      BOOKED SEAT: 3
      PRICE FOR THE SEAT: RM90
      BOOKED MOVIE: The Karate Kid
      BOOKED SEAT: 1
      PRICE FOR THE SEAT: RM25
      TOTAL PRICE: RM115
      PAYMENT: PAID
ress any key to continue . . .
```

<u>Test Cases for User Register and Login module – function LoginResgister()</u>

Valid Input:

1. "Y", "y", "N" and "n" to continue.

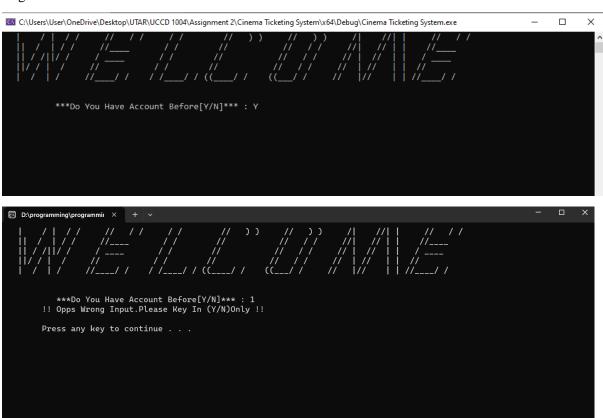
Invalid Input:

- 1. Number
- 2. Character other than "Y", "y", "N" and "n"

System will display Invalid Input and remind user to key in Y/N only then back to Login Register interface.

1. More than one character

System will display Invalid Input and remind user to key in one letter only then back to Login Register interface.







Key in N proceed to register interface to register an account.

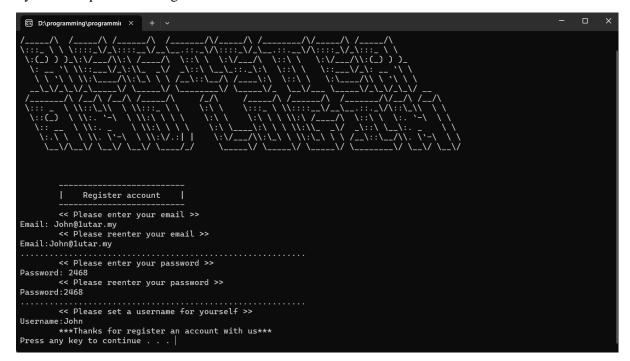


Sample register

Email: John@1utar.my

Password: 2468 Username: John

System will proceed to Login interface.



User prompt to key in email and password two times for confirmation.

When email or password input in the second time did not match the first input, system will ask user to reenter the email and password.

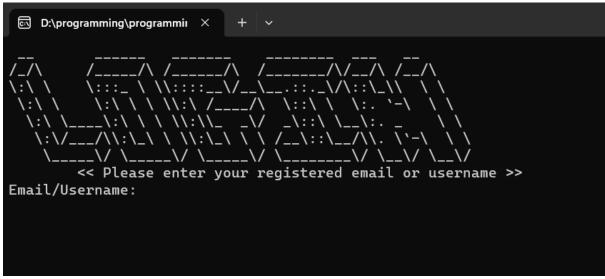


If account already exist system will proceed to login interface



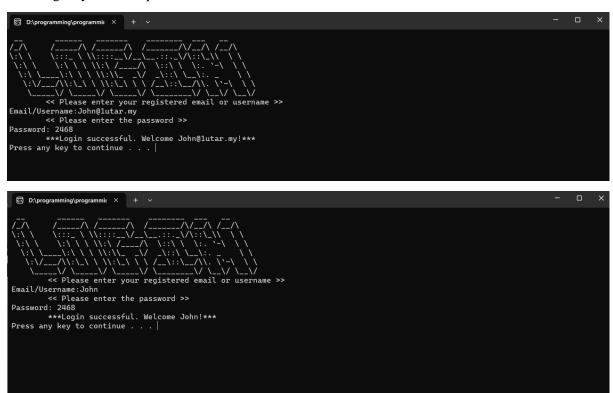
Key in Y in the login register interface or after the register of account system will proceed to login interface.





Login with the email / username that already registered.

After login system will proceed to User Interface



Key in the wrong username/email, system will tell user that user not found and let user to choose to proceed to login or register.



If user input wrong password, system will tell user that password incorrect and let user to choose to proceed to login or register.

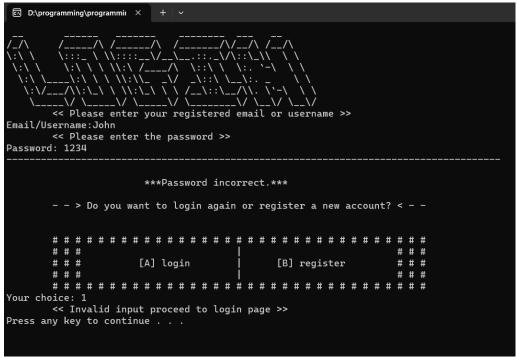


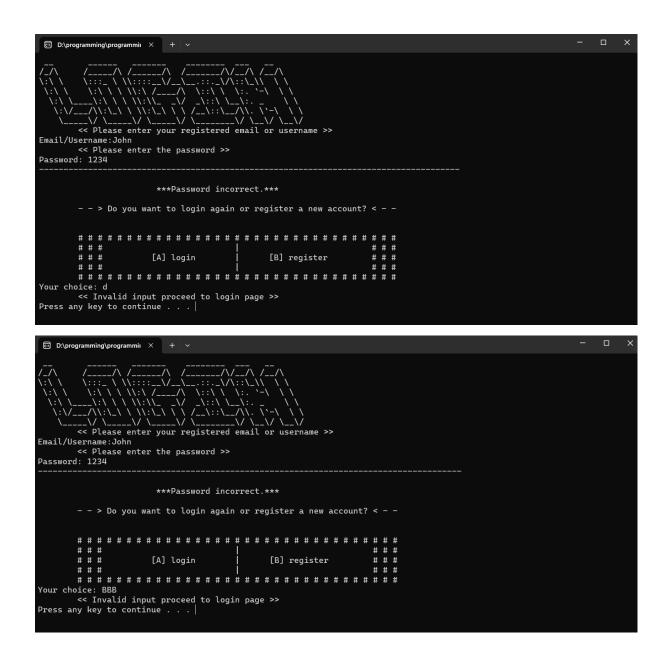
Valid Input:

1. "A", "a", "B" and "b" to continue.

Invalid Input:

- 1. Number
- 2. Character other than "Y", "y", "N" and "n"
- 3. More than one character





<u>Test Cases for User Interface – function userUI()</u>

Valid Input:

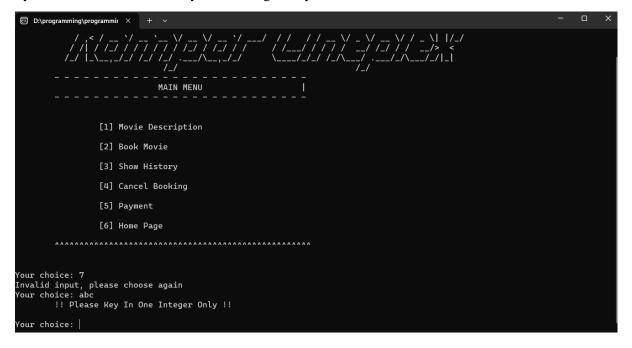
1. Integer within the range 1-6



Invalid Input:

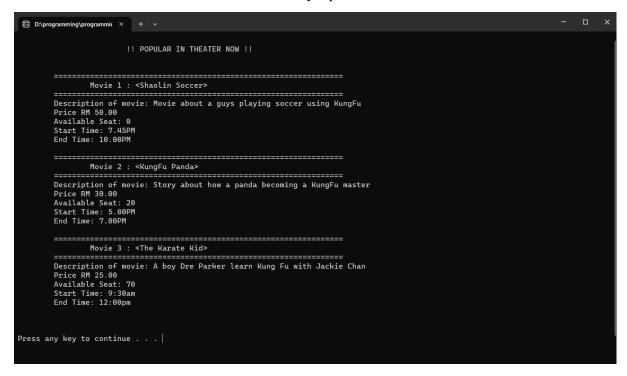
- 1. Integer not in the range 1-6.
- System will display Invalid Input and ask user to choose again.
 - 2. Input character.

System will remind user to key in one integer only.



<u>Test Cases for Show Movie Description Module – function showMovie()</u>

All the movie details will show to user without any input.



<u>Test Cases for Book Movie Module – function bookMovie()</u>

Valid Input:

- 1. "Y" or "y" to continue book movie.
- 2. "N" or "n" will return to user interface.

Invalid Input:

1. Input except uppercase and lowercase of character "Y" and "N" System will show invalid input and remind user to key in "Y" or "N" only. User will choose again.

```
Do you want to continue to book the movie?

| Y-yes , N-no |
| Your choice: we
|! Oops! Invalid Input. Please Key In Y/N Only !!
| Press any key to continue . . .
```

Valid Input:

To book movie, user need to key in movie number that want to book and key in the number of seat that user want to book.

Invalid Input:

- 1. Number of movie key in out of the range of number of movies available.
- 2. Input alphabet

System will remind the user to give input in the range of number and then system will continue.

```
Do you want to continue to book the movie?

| Y-yes , N-no |
Your choice: Y

Select the movie you want to book: 4

Key in the range from 1 to 3 only
Press any key to continue . . .
```

If user choose the movie that already sold out all the seat, system will tell user that movie was sold out

<u>Test Cases for Show History Module – function showHistory()</u>

System will display user's booking history and ask whether user want to make payment or not Valid Input:

1. "Y" or "y" to proceed to make payment – payment interface

2. "N" or "n" to back to user interface.

Invalid Input:

1. Any input rather than "Y", "y", "N" and "n" will display Invalid Input and prompt user to enter again.

System will show Empty if user does not book any movie.

Valid Input:

- "Y" or "y" to proceed to book movie.
 Any other input except "Y" and "y" will back to user interface.

```
■ C:\Users\User\OneDrive\Desktop\UTAR\UCCD 1004\Assignment 2\Cinema Ticketing System\x64\Debug\Cinema Ticketing System.exe

                                                                                                                       HISTORY
       So Empty Here, Go Get'em Shall We? >_<
        ***Press anykey to leave***
       Your Choice : y
!!Great choice.Let's go!!
Press any key to continue . . .

    □ C:\Users\User\OneDrive\Desktop\UTAR\UCCD 1004\Assignment 2\Cinema Ticketing System\x64\Debug\Cinema Ticketing System.exe

                                                                                                                       So Empty Here, Go Get'em Shall We? >_<
        ***Press anykey to leave***
       Back to User Interface.
Press any key to continue . . .
```

<u>Test Cases for Cancel Booking Module – function cancelBooking()</u>

Valid Input:

1. Cancel the booking in range given.

Invalid Input:

1. Cancel the booking out of the range given.

System will display "Empty" message if there was booking without any input.

<u>Test Cases for Payment Module – function paybill()</u>

Valid Input:

- 1. "Y" or "y" to make payment.
- 2. "N" or "n" will back to user interface.

```
| Columnation |
```

Invalid Input:

1. Input except uppercase or lowercase of "Y" and "N" System will display Invalid Input and prompt user to key in again.

System will ask user to confirm the payment after that.

Valid Input:

- 1. "Y" or "y" to confirm the payment.
- 2. Any other input except "Y" or "y" to exit payment.

```
C:\Users\User\OneDrive\Desktop\UTAR\UCCD 1004\Assignment 2\Cinema Ticketing System\x64\Debug\Cinema Ticketing System.exe
                                                                                                                                                                Do you want to perform the payment?:  [Y \ - \ yes \ | \ N \ - \ no] \ : Y 
            $$ The total price: RM 200.00 $$
           |Press Y to comfirm the payment
|Press other key to exit the payment
$$ Your payment are done hope you have a good day $$
Press any key to continue . . .

    C:\Users\User\OneDrive\Desktop\UTAR\UCCD 1004\Assignment 2\Cinema Ticketing System\x64\Debug\Cinema Ticketing System.exe

                                                                                                                                                                Do you want to perform the payment?:  [Y \ - \ yes \ | \ N \ - \ no] \ : Y 
            $$ The total price: RM 200.00 $$
           |Press Y to comfirm the payment
|Press other key to exit the payment
Exit the payment
Press any key to continue . . .
```

Source Code

```
#include<iostream>
#include<string>
#include<iomanip>
#include<fstream>
#include <cstring>
#include <cctype>
using namespace std;
void userUI();
void loginadmin();
void admin();
void home();
void mainpage();
// admin interf func
void addMovie();
void editMovie();
void deleteMovie();
void ViewTrans();
void adminShowMovie();
//login/register func
void LoginResgister();
void Register();
void Login();
bool userExist(string email_1);
// user interf func
void showMovie();
void bookMovie();
void showHistory();
```

```
void cancelBooking();
void paybill();
// pls call when u want to use array
void storeInfoInArray(int&);
void storeBookedInfoInArray(int&);
// store info in array
// every one can use the array
string MovieTitle[100], MovieDesc[100];
double MoviePrice[100] = { 0 };
int MovieSeat[100];
string startTime[100], endTime[100];
short i = 0;
string title, describe;
double price;
int seat;
string sTime, eTime;
double totalPrice = 0;
// booked item
int totalBookedMovie = 0;
string btitle;
int bSeat;
double bprice;
string bStartTime, bEndTime;
string bMovietitle[100];
string bMovieStartTime[100], bMovieEndTime[100];
int bNumMovieSeat[100];
double bMoviePrice[100];
string paidStatus = "No Paid";
// Global Variable
```

```
int totalMovie = 0;
// user info
string username;
// main function
int main()
{
     cout << fixed << setprecision(2);</pre>
     mainpage();
     home();
}
void mainpage()
{
cout << "\t\t ^
                           _
[]" << endl;
 cout << "\t\t[] / //_/__ ___ /
__(_)__ / /__ _ ^" << endl;
cout << "\t\t ^ /,< / _ `/ _ `\/ _ \\/ _ \\/ _ '/ _/ / 
//_ \\/ _ \\/ _ \\/ _ \\| |/_/ []" << endl;
cout << "\t\t ^ /_/ |_\\__,_/_/ /_/ .___/\\__,_/_/ \\__/_/ /_/ .___/\\\__/_/| [] " << endl;
     cout << "\t\t[]</pre>
                                      /_/
                   ^" << endl;
/_/
    cout << "\t\t ^
[]" << endl;
                                         ^" << endl;
     cout << "\t\t[]\t\t\t\t\t\t\t\t\t\t
     cout << "\t\t ^\t\t\t\t\t\t\t\t\t\t\</pre>
[]" << endl;
     cout << "\t\t[]
                       cout << "\t\t ^ /_//_/\\ /___/\\ /___/\\ /___/\\ /____/\\ /____/\\ /____/\\ [] " << endl;
```

```
\\:::<u>_</u>\\/ \\:::_ \\ \\\\::\\| \\| \\ \\\\:::_\\/_
\\/_/\\\:\\ \\ \\\\\:\\-/\\ \\\\\::__\\/_
                         ^" << endl;
  cout << "\t\t ^ \\:\\\:\\
\\\:\\___/\\ []" << endl;
cout << "\t\t[] \\___\\/ \\__\\/ \\__\\/ \\__\\/ \\__\\/ \\__\; << endl;
                  []" << endl;
  cout << "\t\t ^\t\t\t\t\t\t\t\t\t\t\t</pre>
  cout << "\t\t[]\t\t\t\t\t\t\t\t\t\t</pre>
                    ^" << endl;
  cout << "\t\t ^\t\t\t\t\t\t\t\t\t\t</pre>
                    []" << endl;
  ^" << endl;
  cout << "\t\t ^\t\t\t\t\t\t\t\t\t\t\t\</pre>
[]" << endl;
  [] ^ [] ^ [] ^ [] ^ [] ^" << endl << endl << endl;
  cout << "\t\t ";</pre>
  system("pause");
}
void home()
{
  system("cls");
```

```
cout << "
(_)_(_)" << endl;
      cout << "
(___) " << endl;
      char interfaceChoose[10];
      cout << endl;</pre>
      cout << endl;</pre>
      cout << "\t***please choose your interface before further action***"</pre>
<< endl << endl;
     cout << "\t========= " << "\t" << "======= " <<
"\t" << "====== " << endl;
     cout << "\t# !! ADMIN[A] # " << "\t" << "# !! GUEST[G] # " <<
"\t" << "# !! EXIT[E] # " << endl;
     cout << "\t========= " << "\t" << "======= " <<
"\t" << "======= " << endl;
     cout << endl;</pre>
      do
      {
           cout << "\tPlease Choose The Interface: ";</pre>
           cin >> interfaceChoose;
           if (strlen(interfaceChoose) != 1)
            {
                 cout << "\tInvalid Input. Please Enter One Character</pre>
Only." << endl;
--" << endl << endl;
                 continue;
            }
           else if (strcmp(interfaceChoose, "A") == 0 ||
strcmp(interfaceChoose, "a") == 0)
            {
                 loginadmin();
           }
           else if (strcmp(interfaceChoose, "G") == 0 ||
strcmp(interfaceChoose, "g") == 0)
           {
```

```
LoginResgister();
                userUI();
          }
          else if (strcmp(interfaceChoose, "E") == 0 ||
strcmp(interfaceChoose, "e") == 0)
          {
                cout << "\tSee You Again >_<" << endl;</pre>
                exit(0);
                system("pause");
          }
          else
          {
                cout << "\tInvalid Input.Please Key In (A,G,E) Only." <</pre>
endl;
                cout << "\t-----" <<
endl << endl;</pre>
          }
     } while (strcmp(interfaceChoose, "A") != 0 &&
strcmp(interfaceChoose, "a") != 0
          && strcmp(interfaceChoose, "G") != 0 &&
strcmp(interfaceChoose, "g") != 0
          && strcmp(interfaceChoose, "E") != 0 &&
strcmp(interfaceChoose, "e") != 0);
}
//***************
//
//
//
         below all admin interface!!!!!!
//
//
//***************
void loginadmin()
{
     char id[50];
```

```
char pass[50];
     bool correct = true;
     do
     {
           system("cls");
           cout <<
" :::
              ::::::: ::: " << endl;
           cout <<
                                     :+: :+:+: :+: " << endl;
 :+:
             :+: :+: :+:
                            :+:
           cout << " +:+
                               +:+
                                      +:+ +:+
                                                       +:+
                                                               :+:+:+
+:+ " << endl;
           cout << " +#+
                               +#+
                                      +:+ :#:
                                                       +#+
                                                               +#+
+:+ +#+ " << endl;
          cout << " +#+
                               +#+
                                      +#+ +#+
                                               +#+#
                                                       +#+
                                                               +#+
+#+#+# " << endl;
           cout << " #+#
                                                #+#
                               #+#
                                      #+# #+#
                                                        #+#
                                                               #+#
#+#+# " << endl;
           #### \n\n\n";
           cout << "\t<< Welcome Admin >>" << endl;</pre>
           cout << "\t~~~~~~~~" << endl << endl;</pre>
           cout << "\tUsername: ";</pre>
           cin >> id;
           if (strcmp(id, "admin") == 0)
           {
                cout << "\tPassword: ";</pre>
                cin >> pass;
                cout << endl;</pre>
                if (strcmp(pass, "admin") == 0)
                {
                      cout << "\t***Correct Username and Password***" <<</pre>
endl;
                      correct = false;
                      cout << endl;</pre>
                      cout << "\t";</pre>
                      system("pause");
```

```
admin();
               }
               else
               {
                    cout << "\t !! Wrong password.Please Try Again" <<</pre>
endl;
                    cout << "\t\t [Hint: admin]" << endl << endl <<</pre>
endl << endl;</pre>
                    cout << "\t";</pre>
                    system("pause");
               }
          }
          else
          {
               cout << "\t !! Wong username.Please Try Again" << endl;</pre>
               cout << "\t\t [Hint: admin]" << endl << endl;</pre>
               cout << "\t";</pre>
               system("pause");
          }
     } while (correct == true);
}
void admin()
{
     system("cls");
     char choice[20];
     bool stop = true;
     cout << " _____
endl;
cout << "/___/\\ /___/\\ /___/\\ /___/\\ /__/\\
     cout << "\\::: _ \\ \\\\::: \\ \\\\| \\\
\\:. `-\\ \\ \\ " << endl;
```

```
\\__\\:. _ \\ \\ " << endl;
     cout << " \\:.\\ \\ \\\\!\\/.:| |\\. \\ \\
\\/__\\::\\__/\\\. \\`-\\ \\\" << endl;
     cout << " \\_\\/\\_\/\\\\_\/\\\
\\_\\/ \\_\\" << endl << endl << endl;
     cout << "\t## What's the plan taday ?" << endl << endl;</pre>
     cout << "\t-----" << endl << endl;</pre>
                                               " << endl << endl;
     cout << "\t\t[1] Show Movie</pre>
                                               " << endl << endl;
     cout << "\t\t[2] Add Movie</pre>
                                                 " << endl << endl;
     cout << "\t\t[3] Edit Movie</pre>
     cout << "\t\t[4] Delete Movie</pre>
                                             " << endl << endl;
                                              " << endl << endl;
     cout << "\t\t[5] View Transaction</pre>
                                               " << endl << endl;
     cout << "\t\t[6] Main Page</pre>
                                          " << endl << endl;
     cout << "\t\t[7] Exit Program</pre>
     cout << "\t-----" << endl << endl;</pre>
     do
     {
          cout << "\tYour choice: ";</pre>
          cin >> choice;
          if (strlen(choice) != 1)
          {
                cout << " \t!! Please Key In One Integer Only !! " <<</pre>
endl << endl;</pre>
                continue;
          }
          else
          {
                if (strcmp(choice, "1") == 0)
                {
                     adminShowMovie();
                     break;
                }
```

```
{
                         addMovie();
                         break;
                   }
                  else if (strcmp(choice, "3") == 0)
                   {
                         editMovie();
                         break;
                   }
                  else if (strcmp(choice, "4") == 0)
                   {
                         deleteMovie();
                         break;
                   }
                  else if (strcmp(choice, "5") == 0)
                   {
                         ViewTrans();
                         break;
                   }
                  else if (strcmp(choice, "6") == 0)
                   {
                         home();
                         break;
                   }
                  else if (strcmp(choice, "7") == 0)
                   {
                         exit(0);
                         system("pause");
                   }
                  else
                   {
                         cout << " \t!! Please Key In (1-7) Only !!" <<
endl << endl;</pre>
```

else if (strcmp(choice, "2") == 0)

```
continue;
                }
          }
     } while (stop == true);
}
void adminShowMovie()
{
     cout << fixed << setprecision(2);</pre>
     system("cls");
     cout << "\n\t\t== Movie List == " << endl << endl;</pre>
     storeInfoInArray(totalMovie);
     for (int i = 0; i < totalMovie - 1; i++)</pre>
          cout <<
endl;
          cout << "\t\tMovie " << i + 1 << " : <" << MovieTitle[i] << "><</pre>
" << endl;
          cout <<
endl;
          cout << "\tDescription of movie: " << MovieDesc[i] << endl;</pre>
          cout << fixed << setprecision(2);</pre>
          cout << "\tPrice RM " << MoviePrice[i] << endl;</pre>
          cout << "\tAvailable Seat: " << MovieSeat[i] << endl;</pre>
          cout << "\tStart Time: " << startTime[i] << endl;</pre>
          cout << "\tEnd Time: " << endTime[i] << endl;</pre>
          cout << endl << endl;</pre>
     }
     system("pause");
     admin();
}
```

```
void addMovie()
{
     cout << fixed << setprecision(2);</pre>
     // variable for new movie
     system("cls");
     string newMovieTitle, MovieDesc;
     double price;
     int seat;
     string sTime, eTime;
     int addedM = 0;
     ofstream outMovieFile;
     outMovieFile.open("MovieList.txt", ios::app);
     char choice[20];
     cin.ignore();
     cout << "\t- - - - - - - - - - - - - - - -
<< endl;
     cout << "\t|
                                  Add Movie
<< endl;
     cout << "\t- - - - - - - - - - - - - - - -
<< endl;
     cout << "\t
                   =========
<< endl;
     cout << "\t !! EXAMPLE !!</pre>
<< endl;
     cout << "\t
                   =========
<< endl;
     cout << "\t
                   Movie Title: POKEMON
<< endl << endl;
     cout << "\t
                   Movie Price: RM15.00
<< endl << endl;
     cout << "\t
                   Total Seats: 30
<< endl << endl;
     cout << "\t
                   Movie Description: Adventure of Ash and Pikachu
<< endl << endl;
```

```
cout << "\t Movie Start Time: 8:00PM</pre>
<< endl << endl;
                                                                            " <<
      cout << "\t Movie End Time: 11:00PM</pre>
endl << endl;</pre>
      << endl << endl;
      bool again = true;
      bool yes = true;
      do
      {
            cout << "\t New Movie Title: ";</pre>
            getline(cin, newMovieTitle);
            cout << endl;</pre>
            outMovieFile << newMovieTitle;</pre>
            outMovieFile << endl;</pre>
            cout << "\t New Movie Price: RM";</pre>
            cin >> price;
            cout << endl;</pre>
            outMovieFile << price;</pre>
            outMovieFile << endl;</pre>
            cout << "\t New Total Seats: ";</pre>
            cin >> seat;
            cout << endl;</pre>
            outMovieFile << seat;</pre>
            outMovieFile << endl;</pre>
            cin.ignore();
            cout << "\t New Movie Description: ";</pre>
            getline(cin, MovieDesc);
            cout << endl;</pre>
            outMovieFile << MovieDesc;</pre>
            outMovieFile << endl;</pre>
```

```
cout << "\t New Movie Starting Time: ";</pre>
          getline(cin, sTime);
          cout << endl;</pre>
          outMovieFile << sTime;</pre>
          outMovieFile << endl;</pre>
          cout << "\t New Movie Ending Time: ";</pre>
          getline(cin, eTime);
          cout << endl;</pre>
          outMovieFile << eTime;</pre>
          outMovieFile << endl;</pre>
          cout << "\n\t****************************
<< endl;;
          addedM++;
          do
               movie?(Y/N):^^^ ";
               cin >> choice;
               cout <<
"\n\t******** << endl << endl;
               cin.ignore();
               if (strlen(choice) != 1)
                    cout << "\t !! PLease Key In One Character</pre>
Only !! " << endl;
                    cout <<
"\n\t******** << endl << endl;
               }
               else
               {
                     if (strcmp(choice, "Y") == 0 || strcmp(choice,
                     {
```

```
break;
                        }
                       else if (strcmp(choice, "N") == 0 ||
strcmp(choice, "n") == 0)
                        {
                             again = false;
                             yes = false;
                             cout << "\n\n\t Total " << addedM << " New</pre>
Movie Added." << endl;
                             cout << endl << "\t";</pre>
                             system("pause");
                        }
                       else
                        {
                             cout << "\t !! Please Key In (Y/N)</pre>
Only !!" << endl;
                             cout <<
"\n\t******** << endl << endl;
                        }
                  }
            } while (yes);
      } while (again);
      outMovieFile.close();
      system("cls");
      admin();
}
// edit movie by edit in the array
// store the array that already edit into the txt file
void editMovie()
{
      cout << fixed << setprecision(2);</pre>
      system("cls");
      storeInfoInArray(totalMovie);
```

```
cout << "\n\t-----" <<
endl;
     cout << "\t|**** Please Choose The Desire Movie To Edit ****|" <<
endl;
     cout << "\t-----" <<
endl << endl;</pre>
     for (int i = 0; i < totalMovie - 1; i++)</pre>
     {
           cout << " Movie [" << i + 1 << "] " << MovieTitle[i] << endl;</pre>
          cout << "
                      Description of movie: " << MovieDesc[i] << endl;</pre>
          cout << " Price RM " << MoviePrice[i] << endl;</pre>
          cout << " Total Seats: " << MovieSeat[i] << endl;</pre>
           cout << " Start Time: " << startTime[i] << endl;</pre>
           cout << "
                     End Time: " << endTime[i] << endl;</pre>
          - - - - -" << endl;
     }
     bool check = false;
     int choice;
     do
     {
           cout << "\t Please Select The Number of Movie You Want to</pre>
Edit (1-" << totalMovie - 1 << ") : ";</pre>
          cin >> choice;
          cin.ignore();
          if (choice > totalMovie - 1 || choice <= 0)</pre>
           {
                cout << " !! Invalid Input.Key in Number in Range</pre>
Only !!" << endl << endl;
           }
           else
           {
                check = true;
           }
     } while (check == false);
```

```
for (int i = 0; i < totalMovie - 1; i++)</pre>
     {
           if (i == choice - 1)
           {
                 cout << "\t========= << endl;</pre>
                 cout << "\t A. Title" << endl << endl;</pre>
                 cout << "\t B. Description" << endl << endl;</pre>
                 cout << "\t C. Price" << endl << endl;</pre>
                 cout << "\t D. Seat" << endl << endl;</pre>
                 cout << "\t E. Start time" << endl << endl;</pre>
                 cout << "\t F. End time" << endl << endl;</pre>
                 end1;
                 char editChoice[20];
                 bool stop = true;
                 do
                 {
                       cout << "\t << Please select what part of the
movie you want to edit: >> ";
                       cin >> editChoice;
                       cin.ignore();
                       if (strcmp(editChoice, "A") == 0 ||
strcmp(editChoice, "a") == 0)
                       {
                             string newTitle;
                             cout << "\t\t New title: ";</pre>
                             getline(cin, newTitle);
                             MovieTitle[i] = newTitle;
                             cout << "\t\t" << "****New Title</pre>
Updated****" << endl << endl;</pre>
                             stop = false;
                       }
```

```
else if (strcmp(editChoice, "B") == 0 ||
strcmp(editChoice, "b") == 0)
                         {
                                string newDescription;
                                cout << "\t\t
                                                 New description: ";
                                getline(cin, newDescription);
                                MovieDesc[i] = newDescription;
                                cout << "\t\t" << "****New Description</pre>
Updated****" << endl << endl;</pre>
                                stop = false;
                         }
                         else if (strcmp(editChoice, "C") == 0 ||
strcmp(editChoice, "c") == 0)
                         {
                                double newPrice;
                                cout << "\t\t New price: ";</pre>
                                cin >> newPrice;
                                MoviePrice[i] = newPrice;
                                cout << "\t\t" << "****New Price</pre>
Updated****" << endl << endl;</pre>
                                stop = false;
                         }
                         else if (strcmp(editChoice, "D") == 0 ||
strcmp(editChoice, "d") == 0)
                         {
                                int newSeat;
                                cout << "\t\t New Total Seat: ";</pre>
                                cin >> newSeat;
                                MovieSeat[i] = newSeat;
                                cout << "\t\t" << "****New Seat Updated****"</pre>
<< endl << endl;
                                stop = false;
                         }
                         else if (strcmp(editChoice, "E") == 0 ||
strcmp(editChoice, "e") == 0)
                         {
```

```
string newStartTime;
                                cout << "\t\t New starting time: ";</pre>
                                cin >> newStartTime;
                                startTime[i] = newStartTime;
                                cout << "\t\t" << "****New Starting Time</pre>
Updated****" << endl << endl;</pre>
                                stop = false;
                          }
                         else if (strcmp(editChoice, "F") == 0 ||
strcmp(editChoice, "f") == 0)
                          {
                                string newEndTime;
                                cout << "\t\t
                                                 New ending time: ";
                                cin >> newEndTime;
                                endTime[i] = newEndTime;
                                cout << "\t\t" << "****New Ending Time</pre>
Updated****" << endl << endl;</pre>
                                stop = false;
                          }
                          else
                          {
                                cout << "\t !! Invalid Option. Please Try</pre>
Again !!" << endl << endl;
                   } while (stop == true);
             }
      }
      // store the array info into txt file
      ofstream outMovieFile;
      outMovieFile.open("MovieList.txt");
      for (int i = 0; i < totalMovie - 1; i++)</pre>
      {
```

```
outMovieFile << MovieTitle[i] << endl;</pre>
         outMovieFile << MoviePrice[i] << endl;</pre>
         outMovieFile << MovieSeat[i] << endl;</pre>
         outMovieFile << MovieDesc[i] << endl;</pre>
         outMovieFile << startTime[i] << endl;</pre>
         outMovieFile << endTime[i] << endl;</pre>
    }
    system("pause");
    admin();
}
void deleteMovie()
{
    cout << fixed << setprecision(2);</pre>
    int n;
    system("cls");
    cout << "\n\t-----" <<
endl;
    cout << "\t|****Please Choose The Desire Movie To Delete****|" <<</pre>
endl;
    cout << "\t-----" <<
endl << endl;</pre>
    ofstream DeleteMovieFile;
    storeInfoInArray(totalMovie);
    n = totalMovie;
    for (int i = 0; i < n - 1; i++)
    {
         cout <<
  endl;
         endl;
         cout <<
endl << endl;</pre>
```

```
}
cout << "Which Movie You Want To Delete: ";</pre>
cin >> i;
if (i >= totalMovie)
{
      cout << "\n Invalid Movie. Back to Admin Interface\n\t";</pre>
      system("pause");
      admin();
}
cout << MovieTitle[i - 1] << " is deleted." << endl;</pre>
for (i = i; i < n - 1; i++)
{
      MovieTitle[i - 1] = MovieTitle[i];
      MoviePrice[i - 1] = MoviePrice[i];
      MovieSeat[i - 1] = MovieSeat[i];
      MovieDesc[i - 1] = MovieDesc[i];
      startTime[i - 1] = startTime[i];
      endTime[i - 1] = endTime[i];
}
n--;
DeleteMovieFile.open("MovieList.txt");
for (int i = 0; i < n - 1; i++)
{
      DeleteMovieFile << MovieTitle[i] << endl;</pre>
      DeleteMovieFile << MoviePrice[i] << endl;</pre>
      DeleteMovieFile << MovieSeat[i] << endl;</pre>
      DeleteMovieFile << MovieDesc[i] << endl;</pre>
      DeleteMovieFile << startTime[i] << endl;</pre>
      DeleteMovieFile << endTime[i] << endl;</pre>
}
system("pause");
admin();
```

}

```
void ViewTrans()
{
     cout << fixed << setprecision(2);</pre>
     system("cls");
     cout << "0))) 0))))))
0))
                             " << endl;
     cout << "
                0))
0))
                      " << endl;
     0)
           " 0)) 0)0))) 0))
0)) 0)) 0)) " << endl;
                     0) 0))) 0)) 0)) 0)) 0))) 0)))
     cout << "
0)))0)0) 0)
                           0)) 0)) 0)) 0))0)) 0)) 0)) 0))
    cout << "
                0))
                       0))
0)) 0)) 0)) 0)) 0)) 0))" << endl;
    cout << " 0))
                          0)) 0)) 0)) 0)) 0))) 0))
                    0))
                                                      0)) 0))
0)) 0))0)) 0)) 0))" << endl;
    cout << "
                                0)) 0)) 0)) 0))))
                0))
                           0))
                                                      0)) 0))
0)) 0)) 0)) 0)) 0)) 0))" << endl;
     cout << " 0)) 0))) 0)))0)))) 0))))))))))))
string line;
     cout << " ## Here the transaction all the time ##" << endl;</pre>
     ^_^ ^_^ ^_^ ^_^ ^_^ ^_^ ^_^ ^_^ " << endl;
     ifstream adminview;
     adminview.open("AdminView.txt");
     if (adminview.is open())
     {
         while (getline(adminview, line))
         {
              cout << "\t" << line << endl << endl;</pre>
         }
         adminview.close();
     }
     system("pause");
     admin();
```

```
//
//
//
      below all user interface!!!!!!
          below all login register interface!!!!!!
//
//
//
//
//***************
void LoginResgister()
{
     system("cls");
    cout << " | / | / / // // //
) ) /| //| | // / / " << endl;
                                                // ))
    cout << " || / | / / //___
//| // || //___ " << endl;
                                                 //
                                                           //
/ /
cout << " || / /|| / / ___ //
/ / / | // | | / ___ " << endl;
                                                //
                                                           //
    //
                                                           //
/ /
char choose[100];
     bool check = false;
     do
     {
          cout << "\t ***Do You Have Account Before[Y/N]*** : ";</pre>
          cin >> choose;
          if (strlen(choose) != 1)
               cout << "\t!! Opps Wrong Input.Please Key In One Letter</pre>
Only !!" << endl << endl;
```

}

```
cout << "\t";
                  system("pause");
                  LoginResgister();
            }
            else if (strcmp(choose, "y") == 0 || strcmp(choose, "Y") == 0)
            {
                  check = true;
                  Login();
            }
            else if (strcmp(choose, "n") == 0 || strcmp(choose, "N") == 0)
            {
                  check = true;
                  Register();
            }
            else {
                  cout << "\t!! Opps Wrong Input.Please Key In</pre>
(Y/N)Only !!" << endl << endl;
                  cout << "\t";</pre>
                  system("pause");
                  LoginResgister();
            }
      } while (check == false);
}
bool userExist(string email_1)
{
      ifstream userregister("userregister.txt");
      if (userregister.is_open()) {
            string username, password, email;
            while (!userregister.eof()) {
                  userregister >> email >> password >> username;
                  if (email 1 == email) {
```

```
userregister.close();
          return true;
          break;
        }
     }
     userregister.close();
  }
  return false;
}
void Register()
{
  system("cls");
  cout << "_____
____" << endl;
cout << "/___/\\ /___/\\ /___/\\ /___/\\ /___/\\ /___/\\
  cout << "\\:::_ \\ \\
\\::::_\\/_\\::::_\\/_\\::::_\\/\\::::\\/_\\:
::_ \\ \\ " << endl;
cout << " /____/\\ /__/\\ /___/\\ /___/\\ /__/\\ /__/\\ /__/\\ endl;
\\:\\ \\ \\\\\\ /<u>_</u>/\\ \\::\\ \\ \\ " << endl;
```

```
cout << " \\:.\\ \\ \\\\.\\`-\\ \\\\\!\\\.:| |
<< endl;
    \\___\\/ \\__\\/ \\__\\/" << endl <<
endl << endl;</pre>
    cout << "\t----" << endl;</pre>
    cout << "\t| Register account |" << endl;</pre>
    cout << "\t----" << endl;</pre>
    string email_1, email_2, password_1, password_2;
    ofstream userregister;
    userregister.open("userregister.txt", ios::app);
    if (userregister.is_open())
    {
         cout << "\t<< Please enter your email >>\n" << "Email: ";</pre>
        cin >> email 1;
        cout << "\t<< Please reenter your email >>\n" << "Email:";</pre>
        cin >> email 2;
        cout <<
"....." << endl;
        // check for email
        while (email_1 != email_2)
         {
             cout << "\t<< Email do not match, kindly retype</pre>
agian >>\n" << "Email:";</pre>
             cin >> email_1;
             cout << "\t<< Please reenter your email >>\n" <<</pre>
"Email:";
             cin >> email_2;
             cout <<
"....." << endl;
        }
         if (userExist(email_1))
```

```
{
                 cout << "\t***Account already exist, proceed to login</pre>
interface***" << endl;</pre>
                 system("pause");
                 cout << endl;</pre>
                 Login();
           }
           // check for password
           cout << "\t<< Please enter your password >>\n" << "Password:</pre>
           cin >> password_1;
           cout << "\t<< Please reenter your password >>\n" <</pre>
"Password:";
           cin >> password 2;
           cout <<
"....." << endl;
           while (password_1 != password_2)
                 cout << "\t<< Password do not match, kindly retype</pre>
agian >>\n" << "Password:";</pre>
                 cin >> password 1;
                 cout << "\t<< Please reenter your password >>\n" <</pre>
"Password:";
                 cin >> password_2;
                 cout <<
"....." << endl;
           }
           cout << "\t<< Please set a username for yourself >>\n" <</pre>
"Username:";
           cin >> username;
           // input the email and password into the unresgister.txt
           userregister << email_1 << endl;</pre>
           userregister << password_1 << endl;</pre>
```

```
userregister << username << endl;</pre>
         cout << "\t***Thanks for register an account with us***" <<</pre>
endl;
         userregister.close();
         system("pause");
         Login();
    }
    else
         cout << "\t!! cant open file !!";</pre>
    system("pause");
}
void Login()
{
    system("cls");
    cout << " __
                                                        " <<
endl;
    cout << "/_/\\ /____/\\ /____/\\ /____/\\
" << endl;
    cout << "\\:\\ \\ \\:::_ \\
`-\\ \\ \\ " << endl;
    cout << " \\:\\ \\__\\:\\ \\ \\\\\\_ _\\/
\\__\\:. _ \\ \\ " << endl;
    cout << " \\:\\/__/\\\:\\_\\ \\ \\\
/__\\::\\__/\\\. \\`-\\ \\ \\" << endl;
    cout << "
              \\___\\/ \\___\\/ \\____\\/ \\___
\\_\\/" << endl;
    bool loggedIn = false;
    string _password, _input;
    cout << "\t<< Please enter your registered email or username >>" <<</pre>
endl << "Email/Username:";</pre>
    cin >> _input;
```

```
cin >> _password;
      ifstream userregister;
      userregister.open("userregister.txt");
      if (userregister.is_open())
      {
            string email, username, password;
            while (!userregister.eof())
            {
                  getline(userregister, email);
                  getline(userregister, password);
                  getline(userregister, username);
                  if (email == _input && password == _password) {
                         loggedIn = true;
                        // write the username into a file
                         ofstream userNameFile("username.txt");
                        userNameFile << _input;</pre>
                        break;
                  }
                  else if (username == _input && password == _password) {
                         loggedIn = true;
                        break;
                  }
                  else {
                         loggedIn = false;
                  }
            }
            userregister.close();
            if (loggedIn) {
                  cout << "\t***Login successful. Welcome " << _input <<</pre>
"!***" << endl;
```

cout << "\t<< Please enter the password >>" << endl << "Password: ";</pre>

```
cout << "\t" << system("pause");</pre>
               userUI();
          }
          else {
               if (password != _password)
               {
                    cout << "-----
                        -----" << endl;
                    cout << "\n\t\t***Password incorrect.***" <<</pre>
endl << endl;</pre>
               }
               else
                          -----" << endl;
                    cout << "\n\t\t***Oops user not found.***" <<</pre>
endl;
               }
               while (loggedIn == false) {
                    char choose[10];
                    cout << "\t- - > Do you want to login again or
register a new account? < - -" << endl << endl;</pre>
                    # # # # # # # # # # # " << endl;
                    cout << "\t# # #
# # #" << endl;
                    cout << "\t# # #
                                      [A] login
                # # #" << endl;
[B] register
                    cout << "\t# # #
# # #" << endl;
                    # # # # # # # # # # # " << endl;
                    cout << "Your choice: ";</pre>
                    cin >> choose;
                    if (strcmp(choose, "A") == 0 || strcmp(choose,
"a") == 0) {
                         Login();
```

```
}
                else if (strcmp(choose, "B") == 0 ||
strcmp(choose, "b") == 0)
                {
                    Register();
                }
                else {
                    cout << "\t<< Invalid input proceed to login</pre>
page >>" << endl;</pre>
                    system("pause");
                    Login();
                }
            }
        }
    }
    else {
        cout << " !! Error: Failed to open users file !! " << endl;</pre>
        system("pause");
        LoginResgister();
    }
}
void userUI()
{
    system("cls");
    cout << "\t
        " << endl;
```

```
cout << "\t /_/ |_\\__,_/ / .___/\\__,_/_/ \\__/_/ /_/.__//\\__/ endl;
    cout << "\t
                               /_/
                   " << endl;
/_/
    char choice[25];
    endl;
                               MAIN MENU
    cout << "\t
endl;
    endl;
    cout << "\t
                                                " << endl <<
endl;
    cout << "\t [1] Movie Description</pre>
                                                " << endl <<
endl;
    cout << "\t
                   [2] Book Movie
                                                 " << endl <<
endl;
    cout << "\t
                    [3] Show History
                                                 " << endl <<
endl;
    cout << "\t
                    [4] Cancel Booking
                                                 " << endl <<
endl;
    cout << "\t
                    [5] Payment
                                                 " << endl <<
endl;
    cout << "\t
                    [6] Home Page
                                                 " << endl <<
endl;
    cout << "\t^^^^^^^^^^^^^^^^^^^^^^^^^^^^
endl << endl;</pre>
    do
    {
         cout << "Your choice: ";</pre>
         cin >> choice;
         if (strlen(choice) != 1)
              cout << " \t!! Please Key In One Integer Only !! " <<</pre>
endl << endl;</pre>
              continue;
```

```
}
else
{
      if (strcmp(choice, "1") == 0)
      {
            showMovie();
            break;
      }
      else if (strcmp(choice, "2") == 0)
      {
            bookMovie();
            break;
      }
      else if (strcmp(choice, "3") == 0)
      {
            showHistory();
            break;
      }
      else if (strcmp(choice, "4") == 0)
      {
            cancelBooking();
            break;
      }
      else if (strcmp(choice, "5") == 0)
      {
            paybill();
            break;
      else if (strcmp(choice, "6") == 0)
      {
            home();
            break;
      }
```

```
else
                {
                     cout << "Invalid input, please choose again" <<</pre>
endl;
                     continue;
                }
          }
     } while (true);
}
// correct le
void showMovie()
{
     cout << fixed << setprecision(2);</pre>
     system("cls");
     cout << "\n\t\t!! POPULAR IN THEATER NOW !! " << endl << endl <<</pre>
endl;
     storeInfoInArray(totalMovie);
     for (int i = 0; i < totalMovie - 1; i++)</pre>
     {
          cout <<
endl;
          cout << "\t\tMovie " << i + 1 << " : <" << MovieTitle[i] << "><</pre>
" << endl;
          cout <<
endl;
          cout << "\tDescription of movie: " << MovieDesc[i] << endl;</pre>
          cout << "\tPrice RM " << MoviePrice[i] << endl;</pre>
          cout << "\tAvailable Seat: " << MovieSeat[i] << endl;</pre>
          cout << "\tStart Time: " << startTime[i] << endl;</pre>
```

```
cout << "\tEnd Time: " << endTime[i] << endl;</pre>
           cout << endl;</pre>
     }
     cout << endl << endl;</pre>
     system("pause");
     userUI();
}
void bookMovie()
{
     cout << fixed << setprecision(2);</pre>
     int noSeat;
     system("cls");
     //display movie for cust to choose
     storeInfoInArray(totalMovie);
     cout << "\n\t\t_____" << endl;</pre>
     cout << "\t\t !!! Got'em All Before Sold Out !!!" << endl;</pre>
     cout << "\t\t----" << endl << endl
<< endl;
     cout <<
    endl;
     for (int i = 0; i < totalMovie - 1; i++)</pre>
           cout <<
endl;
           cout << "\t" << i + 1 << ") Movie: " << MovieTitle[i] << endl;</pre>
           cout << "\t" << " Description of movie: " << MovieDesc[i] <<</pre>
endl;
           cout << "\t" << " Movie seat: " << MovieSeat[i] << endl;</pre>
```

```
cout << "\t" << " Price RM " << MoviePrice[i] << endl;</pre>
           cout << "\t" << " Start Time: " << startTime[i] << endl;</pre>
           cout << "\t" << " End Time: " << endTime[i] << endl;</pre>
           cout << endl;</pre>
     }
     int movieChoice, bookedMovieNo;
     char custChoice[10];
     cout << endl << endl <<</pre>
endl;
     cout << "\tDo you want to continue to book the movie?" << endl;</pre>
     cout << "\t\t----" << endl;</pre>
     cout << "\t\t| Y-yes , N-no |" << endl;</pre>
     cout << "\t\t----" << endl;</pre>
     cout << "\tYour choice: ";</pre>
     cin >> custChoice;
     if (strcmp(custChoice, "Y") == 0 || strcmp(custChoice, "y") == 0)
           // let user choose movie
           cout <<
endl;
           cout << "\tSelect the movie you want to book: ";</pre>
           cin >> movieChoice;
           cin.ignore();
           cout <<
endl;
           if (movieChoice > totalMovie - 1 || movieChoice <= 0)</pre>
           {
                 cout << "\tKey in the range from 1 to " << totalMovie -</pre>
1 << " only" << endl;</pre>
                 system("pause");
                 bookMovie();
```

```
}
           else
            {
                 cout << "\tYour movie booked is " <<</pre>
MovieTitle[movieChoice - 1] << endl;</pre>
                 bookedMovieNo = movieChoice;
                 if (MovieSeat[movieChoice - 1] <= 0)</pre>
                 {
                        cout << "\tThe movie was sold out" << endl;</pre>
                        system("pause");
                       bookMovie();
                  }
                 else
                 {
                       cout << "\tPlease select the number of seat you</pre>
want to book: ";
                       cin >> noSeat;
                       if (noSeat > MovieSeat[movieChoice - 1])
                        {
                             cout << "\tThe seat left only " <<</pre>
MovieSeat[movieChoice - 1] << endl;</pre>
                             system("pause");
                             bookMovie();
                        }
                        else
                             cout <<
  endl;
                             cout << "\t!!!The movie " <<</pre>
MovieTitle[movieChoice - 1] << " with " << noSeat << " seat booked
successfully!!!" << endl << endl << endl;</pre>
                        }
```

```
MovieSeat[movieChoice - 1] = MovieSeat[movieChoice
- 1] - noSeat;
                          int n = totalMovie;
                          ofstream storeMovieFile;
                          storeMovieFile.open("MovieList.txt");
                          for (int i = 0; i < n - 1; i++)
                          {
                                storeMovieFile << MovieTitle[i] << endl;</pre>
                                storeMovieFile << MoviePrice[i] << endl;</pre>
                                storeMovieFile << MovieSeat[i] << endl;</pre>
                                storeMovieFile << MovieDesc[i] << endl;</pre>
                                storeMovieFile << startTime[i] << endl;</pre>
                                storeMovieFile << endTime[i] << endl;</pre>
                          }
                          storeMovieFile.close();
                   }
            }
            // open text to store the book movie info into a text file for
cust usage
            // store in permenent file
            ofstream outFile("temp_booked_movie_info.txt", ios::app);
            outFile << MovieTitle[movieChoice - 1] << endl;</pre>
            outFile << noSeat << endl;</pre>
            outFile << MoviePrice[movieChoice - 1] << endl;</pre>
            outFile << startTime[movieChoice - 1] << endl;</pre>
            outFile << endTime[movieChoice - 1] << endl;</pre>
            outFile.close();
      }
```

```
else if (strcmp(custChoice, "N") == 0 || strcmp(custChoice, "n") ==
0)
      {
            userUI();
      }
      else
      {
            cout << "Invalid input" << endl;</pre>
            system("pause");
            bookMovie();
      }
      system("pause");
      userUI();
}
// show cust the book history
void showHistory()
{
      cout << fixed << setprecision(2);</pre>
      double totalPrice = 0;
      system("cls");
      storeBookedInfoInArray(totalBookedMovie);
      ifstream nameFile;
      nameFile.open("username.txt");
      if (nameFile.is_open())
      {
            while (!nameFile.eof())
            {
                   getline(nameFile, username);
            }
      }
      nameFile.close();
```

```
if (totalBookedMovie - 1<= 0)</pre>
     {
           char choose[10];
           cout << "\t\t\----- << endl;</pre>
           cout << "\t\t\t|
                                               |" << endl;
                                  HISTORY
           cout << "\t\t\----- << endl;</pre>
           cout << "\n\tSo Empty Here, Go Get'em Shall We? > <" << endl;</pre>
           cout << "\t= = = = = = = = = = = = = = " << endl;
           cout << "\t ***Press Y to get your ticket now***" << endl <<</pre>
"\t" << endl;
                         ***Press anykey to leave***" << endl << "\t"
           cout << "\t
<< endl;
           cout << "\t
                         Your Choice : ";
           cin >> choose;
           if (strcmp(choose, "y") == 0 || strcmp(choose, "Y") == 0) {
                 cout << "\t !!Great choice.Let's go!!" << endl;</pre>
                cout << "\t";</pre>
                 system("pause");
                 bookMovie();
           }
           else {
                cout << "\n\tBack to User Interface." << endl;</pre>
                system("pause");
                userUI();
           }
     }
     else
     {
           cout << "\t\t\----- << endl;</pre>
           cout << "\t\t\t HISTORY
           cout << "\t\t\t-----" << endl << endl;</pre>
           cout << "\t\t
                             >_< Hi, my dear " << username << endl;</pre>
           cout << "\t\t Here is your booking history" << endl <<</pre>
endl << endl;
```

```
for (int i = 0; i < totalBookedMovie - 1; i++)</pre>
           {
                 cout <<
"-----
         ======== << endl;
                 cout << "\t\t" << bMovietitle[i] << endl;</pre>
                 cout << "\t\tNumber of seat booked: " <<</pre>
bNumMovieSeat[i] << endl << endl;</pre>
                 cout << "\t\tPrice: RM " << bMoviePrice[i] << endl <<</pre>
endl;
                 cout << "\t\tStarting Time: " << bMovieStartTime[i] <<</pre>
" , End time: " << bMovieEndTime[i] << endl << endl;
           }
           for (int i = 0; i < totalBookedMovie - 1; i++)</pre>
           {
                 cout << fixed << setprecision(2);</pre>
                 totalPrice += bMoviePrice[i] * bNumMovieSeat[i];
           }
           cout << "\t\tThe Total Price Is << RM" << totalPrice << " >> "
<< endl << endl;
           cout << "\t\t" << paidStatus << endl << endl;</pre>
           char paychoice[10];
           cout << "*****Do you want to make payment?(Y-yes, N-no)*****:</pre>
           cin >> paychoice;
           if (strcmp(paychoice, "Y") == 0 || strcmp(paychoice, "y") ==
0)
           {
                 paybill();
           else if (strcmp(paychoice, "N") == 0 || strcmp(paychoice, "n")
== 0)
           {
                 system("pause");
                 userUI();
```

```
}
          else
          {
               cout << "\tInvalid Input. Key In (Y/N) only." << endl;</pre>
               system("pause");
               showHistory();
          }
     }
     cout << endl;</pre>
}
void cancelBooking()
{
     cout << fixed << setprecision(2);</pre>
     system("cls");
     int choice;
     |" << endl;
     cout << "\t\t\t|
                         CANCEL BOOKING
     cout << "\t\t\t******************************* << endl << endl;</pre>
     storeBookedInfoInArray(totalBookedMovie);
     if (totalBookedMovie - 1 <= 0)</pre>
     {
          cout << "\t\t\----" << endl;</pre>
                                                   |" << endl;
          cout << "\t\t\t|
                                   Empty
          cout << "\t\t\----" << endl;</pre>
```

```
cout << endl << "\tYou have not book any movie" <<</pre>
endl << endl;</pre>
            system("pause");
            userUI();
      }
      ofstream CancelFile;
      for (int i = 0; i < totalBookedMovie - 1; i++)</pre>
            cout << "\tBooked Movie " << i + 1 << ": " << bMovietitle[i]</pre>
<< endl << endl;
            cout << "\tBooked Seat: " << bNumMovieSeat[i] << endl << endl;</pre>
            cout << "\tMovie Price: " << bMoviePrice[i] << endl << endl;</pre>
            cout << "\tMovie Show Time : " << bMovieStartTime[i] << " - "</pre>
<< bMovieEndTime[i] << endl << endl;
            = = " << endl;
      }
      cout << "\tWhich movie you want to cancel (1-" << totalBookedMovie -</pre>
1 << ") : ";
      cin >> choice;
      if (choice > totalBookedMovie-1 || choice <= 0)</pre>
      {
            cout << "\t!! Please key in movie in range only !!" << endl <<</pre>
endl;
            system("pause");
            cancelBooking();
      }
      else
      {
            cout << "\tYour Booked Movie ( " << bMovietitle[choice - 1] <<</pre>
" ) has canceled." << endl;
            for (int i = choice; i < totalBookedMovie - 1; i++)</pre>
            {
                  bMovietitle[i - 1] = bMovietitle[i];
                  bNumMovieSeat[i - 1] = bNumMovieSeat[i];
```

```
bMoviePrice[i - 1] = bMoviePrice[i];
                   bMovieStartTime[i - 1] = bMovieStartTime[i];
                   bMovieEndTime[i - 1] = bMovieEndTime[i];
            }
            CancelFile.open("temp_booked_movie_info.txt");
            for (int i = 0; i < totalBookedMovie - 2; i++)</pre>
            {
                   CancelFile << bMovietitle[i] << endl;</pre>
                   CancelFile << bNumMovieSeat[i] << endl;</pre>
                   CancelFile << bMoviePrice[i] << endl;</pre>
                   CancelFile << bMovieStartTime[i] << endl;</pre>
                   CancelFile << bMovieEndTime[i] << endl;</pre>
            }
            CancelFile.close();
            system("pause");
            userUI();
      }
}
void paybill()
{
      system("cls");
      double totalPrice = 0;
      cout << fixed << setprecision(2);</pre>
      cout << "\n$$$$$$\\
        " << endl;
$$\\
      cout << "$$ __$$\\
$$ |
        " << endl;
cout << "$$ | $$ |$$$$$\\ $$\\ $$$$$$\\$$$$\\
$$$$$$$\\ $$$$$$\\ " << endl;
                                                                    $$$$$$\\
      cout << "$$$$$$$ |\\___$$\\ $$ | $$ |$$ _$$ _$$\\ $$ __$$\\
$$ __$$\\\_$$ _| " << endl;
```

```
$$ | $$ | " << end1;
     cout << "$$ | $$ __$$ |$$ | $$ |$$ | $$ |$$ | $$ |
$$ | $$ |$$\\ " << endl;
     cout << "$$ |
                    \\$$$$$$ |\\$$$$$$ |$$ | $$ | \$$$$$$\
$$ | $$ | \$$$$ |" << endl;
     cout << "\\__|
                       \\____
                               __| \\____$$ |\\__| \\__| \\__|
\\___|\\_| \\_| \\__/ " << endl;
     cout << "
                               $$\\ $$ |
                                       " << endl:
                               \\$$$$$$ |
" << endl;
     cout << "
     cout << "
                                       _/
" << endl << endl << endl;
     storeBookedInfoInArray(totalBookedMovie);
     ofstream clearFile;
     char choice[15];
     cout << "\tDo you want to perform the payment?: " << endl;</pre>
     cout << "\t\t[Y - yes | N - no] :";</pre>
     cin >> choice;
     cout << endl;</pre>
     if (strcmp(choice, "Y") == 0 || strcmp(choice, "y") == 0)
     {
           for (int i = 0; i < totalBookedMovie - 1; i++)</pre>
           {
                cout << fixed << setprecision(2);</pre>
                totalPrice += bMoviePrice[i] * bNumMovieSeat[i];
           }
           char choice2[20];
           cout << "\t $$ The total price: RM " << totalPrice << " $$" <<</pre>
endl;
           cout << "\t----" << endl;</pre>
           cout << "\t|Press Y to comfirm the payment |" << endl;</pre>
           cout << "\t|Press other key to exit the payment |" << endl;</pre>
           cout << "\t-----" << endl;</pre>
           cout << "\tYour choice: ";</pre>
```

```
cin >> choice2;
            cout << endl <<
if (strcmp(choice2, "Y") == 0 || strcmp(choice2, "y") == 0)
                  cout << "$$ Your payment are done hope you have a good
day $$" << endl << endl;</pre>
                  ifstream nameFile;
                  nameFile.open("username.txt");
                  getline(nameFile, username);
                  nameFile.close();
                  storeBookedInfoInArray(totalBookedMovie);
                  ofstream adminFile("AdminView.txt", ios::app);
                  adminFile << "USERNAME: " << username << endl;;</pre>
                  for (int i = 0; i < totalBookedMovie - 1; i++)</pre>
                  {
                        adminFile << "BOOKED MOVIE: " << bMovietitle[i] <<
end1;
                        adminFile << "BOOKED SEAT: " << bNumMovieSeat[i]</pre>
<< endl;
                        cout << fixed << setprecision(2);</pre>
                        adminFile << "PRICE FOR THE SEAT: RM" <<
bMoviePrice[i] * bNumMovieSeat[i] << endl;</pre>
                  }
                  cout << fixed << setprecision(2);</pre>
                  adminFile << "TOTAL PRICE: RM" << totalPrice << endl;</pre>
                  adminFile << "PAYMENT: PAID" << endl << endl;</pre>
                  adminFile.close();
                  clearFile.open("temp_booked_movie_info.txt");
                  clearFile << "";</pre>
                  clearFile.close();
                  system("pause");
                  userUI();
            }
```

```
else
            {
                   cout << "Exit the payment" << endl;</pre>
                   system("pause");
                   userUI();
            }
      }
      else if (strcmp(choice, "N") == 0 || strcmp(choice, "n") == 0)
      {
            cout << endl << "Back to User Interface. " << endl << endl;</pre>
            system("pause");
            userUI();
      }
      else
      {
            cout << endl << "Invalid Input. Key In (Y/N) Only. " << endl</pre>
<< endl;
            system("pause");
            paybill();
      }
}
// function to store the cust info from cust_info.txt to array
// when want to use the array pls call the function
void storeBookedInfoInArray(int& totalBookedMovie)
{
      cout << fixed << setprecision(2);</pre>
      int total = 0;
      int i = 0;
      ifstream bookfile;
      bookfile.open("temp_booked_movie_info.txt");
      if (bookfile.is_open())
```

```
while (!bookfile.eof())
            {
                  //bookfile.ignore();
                  getline(bookfile, btitle);
                  bMovietitle[i] = btitle;
                  //bookfile.ignore();
                  bookfile >> bSeat;
                  bNumMovieSeat[i] = bSeat;
                  /*bookfile.ignore();*/
                  bookfile >> bprice;
                  bMoviePrice[i] = bprice;
                  bookfile >> bStartTime;
                  bMovieStartTime[i] = bStartTime;
                  bookfile >> bEndTime;
                  bMovieEndTime[i] = bEndTime;
                  i++;
                  total++;
                  bookfile.ignore();
            }
      }
      totalBookedMovie = total;
      bookfile.close();
}
// function to store the info from txt file to array
// when want to use array please call out this function first
```

{

```
void storeInfoInArray(int& totalMovie)
{
      cout << fixed << setprecision(2);</pre>
      int total = 0;
      int i = 0;
      ifstream moviefile;
      moviefile.open("MovieList.txt");
      if (moviefile.is_open())
            while (!moviefile.eof())
            {
                  getline(moviefile, title);
                  MovieTitle[i] = title;
                  moviefile >> price;
                  MoviePrice[i] = price;
                  moviefile >> seat;
                  MovieSeat[i] = seat;
                  moviefile.ignore();
                  getline(moviefile, describe);
                  MovieDesc[i] = describe;
                  moviefile >> sTime;
                  startTime[i] = sTime;
                  moviefile >> eTime;
                  endTime[i] = eTime;
                  i++;
                  total++;
                  moviefile.ignore();
```

```
}
totalMovie = total;
moviefile.close();
}
```