# White Box Test "CINEMA BOX OFFICE(ONLINE)"

## Versión 1.1

#### **Members:**

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#### **CINEMA BOX OFFICE (ONLINE)**

#### **SOURCE CODE**

```
Package Controller
FileManager:
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
package ec.edu.espe.cinemaboxoffice.controller;
import java.io.BufferedReader;
import java.io.File;
import java.io.FileReader;
import java.io.FileWriter;
import java.io.IOException;
import java.io.PrintWriter;
import java.util.logging.Level;
import java.util.logging.Logger;
* @author Kevin Chuquimarca ESPE-DCCO
public final class FileManager {
   private String fileName;
   private File file;
   private boolean answer = true;
   public FileManager(String fileName) {
      this.fileName = fileName;
   public boolean createFile() {
      file = new File(fileName);
      if (!file.exists()) {
        try {
           file.createNewFile();
        } catch (IOException ex) {
           Logger.getLogger(Object.class.getName()).log(Level.SEVERE, null, ex);
           answer = false;
     return answer;
   public boolean writeFile(String informationToSave) {
     createFile();
      try (FileWriter fileWriter = new FileWriter(file, true);
           PrintWriter printWriter = new PrintWriter(fileWriter)) {
        printWriter.println(informationToSave);
        printWriter.close();
```

```
try {
        fileWriter.close();
     } catch (IOException ex) {
        Logger.getLogger(Object.class.getName()).log(Level.SEVERE, null, ex);
        answer = false;
   } catch (IOException ex) {
     Logger.getLogger(Object.class.getName()).log(Level.SEVERE, null, ex);
     answer = false;
  return answer;
}
public boolean readFile() {
  createFile();
  try {
     FileReader fileReader = new FileReader(file);
     BufferedReader bufferReader = new BufferedReader(fileReader);
     String stringData = "";
     while (stringData != null) {
        System.out.println(stringData);
        stringData = bufferReader.readLine();
   } catch (IOException ex) {
     Logger.getLogger(Object.class.getName()).log(Level.SEVERE, null, ex);
     answer = false;
  return answer;
public void deleteFile() {
   file = new File(fileName);
  if (file.exists()) {
     file.delete();
     System.out.println("The file " + file + " was delete");
   } else {
     System.out.println("The file " + file + " don't exist");
}
public boolean findRecord(String seeker) {
  createFile();
   boolean flat = false;
   try {
     FileReader fileReader = new FileReader(file);
     BufferedReader bufferReader = new BufferedReader(fileReader);
     String linea;
     while ((linea = bufferReader.readLine()) != null) {
        String[] searchWord = linea.split(",");
        if (searchWord[0].equals(seeker)) {
           System.out.println(linea);
           flat = true;
     if (flat == false) {
        System.out.println("Non-existent movie or unregistered movies on "
              + "billboard");
   } catch (IOException ex) {
     Logger.getLogger(Object.class.getName()).log(Level.SEVERE, null, ex);
     answer = false;
```

```
return answer;
  }
}
RecordInformation:
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
 * and open the template in the editor.
*/
package ec.edu.espe.cinemaboxoffice.controller;
import ec.edu.espe.cinemaboxoffice.model.FoodCombo;
import ec.edu.espe.cinemaboxoffice.model.Movie;
import ec.edu.espe.cinemaboxoffice.model.Promotion;
import ec.edu.espe.cinemaboxoffice.model.Room;
import ec.edu.espe.cinemaboxoffice.utils.Keyboard;
import java.io.IOException;
/**
* @author Kevin Chuquimarca ESPE-DCCO
public class RecordInformation {
  private Movie movie;
  private Promotion promotion;
  Keyboard in = new Keyboard();
  public void createMovie() throws IOException {
     boolean repeat = false;
     String answer;
     String movieTitle;
     String movieGender;
     int roomNumberForMovie;
     String roomFormatForMovie;
     float moviePrice = 3.0f;
     FileManager file = new FileManager("MovieList.txt");
     do {
        Room room = new Room();
        movieTitle = in.getString("Enter the movie title");
        movieGender = in.getString("Enter the movie gender: ");
        room.showDataRoom();
        roomNumberForMovie = in.getInt("Enter the movie room: )", 1);
        roomFormatForMovie = in.getString("Enter the movie format: ");
        if ("2D".equals(roomFormatForMovie)){
           moviePrice = moviePrice + 3.50f;
        if ("3D".equals(roomFormatForMovie)){
           moviePrice = moviePrice + 5.0f;
        movie = new Movie(movieTitle, movieGender, roomNumberForMovie, roomFormatForMovie,
moviePrice);
        System.out.println(file.writeFile(movie.toString()));
        answer = in.getStringAnswer("Add more movies[yes/no]: ");
        if ("no".equals(answer)) {
           repeat = true;
```

```
} while (repeat == false);
  }
  public void deleteMovie(String fileName) {
     FileManager file = new FileManager(fileName);
     file.deleteFile();
  }
  public void createPromotion() throws IOException {
     FileManager file = new FileManager("PromotionsList.txt");
     FoodCombo foodCombo = new FoodCombo(0, "", "", "", 0);
     boolean repeat = false;
     String name;
     String day;
     String answer;
     do {
        name = "Combo" + Integer.toString(foodCombo.menuCombo());
        day = in.getString("Enter the day promotion: ");
        answer = in.getStringAnswer("Add more movies[yes/no]: ");
        if ("no".equals(answer)) {
           repeat = true;
     } while (repeat == false);
     promotion = new Promotion(name, day);
     file.writeFile(promotion.toString());
  public void deletePromotion(String fileName) {
     FileManager file = new FileManager(fileName);
     file.deleteFile();
}
Package Model
Admin:
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
 * and open the template in the editor.
package ec.edu.espe.cinemaboxoffice.model;
import ec.edu.espe.cinemaboxoffice.controller.RecordInformation;
import ec.edu.espe.cinemaboxoffice.utils.Keyboard;
import ec.edu.espe.cinemaboxoffice.utils.Screen;
import ec.edu.espe.filemanagerlibrary.FileManagerLib;
import java.io.IOException;
/**
* @author Kevin Chuquimarca ESPE-DCCO
public class Admin {
   private String userName;
```

```
private int keyUser;
Keyboard in = new Keyboard();
Screen cls = new Screen();
RecordInformation infoRecord = new RecordInformation();
public Admin(String userName, int keyUser) {
  this.userName = userName = "Kevin";
  this.keyUser = keyUser = 123;
}
public void adminMenu() throws IOException {
  int option;
  boolean repeat = false;
  while (repeat == false) {
     System.out.println(" 1: Organize movie list \n 2: Organize promotions \n 3: Exit");
     option = in.getInt("Enter an option: ", 1);
     switch (option) {
        case 1:
           organizeMovieList();
           break;
        case 2:
           organizePromotions();
           break;
        case 3:
           repeat = true;
           break;
           System.out.println("Incorrect option");
           break;
  }
}
public void enterUser() {
  String loginName;
  int keyUser2;
  do {
     loginName = in.getString("Username: ");
     if (!loginName.equals(userName)) {
        System.out.println("Incorrect Username. Please enter again");
  } while (!loginName.equals(userName));
     keyUser2 = in.getInt("Password: ", 3);
  } while (keyUser2 != keyUser);
}
public void organizeMovieList() throws IOException {
  FileManagerLib file = new FileManagerLib("MovieList.txt");
  boolean repeat = false;
  int option;
  String fileName;
  do {
     System.out.println(" 1: Create Movie \n 2: Delete Movie \n 3: Exit");
     option = in.getInt("Enter an option: ", 1);
     switch (option) {
```

```
case 1:
           infoRecord.createMovie();
           break;
        case 2:
           FileManagerLib.readFile();
           fileName = in.getString("enter the name of file for delete: ");
           infoRecord.deleteMovie(fileName + ".txt");
           break;
        case 3:
           repeat = true;
           break;
  } while (repeat == false);
public void organizePromotions() throws IOException {
  FileManagerLib file = new FileManagerLib("PromotionsList.txt");
  boolean repeat = false;
  String fileName;
  int option;
  do {
     System.out.println(" 1: Save Promotion \n 2: Delete Promotion \n 3: Exit");
     option = in.getInt("Enter an option: ", 1);
     switch (option) {
        case 1:
           infoRecord.createPromotion();
           break;
           FileManagerLib.readFile();
           fileName = in.getStringAnswer("you want to delete the promotion list[yes/no]: ");
           if ("yes".equals(fileName)) {
              infoRecord.deletePromotion("PromotionsList.txt");
           break;
        case 3:
           repeat = true;
           break;
  } while (repeat == false);
* @return the loginName
*/
public String getUserName() {
  return userName;
}
* @param userName the loginName to set
public void setUserName(String userName) {
  this.userName = userName;
* @return the keyUser
public int getKeyUser() {
  return keyUser;
```

```
}
   * @param keyUser the keyUser to set
   public void setKeyUser(int keyUser) {
     this.keyUser = keyUser;
}
Bill:
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
package ec.edu.espe.cinemaboxoffice.model;
* @author Kevin Chuquimarca ESPE-DCCO
public class Bill {
   private Customer customer;
   private int idBill;
   private float priceToPay;
   private Payment payment;
   public Bill(Customer customer, int idBill, float priceToPay, Payment payment) {
     this.customer = customer;
     this.idBill = idBill;
     this.priceToPay = priceToPay;
     this.payment = payment;
   }
   public Customer getCustomer() {
     return customer;
   public void setCustomer(Customer customer) {
     this.customer = customer;
   public int getIdBill() {
     return idBill;
   public void setIdBill(int idBill) {
     this.idBill = idBill;
   public float getPriceToPay() {
     return priceToPay;
   public void setPriceToPay(float priceToPay) {
     this.priceToPay = priceToPay;
```

```
}
  public Payment getPayment() {
     return payment;
  public void setPayment(Payment payment) {
     this.payment = payment;
  public void showBillData(){
  public void saveBill(){
}
Billboard:
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
 * and open the template in the editor.
package ec.edu.espe.cinemaboxoffice.model;
import ec.edu.espe.cinemaboxoffice.utils.Keyboard;
import ec.edu.espe.cinemaboxoffice.utils.Screen;
import ec.edu.espe.filemanagerlibrary.FileManagerLib;
import java.io.File;
import java.io.IOException;
/**
* @author Kevin Chuquimarca ESPE-DCCO
public class Billboard {
  private Room room;
  private Admin admin;
  Keyboard in = new Keyboard();
  Screen cls = new Screen();
  FileManagerLib fileManagerLib;
  Seat seat;
  Ticket ticket;
  public void billboardMenu() throws IOException {
     boolean repeat = false;
     String selection = "";
     int election;
     do {
        System.out.println("1: Search a movie \n 2: See Billboard \n 3: Promotions \n 4: Exit");
        int option = in.getInt("Please, enter an option: ", 1);
        switch (option) {
           case 1:
              fileManagerLib = new FileManagerLib("MovieList.txt");
              selection = in.getString("Search: ");
              FileManagerLib.findRecord(selection);
```

```
break;
        case 2:
           Screen.cleanScreen();
           checkEmptyness(selection);
           break;
        case 3:
           Screen.cleanScreen();
           showPromotions();
           election = in.getInt("choose the number of promotion[100n]: ", 4);
           choosePromotion(election);
           break;
        case 4:
           repeat = true;
           break;
        default:
           System.out.println("Incorrect option");
           break;
   } while (repeat == false);
public void checkEmptyness(String selection) {
  File f = new File("MovieList.txt");
  do {
     if (f.length() == 0) {
        System.out.println("No movies have been registered yet");
        showMoviesList();
        selection = in.getString("What movie do you want to watch?: ");
        chooseMovie(selection);
   } while (f.length() != 0);
public void showMoviesList() {
   fileManagerLib = new FileManagerLib("MovieList.txt");
   FileManagerLib.readFile();
public void showPromotions() {
  fileManagerLib = new FileManagerLib("PromotionsList.txt");
   FileManagerLib.readFile();
}
public void chooseMovie(String selection) {
   fileManagerLib = new FileManagerLib(selection + ".txt");
   FileManagerLib.readFile();
   Ticket.generateTicket(chooseSeat(selection), selection);
public void choosePromotion(int numberPromotion) {
   String selection = in.getString("choose the title movie: ");
   fileManagerLib = new FileManagerLib(selection + ".txt");
   FileManagerLib.readFile();
   Ticket.generateTicket(chooseSeat(selection), selection);
public String chooseSeat(String selection) {
   boolean repeat;
   String chosenSeat;
   int aux;
```

```
do {
        chosenSeat = in.getString("choose the number of seat: ");
        aux = Integer.parseInt(chosenSeat);
        if (aux > 0 \& aux < 101) {
           System.out.println(aux);
           seat = new Seat(selection, chosenSeat, true);
           FileManagerLib.writeFile(seat.toString());
           repeat = true;
        } else {
           System.out.println(aux);
           System.out.println("incorrect number seat, please log in again");
           repeat = false;
        System.out.println(repeat);
     } while (repeat == false);
     return chosenSeat;
}
Customer:
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
package ec.edu.espe.cinemaboxoffice.model;
import java.io.IOException;
/**
* @author Kevin Chuquimarca ESPE-DCCO
public class Customer {
  private String cardNumber;
  private String id;
  private String name;
  private int age;
  public Customer(String cardNumber, String id, String name, int age) {
     this.cardNumber = cardNumber;
     this.id = id;
     this.name = name;
     this.age = age;
  public Customer() {
  }
  @Override
  public String toString() {
     return "Customer{" + "cardNumber=" + cardNumber + ", id=" + id + ", name=" + name + ",
age=" + age + '}';
  }
```

```
public void enterBillboard() throws IOException{
     Billboard billboard = new Billboard();
     billboard.billboardMenu();
  public void exitBillboard(){
  }
  public String getCardNumber() {
     return cardNumber;
  public void setCardNumber(String cardNumber) {
     this.cardNumber = cardNumber;
  public String getId() {
     return id;
  public void setId(String id) {
     this.id = id;
  public String getName() {
     return name;
  public void setName(String name) {
     this.name = name;
  }
  public int getAge() {
     return age;
  public void setAge(int age) {
     this.age = age;
FoodCombo:
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
package ec.edu.espe.cinemaboxoffice.model;
import ec.edu.espe.cinemaboxoffice.utils.Keyboard;
import java.util.ArrayList;
/**
* @author Kevin Chuquimarca ESPE-DCCO
```

```
public class FoodCombo {
   private int numberCombo;
   private String drink;
   private String snack;
   private String fastFood;
   private float priceFood;
   public FoodCombo(int numberCombo, String drink, String snack, String fastFood, float priceFood) {
      this.numberCombo = numberCombo;
       this.drink = drink;
      this.snack = snack;
      this.fastFood = fastFood;
       this.priceFood = priceFood;
   }
   public int menuCombo() {
       Keyboard in = new Keyboard();
       ArrayList<FoodCombo> combos = new ArrayList<>();
       boolean repeat = false;
       int election;
      combos.add(new FoodCombo(1,"CocaCola", "1", "cangreburger", 2.50F)); combos.add(new FoodCombo(2,"CocaCola", "2", "hot dog", 2.50F)); combos.add(new FoodCombo(3,"CocaCola", "3", "pizza", 2.50F)); combos.add(new FoodCombo(4,"CocaCola", "4", "chips", 2.50F)); combos.add(new FoodCombo(5,"CocaCola", "5", "cangreburger", 2.50F));
       System.out.println(combos);
          election = in.getInt("Choose the number of combo: ", 1);
          if (election < 5 & election > 0) {
             combos.get(election);
             repeat = true;
          else{
             System.out.println("The combo don't exist");
             repeat = false;
       } while(repeat = false);
       return election;
   }
   @Override
   public String toString() {
      return "\n" + numberCombo + "," + drink + "," + snack + "," + fastFood + "," + priceFood;
}
Movie:
* To change this license header, choose License Headers in Project Properties.
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 * and open the template in the editor.
package ec.edu.espe.cinemaboxoffice.model;
/**
 * @author Kevin Chuquimarca ESPE-DCCO
```

```
public class Movie {
  private String movieTitle;
  private String movieGender;
  private int roomNumberForMovie;
  private String roomFormatForMovie;
  private float moviePrice;
  public Movie(String movieTitle, String movieGender, int roomNumberForMovie, String
roomFormatForMovie, float moviePrice) {
     this.movieTitle = movieTitle;
     this.movieGender = movieGender;
     this.roomNumberForMovie = roomNumberForMovie;
     this.roomFormatForMovie = roomFormatForMovie;
     this.moviePrice = moviePrice;
  }
  @Override
  public String toString() {
     return movieTitle + "," + movieGender + "," + roomNumberForMovie + "," + roomFormatForMovie
+ "," + moviePrice;
  public String getMovieTitle() {
     return movieTitle;
  public void setMovieTitle(String movieTitle) {
     this.movieTitle = movieTitle;
  public String getMovieGender() {
     return movieGender;
  }
  public void setMovieGender(String movieGender) {
     this.movieGender = movieGender;
  public int getRoomNumberForMovie() {
     return roomNumberForMovie;
  public void setRoomNumberForMovie(int roomNumberForMovie) {
     this.roomNumberForMovie = roomNumberForMovie;
  public String getRoomFormatForMovie() {
     return roomFormatForMovie;
  public void setRoomFormatForMovie(String roomFormatForMovie) {
     this.roomFormatForMovie = roomFormatForMovie;
  public float getMoviePrice() {
     return moviePrice;
  }
  public void setMoviePrice(float moviePrice) {
```

```
this.moviePrice = moviePrice;
  }
}
Payment:
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
package ec.edu.espe.cinemaboxoffice.model;
import ec.edu.espe.cinemaboxoffice.utils.Keyboard;
import ec.edu.espe.cinemaboxoffice.utils.Validation;
import ec.edu.espe.filemanagerlibrary.FileManagerLib;
import java.io.IOException;
/**
* @author Kevin Chuquimarca ESPE-DCCO
public class Payment {
  private Customer customer;
  //private String card;
  Keyboard in = new Keyboard();
  FileManagerLib file;
  public void createPayment() throws IOException{
     boolean repeat = false;
     String cardNumber;
     String customerId;
     String customerName;
     int customerAge;
     file = new FileManagerLib("Bill.txt");
        cardNumber = in.getString("Enter your card number: ");
        customerId = in.getString("Enter your ID: ");
        customerName = in.getString("Enter your name: ");
        customerAge = in.getInt("Enter your age", 2);
        customer = new Customer(cardNumber, customerId, customerName, customerAge);
        System.out.println(file.writeFile(customer.toString()));
     }while(repeat == false);
  public void cancelPay(){
PremierMovie:
 * To change this license header, choose License Headers in Project Properties.
```

```
* To change this template file, choose Tools | Templates
 * and open the template in the editor.
package ec.edu.espe.cinemaboxoffice.model;
/**
* @author Kevin Chuquimarca ESPE-DCCO
public class PremierMovie {
  private String titlePremierMovie;
  private String datePremier;
PricePurchase:
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
package ec.edu.espe.cinemaboxoffice.model;
* @author Kevin Chuquimarca ESPE-DCCO
public class PricePurchase {
  private float pricePurchase;
  private int numberTickets;
  private String typePromotion;
  Bill bills;
  public static void calculatePriceTicket(String ticketData){
  }
  public void calculatePricePromotion(){
}
Promotion:
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
package ec.edu.espe.cinemaboxoffice.model;
/**
* @author Kevin Chuquimarca ESPE-DCCO
public class Promotion{
  private static int indexEnumerator = 1000;
  private int keyPromotion;
  private String namePromotion;
```

```
private String dayPromotion;
private float pricePromotionFood;
private Ticket ticket;
private PricePurchase pricePurchases[];
private FoodCombo foodCombos[];
public Promotion(String namePromotion, String dayPromotion) {
  this.keyPromotion = indexEnumerator + 1;
  indexEnumerator = indexEnumerator + 1;
  this.namePromotion = namePromotion;
  this.dayPromotion = dayPromotion;
public void showPromotionData(){
}
@Override
public String toString() {
  return keyPromotion + "," + namePromotion + "," + dayPromotion + "," + pricePromotionFood;
* @return the indexEnumerator
public static int getIndexEnumerator() {
  return indexEnumerator;
}
\ensuremath{^*} @param aIndexEnumerator the indexEnumerator to set
public static void setIndexEnumerator(int aIndexEnumerator) {
  indexEnumerator = aIndexEnumerator;
}
* @return the keyPromotion
public int getKeyPromotion() {
  return keyPromotion;
/**
* @param keyPromotion the keyPromotion to set
public void setKeyPromotion(int keyPromotion) {
  this.keyPromotion = keyPromotion;
* @return the namePromotion
public String getNamePromotion() {
  return namePromotion;
}
* @param namePromotion the namePromotion to set
```

```
public void setNamePromotion(String namePromotion) {
  this.namePromotion = namePromotion;
}
* @return the dayPromotion
public String getDayPromotion() {
  return dayPromotion;
/**
* @param dayPromotion the dayPromotion to set
public void setDayPromotion(String dayPromotion) {
  this.dayPromotion = dayPromotion;
* @return the pricePromotionFood
public float getPricePromotionFood() {
  return pricePromotionFood;
* @param pricePromotionFood the pricePromotionFood to set
public void setPricePromotionFood(float pricePromotionFood) {
  this.pricePromotionFood = pricePromotionFood;
* @return the ticket
public Ticket getTicket() {
  return ticket;
* @param ticket the ticket to set
public void setTicket(Ticket ticket) {
  this.ticket = ticket;
* @return the pricePurchases
public PricePurchase[] getPricePurchases() {
  return pricePurchases;
\ensuremath{^*} @param pricePurchases the pricePurchases to set
public void setPricePurchases(PricePurchase[] pricePurchases) {
  this.pricePurchases = pricePurchases;
}
```

```
* @return the foodCombos
   */
  public FoodCombo[] getFoodCombos() {
     return foodCombos;
   * @param foodCombos to set
  public void setFoodCombos(FoodCombos) {
     this.foodCombos = foodCombos;
}
Room:
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
package ec.edu.espe.cinemaboxoffice.model;
import java.util.ArrayList;
/**
* @author Kevin Chuquimarca ESPE-DCCO
public class Room {
  private int numberRoom;
  private int numberSeats;
  private String formatRoom;
  private float priceTypeRoom;
  public Room(int numberRoom, int numberSeats, String formatRoom, float priceTypeRoom) {
     this.numberRoom = numberRoom;
     this.numberSeats = numberSeats;
     this.formatRoom = formatRoom;
     this.priceTypeRoom = priceTypeRoom;
  }
  public Room() {
  public void showDataRoom() {
     ArrayList<Room> rooms = new ArrayList<>();
     for (int i = 0; i < 3; i++){
       rooms.add(new Room(i+1, 100, "2D", 3.50f));
       rooms.add(new Room(4+i, 100, "3D", 5.0f));
     System.out.println(rooms);
  }
  @Override
  public String toString() {
```

```
return "\nnumberRoom=" + numberRoom + ", numberSeats=" + numberSeats + ", formatRoom="
+ formatRoom + ", priceTypeRoom=" + priceTypeRoom;
  public int getNumberRoom() {
     return numberRoom;
  public void setNumberRoom(int numberRoom) {
     this.numberRoom = numberRoom;
  public int getNumberSeats() {
     return numberSeats;
  public void setNumberSeats(int numberSeats) {
     this.numberSeats = numberSeats;
  public String getFormatRoom() {
     return formatRoom;
  public void setFormatRoom(String formatRoom) {
     this.formatRoom = formatRoom;
  }
  public float getPriceTypeRoom() {
     return priceTypeRoom;
  }
  public void setPriceTypeRoom(float priceTypeRoom) {
     this.priceTypeRoom = priceTypeRoom;
}
Seat:
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
package ec.edu.espe.cinemaboxoffice.model;
* @author Kevin Chuquimarca ESPE-DCCO
public class Seat{
  private String seatMovie;
  private String numberSeat;
  private boolean freeOrOccupied;
  private float priceSeat;
  private float priceSeatVPI;
  public Seat(String seatMovie, String numberSeat, boolean freeOrOccupied) {
     this.seatMovie = seatMovie;
```

```
this.numberSeat = numberSeat;
  this.freeOrOccupied = freeOrOccupied;
}
@Override
public String toString() {
   return seatMovie + "," + numberSeat + "," + freeOrOccupied;
* @return the seatMovie
public String getSeatMovie() {
  return seatMovie;
* @param seatMovie the seatMovie to set
public void setSeatMovie(String seatMovie) {
  this.seatMovie = seatMovie;
\ast @return the numberSeat
public String getNumberSeat() {
  return numberSeat;
}
^{st} @param numberSeat the numberSeat to set
public void setNumberSeat(String numberSeat) {
  this.numberSeat = numberSeat;
}
* @return the freeOrOccupied
public boolean isFreeOrOccupied() {
  return freeOrOccupied;
/**
* @param freeOrOccupied the freeOrOccupied to set
public void setFreeOrOccupied(boolean freeOrOccupied) {
  this.freeOrOccupied = freeOrOccupied;
* @return the priceSeat
public float getPriceSeat() {
  return priceSeat;
}
* @param priceSeat the priceSeat to set
```

```
public void setPriceSeat(float priceSeat) {
     this.priceSeat = priceSeat;
   }
   * @return the priceSeatVPI
   public float getPriceSeatVPI() {
     return priceSeatVPI;
   /**
   * @param priceSeatVPI the priceSeatVPI to set
   public void setPriceSeatVPI(float priceSeatVPI) {
     this.priceSeatVPI = priceSeatVPI;
}
Ticket:
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
package ec.edu.espe.cinemaboxoffice.model;
* @author Kevin Chuquimarca ESPE-DCCO
public class Ticket {
   private static int indexCounter = 1000;
   private int key;
   private String seat;
   private String titleMovie;
   private String roomAssignment;
   private float priceTicket;
   private PricePurchase pricePurchase;
   public Ticket(String seat, String titleMovie, String roomAssignment, float priceTicket) {
     this.key = indexCounter + 1;
      indexCounter = indexCounter + 1;
     this.seat = seat;
     this.titleMovie = titleMovie;
     this.roomAssignment = roomAssignment;
     this.priceTicket = priceTicket;
   }
   @Override
   public String toString() {
      return "Ticket{" + "key=" + getKey() + ", seat=" + getSeat() + ", titleMovie=" + getTitleMovie() +
", roomAssignment=" + getRoomAssignment() + ", priceTicket=" + getPriceTicket() + ", pricePurchase="
+ getPricePurchase() + '}';
   public static void generateTicket(String seat, String selection) {
      Ticket ticket = new Ticket(seat, selection, "", 0);
```

```
ticket.showDataTicket();
  PricePurchase.calculatePriceTicket(ticket.toString());
public void showDataTicket(){
  System.out.println(toString());
* @return the indexCounter
public static int getIndexCounter() {
  return indexCounter;
/**
* @param aIndexCounter the indexCounter to set
public static void setIndexCounter(int aIndexCounter) {
  indexCounter = aIndexCounter;
* @return the key
public int getKey() {
  return key;
}
* @param key the key to set
public void setKey(int key) {
  this.key = key;
}
* @return the seat
public String getSeat() {
  return seat;
/**
* @param seat the seat to set
public void setSeat(String seat) {
  this.seat = seat;
* @return the titleMovie
public String getTitleMovie() {
  return titleMovie;
* @param titleMovie the titleMovie to set
public void setTitleMovie(String titleMovie) {
```

```
this.titleMovie = titleMovie;
  }
   * @return the roomAssignment
  public String getRoomAssignment() {
     return roomAssignment;
  /**
   * @param roomAssignment the roomAssignment to set
  public void setRoomAssignment(String roomAssignment) {
     this.roomAssignment = roomAssignment;
   * @return the priceTicket
  public float getPriceTicket() {
     return priceTicket;
   \ ^{*} @param priceTicket the priceTicket to set
  public void setPriceTicket(float priceTicket) {
     this.priceTicket = priceTicket;
  }
   * @return the pricePurchase
  public PricePurchase getPricePurchase() {
     return pricePurchase;
  }
   ^{st} @param pricePurchase the pricePurchase to set
  public void setPricePurchase(PricePurchase pricePurchase) {
     this.pricePurchase = pricePurchase;
KeyBoard:
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
package ec.edu.espe.cinemaboxoffice.utils;
import java.util.Scanner;
/**
```

```
* @author Kevin Chuquimarca ESPE-DCCO
public class Keyboard {
  Scanner string;
  Validation validate = new Validation();
  public Keyboard() {
     string = new Scanner(System.in);
  public String getString(String title) {
     String data = "";
      while (data.equals("")) {
        System.out.println(title);
        data = string.nextLine();
        if((!data.matches("^[ A-Za-z0-9]+$"))){
           data = "";
           System.out.println("Special Characters Not Allowed");
      validate.checkCard(data);
      return data;
  public String getStringAnswer(String title) {
      String data = "";
      while (data.equals("")) {
        System.out.print(title);
        data = string.nextLine();
        if (!"yes".equals(data) & !"no".equals(data)) {
           data = "";
     return data;
  public int getInt(String title, int characters) {
      String data = "";
     while (data.equals("")) {
        System.out.println(title);
        data = string.nextLine();
        if (!data.matches("[0-9]{" + characters + "}")) {
           System.out.println("\nIncorrect data, please repeat the ");
      return Integer.parseInt(data);
  public float getFloat(String title, int characters) {
      String data = "";
      while (data.equals("")) {
        System.out.println(title);
        data = string.nextLine();
        if (!data.matches("[[0-9][,]]{" + characters + "}")) {
           data = "";
        }
      return Float.parseFloat(data);
```

```
}
Screen:
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
package ec.edu.espe.cinemaboxoffice.utils;
/**
* @author Gabriel Aguirre
public class Screen {
   public static void cleanScreen(){
      new ProcessBuilder("cmd", "/c", "cls").inheritIO().start().waitFor();
   }catch(Exception e){
        System.out.println(e);
}
Validation
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
package ec.edu.espe.cinemaboxoffice.utils;
import java.util.StringTokenizer;
* @author Gabriel Aguirre
public class Validation {
   String card;
   boolean valid;
   valid=Validation.checkCard(card);
   if(valid){
   System.out.println("the card ir: "+card);
   public static boolean checkCard(String card) {
     if (card.length() != 16) {
        return false;
     int number = 0, sum = 0;
      for (int i = 0; i < 16; i++) {
        if (i \% 2 == 0) {
           number = Integer.valueOf(card.charAt(i)) * 2;
           if (number >= 10) {
```

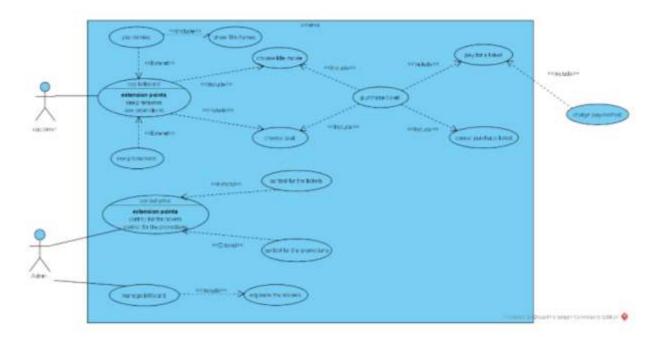
```
number = (number - 10) + 1;
        }
     }
     number = Integer.valueOf(card.charAt(i));
     sum = sum + number;
  if (sum \% 10 == 0) {
     return true;
   } else {
     return false;
}
   String identificationCard;
   boolean valid;
  valid=validation.verifyID(identificationCard);
  if(valid){
     System.out.println ("the identification Card is:"+identification Card);\\
   }else
     System.out.println("the identificationCard is incorrect: ");
public static boolean validateCI(String CI) {
  if (CI.length() != 10) {
     return false;
   for (int i = 0; i < 10; i++) {
     if (!Character.isDigit(CI.charAt(i))) {
        return false;
     }
  }
  int lastDigit = Character.getNumericValue((CI.charAt(CI.length() - 1)));
   int digit;
   int sumPairs = 0;
   int oddSum = 0;
   for (int i = 0; i < 9; i++) {
     digit = Character.getNumericValue(CI.charAt(i));
     if ((i + 1) \% 2 == 0) {
        sumPairs += digit;
     } else {
        oddSum += (digit * 2) > 9 ? (digit * 2) - 9 : (digit * 2);
   }
  int total = sumPairs + oddSum;
  int higher = (10 - (total \% 10)) + total;
  if ((total \% 10) == 0) {
     return lastDigit == 0;
   return lastDigit == (higher - total);
public static boolean validateTime(String time) {
  if (time.length() < 0) {
     return false;
```

```
return true;
  }
  public static boolean validateWord(final String word) {
     final String character = "1234567890}{,.+-=)(\hat{A}\hat{c}?\hat{A}i!#@$%&/'*";
     StringTokenizer compareWord = new StringTokenizer(character, word);
     String ret = compareWord.hasMoreTokens() ?
character.substring(compareWord.nextToken().length()) : null;
     return false;
  }
}
AdminSystem:
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
package ec.edu.espe.cinemaboxoffice.view;
import ec.edu.espe.cinemaboxoffice.model.Admin;
import java.io.IOException;
/**
* @author Kevin Chuquimarca ESPE-DCCO
public class AdminSystem {
  public void manager() throws IOException {
     Admin admin = new Admin("", 0);
     admin.enterUser();
     admin.adminMenu();
}
Cover:
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
package ec.edu.espe.cinemaboxoffice.view;
/**
* @author Josue
public class Cover {
  public void cover(){
```

```
System.out.println("(=
                                                                 =)");
                                                                 =)");
     System.out.println("(=
     System.out.println("(=
                                                                 =)");
     System.out.println("(=
                                                                 =)");
     System.out.println("(=
                               UNIVERSIDAD DE LAS FUERZAS ARMADAS - ESPE
                                                                                    =)");
     System.out.println("(=
                                                                 =)");
     System.out.println("(=
                                MEMBERS: GABRIEL AGUIRRE, JOSUÉ ÁLEMAN
     System.out.println("(=
     System.out.println("(=
                            JOHEL CHICAIZA, ALISSON CLAVIJO, KEVIN CHUQUIMARCA
     System.out.println("(=
                                                                 =)");
     System.out.println("(=
                                   OBJECT ORIENTED PROGRAMMING
     System.out.println("(=
                                   CAREER, NRC: SOFTWARE, 6382
     System.out.println("(=
                                  TEACHING: EDISON LASCANO PHD
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                                        SI 2020
     System.out.println("(=
     System.out.println("(=
     System.out.println("(= System.out.println("(=
                                                                 =)");
     System.out.println("\n\n");
  }
}
Customer:
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
 * and open the template in the editor.
package ec.edu.espe.cinemaboxoffice.view;
import ec.edu.espe.cinemaboxoffice.model.Customer;
import java.io.IOException;
/**
* @author Kevin Chuquimarca ESPE-DCCO
public class CustomerSystem {
  public void buyer() throws IOException{
     Customer customer = new Customer();
     customer.enterBillboard();
}
TicketSystem:
* To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
```

```
package ec.edu.espe.cinemaboxoffice.view;
import ec.edu.espe.cinemaboxoffice.utils.Keyboard;
import ec.edu.espe.cinemaboxoffice.utils.Screen;
import java.io.IOException;
/**
* @author Kevin Chuquimarca ESPE-DCCO
public class TicketSystem {
  public static void main(String[] args) throws IOException {
     Cover cover = new Cover();
     cover.cover();
     Keyboard in = new Keyboard();
     Screen cls = new Screen();
     AdminSystem adminSystem = new AdminSystem();
     CustomerSystem customerSystem = new CustomerSystem();
     boolean repeat = false;
     do {
        System.out.println("----CINEMA BOX OFFICE----");
        System.out.println(" 1: Admin \n 2: Customer \n 3: Exit");
        int option2 = in.getInt("Enter an option: ", 1);
/**<<<< HEAD
>>>>> 544bcb6c4b459c37ff6db3cf81c860801f613952*/
        switch (option2) {
          case 1:
             cls.cleanScreen();
             adminSystem.manager();
             break;
          case 2:
             cls.cleanScreen();
             customerSystem.buyer();
             break;
          case 3:
             repeat = true;
             break;
             System.out.println("Incorrect option");
             break;
     } while (repeat == false);
```

### Diagram Use Case



## Class Diagram

