

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);

```

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        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");

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        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;

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        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";

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```
String s6="11.00am";
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```
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 ");

    }

}

}
```