SOURCE CODE:

package datastructure;

import java.util.ArrayList;

import java.util.HashMap;

import java.util.LinkedList;

import java.util.Scanner;

public class MovieTicketSimulator {

public static void main(String[] args)

{

MovieTicketSimulator m= new MovieTicketSimulator();

m.verify();

}

String SelectedShowTime=" ";

String SelectedMovie=" ";

String username;

String password;

String Date;

String MovieName;

int date;

String Movie;

double showtime;

int numOfPersons;

char selectedrow;

String seat;

int ticket\_Price =150;

int total\_amnt;

Scanner sc=new Scanner(System.in);

HashMap<String,String> mt=new HashMap<>();

MovieTicketSimulator(){

mt.put("Kannan","Kannan@19");

mt.put("Ranjani", "Ranju@27");

mt.put("Sivaram","Siva@24");

mt.put("Rajesh", "Raji@03");

mt.put("Losshika","Kutta@15");

mt.put("Vishwa","Dharshan@20");

mt.put("Divya","Bharathi@13");

}

ArrayList<String> al=new ArrayList<>();

LinkedList RowA=new LinkedList();

LinkedList RowB=new LinkedList();

LinkedList RowC=new LinkedList();

LinkedList RowD=new LinkedList();

LinkedList RowF=new LinkedList();

LinkedList RowE=new LinkedList();

public void verify() {

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*Welcome to Vetri cinemas\*\*\*\*\*\*\*\*\*\*");

System.out.println("Lock your confirmation\n 1.Admin \n 2.User");

int n=sc.nextInt();

switch(n) {

case 1:

System.out.println(" Choose the facility which you need :\n 1.Add user \n 2.Remove user \n 3.Print user \n 4.Exit?");

int op=sc.nextInt();

switch(op) {

case 1:

System.out.println("Enter the user name");

username=sc.next();

System.out.println("Enter the password");

password=sc.next();

mt.put(username, password);

System.out.println("User Added Successfully");

System.out.println(mt);

break;

case 2:

System.out.println("Enter the user name");

username=sc.next();

System.out.println("Enter the password");

password=sc.next();

mt.remove(username, password);

System.out.println("User removed Successfully");

System.out.println(mt);

break;

case 3:

System.out.println("The Existing users of the Movie booking system");

System.out.println(mt);

break;

case 4:System.exit(0);

System.out.println("Closing your application");

break;

default:System.out.println("Invalid choice");

break;

}

case 2:

System.out.println("Are u 1.New User 2.ExistingUser?");

int s=sc.nextInt();

switch(s) {

case 1:

newUser(username, password);

login(username, password);

selectMovie(Date,MovieName);

break;

case 2:

login(username, password);

selectMovie(Date,MovieName);

break;

}

}

}

void newUser(String username,String password)

{

System.out.println();

System.out.println("Register Here!!!");

System.out.println("Enter the user name");

username=sc.next();

System.out.println("Enter the password");

password=sc.next();

mt.put(username, password);

System.out.println("Registered Sucessfully...Now u have to Login");

System.out.println();

login(username, password);

}

void login(String username,String password)

{

System.out.println();

System.out.println("Login Here!!!");

System.out.println("Enter the username");

username=sc.next();

System.out.println("Enter the password");

password=sc.next();

mt.put(username,password);

if(mt.containsKey(username)&&mt.containsValue(password)) {

System.out.println("Login Successfull!");

selectMovie(Date,MovieName);

}

else {

System.out.println("Please enter the valid user name..");

login(username, password);

}

}

void selectMovie(String Date,String MovieName){

String m1="Gargi";

String m2="Iravin nizhlal";

String m3="RRR";

String m4="KGF-2";

System.out.println("Select the Movie 1.Gargi \t 2.Iravin nizhla \t 3.RRR \t 4. KGF-2 5.Exit");

int op=sc.nextInt();

switch(op) {

case 1:

SelectedMovie+=m1;

System.out.println("Your selected Movie"+SelectedMovie);

selectShowTime();

break;

case 2:

SelectedMovie+=m2;

System.out.println("Your selected Movie"+SelectedMovie);

selectShowTime();

break;

case 3:

SelectedMovie+=m3;

System.out.println("Your selected Movie"+SelectedMovie);

selectShowTime();

break;

case 4:

SelectedMovie+=m4;

System.out.println("Your selected Movie"+SelectedMovie);

selectShowTime();

break;

case 5:

System.exit(0) ;

break;

default:System.out.println("Enter the valid option");

}

}

void selectShowTime() {

String s1="6.00am";

String s2="10.00am";

String s3="1.00pm";

String s4="4.00pm";

String s5="7.00pm";

String s6="11.00am";

System.out.println("1.6.00am \t 2.10.00am \t 3.1.00pm \t 4.4.00pm \t 5.7.00pm \t 6.11.00pm");

int cr=sc.nextInt();

if(cr==1) {

SelectedShowTime+=s1;

System.out.println("Your show time:"+SelectedShowTime);

select\_row();

}

if(cr==2) {

SelectedShowTime+=s2;

System.out.println("Your show time:"+SelectedShowTime);

select\_row();

}

if(cr==3) {

SelectedShowTime+=s3;

System.out.println("Your show time:"+SelectedShowTime);

select\_row();

}

if(cr==4) {

SelectedShowTime+=s4;

System.out.println("Your show time:"+SelectedShowTime);

select\_row();

}

if(cr==5) {

SelectedShowTime+=s5;

System.out.println("Your show time:"+SelectedShowTime);

select\_row();

}

if(cr==6) {

SelectedShowTime+=s6;

System.out.println("Your show time:"+SelectedShowTime);

select\_row();

}

}

void select\_no\_of\_persons()

{

Scanner s=new Scanner(System.in);

System.out.println("\nEnter the no of persons you want to book");

numOfPersons=s.nextInt();

System.out.println("\nYou have Booked tickets for a movie "+SelectedMovie+" persons for the show time "+SelectedShowTime);

System.out.println("\nNumbr of Persons u have booked: "+numOfPersons);

payment(numOfPersons,ticket\_Price);

}

void select\_row()

{

Scanner s=new Scanner(System.in);

System.out.println("Select the row (A-F): ");

char ch=s.next().charAt(0);

switch(ch)

{

case 'A':

{

selectedrow='A';

System.out.println("\nYou have Choosed A Row");

System.out.println("\nSelect the seats (1-10)");

seat=sc.next();

seat=selectedrow+seat;

select\_seat(RowA,seat,selectedrow);

break;

}

case 'B':

{

selectedrow='B';

System.out.println("\nYou have Choosed B Row");

System.out.println("\nSelect the seats (1-10)");

seat=sc.next();

seat=selectedrow+seat;

select\_seat(RowB,seat,selectedrow);

break;

}

case 'C':

{

selectedrow='C';

System.out.println("\nYou have Choosed C Row");

System.out.println("\nSelect the seats (1-10)");

seat=sc.next();

seat=selectedrow+seat;

select\_seat(RowC,seat,selectedrow);

break;

}

case 'D':

{

selectedrow='D';

System.out.println("\nYou have Choosed D Row");

System.out.println("\nSelect the seats (1-10)");

seat=sc.next();

seat=selectedrow+seat;

select\_seat(RowD,seat,selectedrow);

break;

}

case 'E':

{

selectedrow='E';

System.out.println("\nYou have Choosed E Row");

System.out.println("\nSelect the seats (1-10)");

seat=sc.next();

seat=selectedrow+seat;

select\_seat(RowE,seat,selectedrow);

break;

}

case 'F':

{

selectedrow='F';

System.out.println("\nYou have Choosed F Row");

System.out.println("\nSelect the seats (1-10)");

seat=sc.next();

seat=selectedrow+seat;

select\_seat(RowF,seat,selectedrow);

break;

}

default:

System.out.println("\nInvalid choice");

select\_row();

break;

}

}

void select\_seat(LinkedList l1, String s1,char row)

{

if(l1.contains(s1))

{

System.out.println("\nSeat is already booked");

System.out.println("\nTry with different seat number");

select\_row();

}

else{

al.add(s1);

l1.add(s1);

System.out.println("\nYou have selected seat number "+s1+" in "+row+" "+"row");

System.out.println("\nDo you want to book another seat (y/n)?: ");

char c=sc.next().charAt(0);

if(c=='y')

select\_row();

else

select\_no\_of\_persons();

}

}

void payment(int noofppl,int ticket) {

Scanner sc=new Scanner(System.in);

total\_amnt=numOfPersons\*ticket;

System.out.println("\nTotal amount for the booked tickets: "+total\_amnt);

System.out.println("\nType (y/n) to confirm booking");

char cnfrm=sc.next().charAt(0);

if(cnfrm=='y')

{

display();

}

else{

System.out.println("\nLast Booking Cancelled");

cancel();

}

}

void display()

{

System.out.println("\*\*\*\*\*\*\*BOOKING CONFIRMED\*\*\*\*");

System.out.println("\nHi "+ username +" Your Booking is Confirmed :) :)");

System.out.println("\nYour Ticket No: "+Math.random());

System.out.println("\nMovie name: "+SelectedMovie);

System.out.println("\nShowTime: "+SelectedShowTime);

System.out.println("\nSelected Row: "+selectedrow);

System.out.println("\nSelected Seats: "+al);

System.out.println("\nNo of Persons: "+numOfPersons);

System.out.println("\nTotal Amount: "+total\_amnt);

System.out.println("\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

System.out.println("\nDo you want to book again (y/n)?: ");

char ch=sc.next().charAt(0);

if(ch=='y')

{

verify();

}

else{

System.out.println("\nThank You for Using our System");

}

}

void cancel()

{

System.out.println("Enter the username");

username=sc.next();

System.out.println("Enter the password");

password=sc.next();

mt.remove(username, password);

System.out.println("\nSorry "+username+" :( :(");

System.out.println("\nYour Last Booking is Cancelled");

System.out.println("\nIf you want to start booking again (y/n)?: ");

char ch=sc.next().charAt(0);

if(ch=='y')

{

verify();

}

else{

System.out.println("\nThank You for Using our System ");

}

}

}