DEPARTMENT OF COMPUTER SCIENCE

SOFTWARE ENGINEERING

INTEGRATOR PROJECT PROFILE I

Members:

Gabriel Aguirre
Josué Alemán
Jhoel Chicaiza
Kevin Chuquimarca
Alisson Clavijo

Tutor:

Ing. Edison Lascano

Sangolquí, June 25, 2020

CINEMA BOX OFFICE(ONLINE)

1. Title 3
2. Introduction 3
3. Defining and justifying the problem 3
4. Bjectivesbjetivos System **- Purpose** 3
4.1. Overall goal 3
4.2. Specific goals 3
5. Overview 4
6. Reach 4
7. Definition, Acronyms and Abbreviation 4
8. Theoretical framework 5
8.1 Product Functionality 5
8.2 User Features 5
8.3 Development IDE (NetBeans) 6
8.4 Scrum methodology 6
9. Restrictions 7
10. Ideas to defend 7
11. Requirements 7
12. Personnel involved 8
13. Diagrams Case of Use 9
14. Diagram of classesis 10
15. Expected results 14
16. Viability 15
16.1. Technical 15
16.2. Human 17
16.2.1. Business Tutor 17
16.2.2. Students 17
17. Bibliography 17

1. Title

"CinemaBox Office (Online)".

2. Introduction

A system will be developed which will allow you to register, book and buy tickets forcinema; and you will have an administrator who will be in charge of the administration of the ticket of movies and promotions.

3. Defining and justifying the problem

We need a system that recognizes the type of user that is treating the system, those who may be admins or clients; this system must be attractive and easily accessible to the clients. The system must show necessary and accurate information, this way the client will be able to choose what to purchase. It will also have to save the client data once they have made a purchase, and constantly compare that information to avoid problems such as available schedules, seats availability and age restrictions.

4. **Bjectivesbjetivos** System **- Purpose**

4.1. Overall goal

Develop and implement a system, by testing in a coding program (in Java) to be able to register, book and buy tickets for cinema.

4.2. Specific goals

- Implement a functionality that allows you to look at and enter new user information, you will do so by encoding the information to files.
- Perform tests or testing by reviewing the coding which must be well structured and thus be able to find the errors and proceed to fix them, so we will use the ide which also helps us to identify errors in the source code. }

- Implement a feature that allows us to search for movies and show us the information on the screen.

5. Overview

The program must have a menu with the option of administrator and cliente, in the administrator system you can enter the list of movies and promotions that will be displayed in the menu of the client and thus the latter can choose the movie, seat, room and format; then the payment method will be indicated and once canceled generate an invoice.

6. Reach

The priority scope we have in this project would be to be able to make two basic options:

- Observe movie information on the movie billboard.
- Book or buy movie tickets.

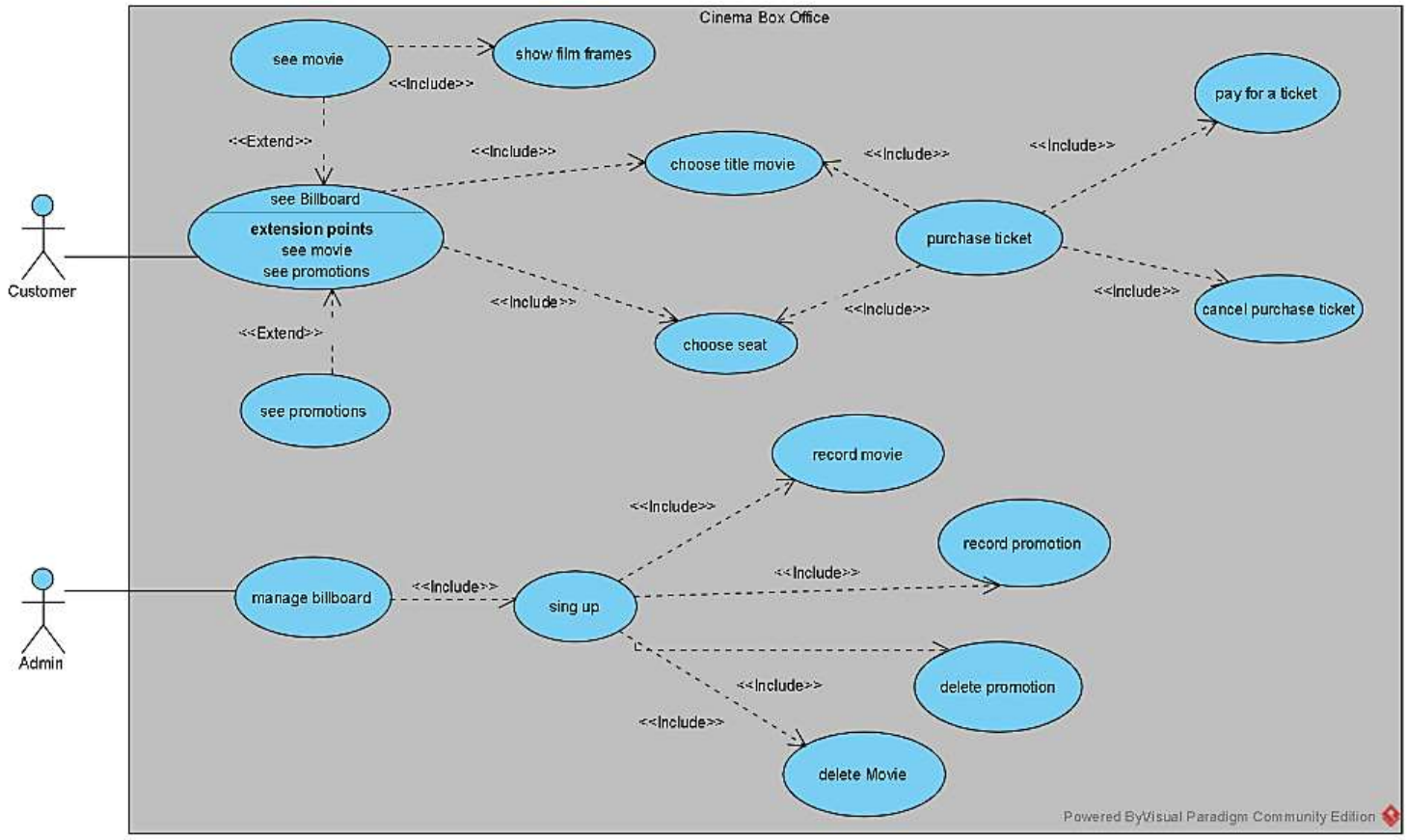
All this accompanied by simple interfaces that allow the use of any type of person,

7. Definition, Acronyms and Abbreviation

Exception	**The class Exception and its subclasses are a form of Throwable that indicates conditions that a reasonable application might want to catch**

8. Theoretical framework

8.1 Product Functionality



8.2 User Features

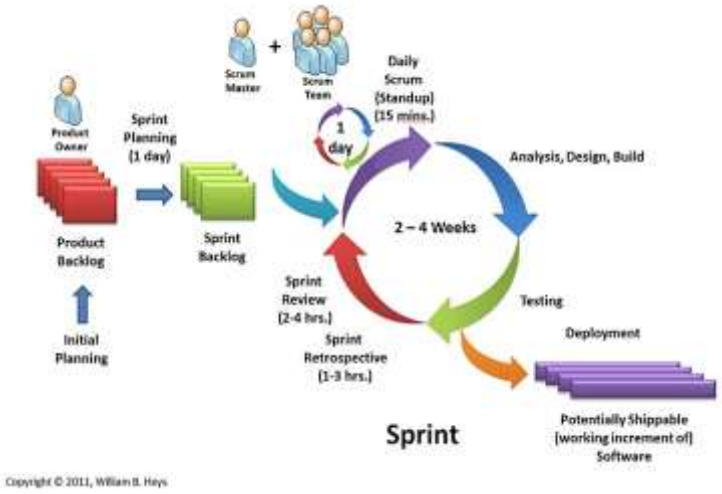
Type of user	**User**
Skills	Basic management of web portals.
Readiness level	Basic Education
Activities	Enter the System, select the movie, buy the ticket.

8.3 Development IDE (NetBeans)

NetBeans is a free integrated development environment, made primarily for the Java programming language. There are also a significant number of modules to extend it. NetBeans IDE1 is a free and free product with no restrictions on use.

8.4 Scrum methodology

Scrum is a process, framework, or framework, used in teams working on complex projects; an agile working methodology that aims to deliver value in short periods of time, based on three pillars: transparency, inspection, and adaptation.



9. Restrictions

1. Our program is designed in NetBeans.
2. The Program will have a system by which only the administrator will be able to enter movies and promotions.
3. The program will be run through the NetBeans or a command console.

10. Ideas to defend

- Demonstrate the efficiency shown by the coded program in NetBeans, along with all its functionalities.
- Demonstrate the ease with which the program can be used and that it is easy to understand for the user.

11. Requirements

11.1FUNCTIONAL REQUIREMENTS:

11.1.1 The program must have a login, which allows you to enter a username and a key for an administrator.

11.1.2 The program must have a menu with the following features: option 1, billboard, which will allow us to observe the title of the movie. Option 2, movies, which will allow us to observe the title, duration, category, and price. Option 3 Premier Movie. which will allow us to observe the title and date of the film in prestreno. Option 4, Administrator, which will allow us to register (User, Password) and organize the list of movies.

11.1.3 The program must keep a clear and organized record of all the options that have to do with the price to be paid. the payment method.

11.1.4 The program must have an easy-to-understand interface for the user with clear instructions.

11.2NON-FUNCTIONAL REQUIREMENTS:

11.2.1 The access permissions to the system may be changed only by the administrator, to organize and update the cinema billboard and that only authorized persons can access it.

11.2.2 The system must have properly structured user manuals, so that the user can manage the program according to the established standards and does not make it difficult to use the program properly.

12. Personnel involved

Name	**Gabriel Aguirre**
Role	Project Manager, Analyst, Developer, Tester.
Professional category	Software Engineering Student
Responsibilities	Almost everything
Contact information	apaguirre3espe.edu.ec
Approval	Yes

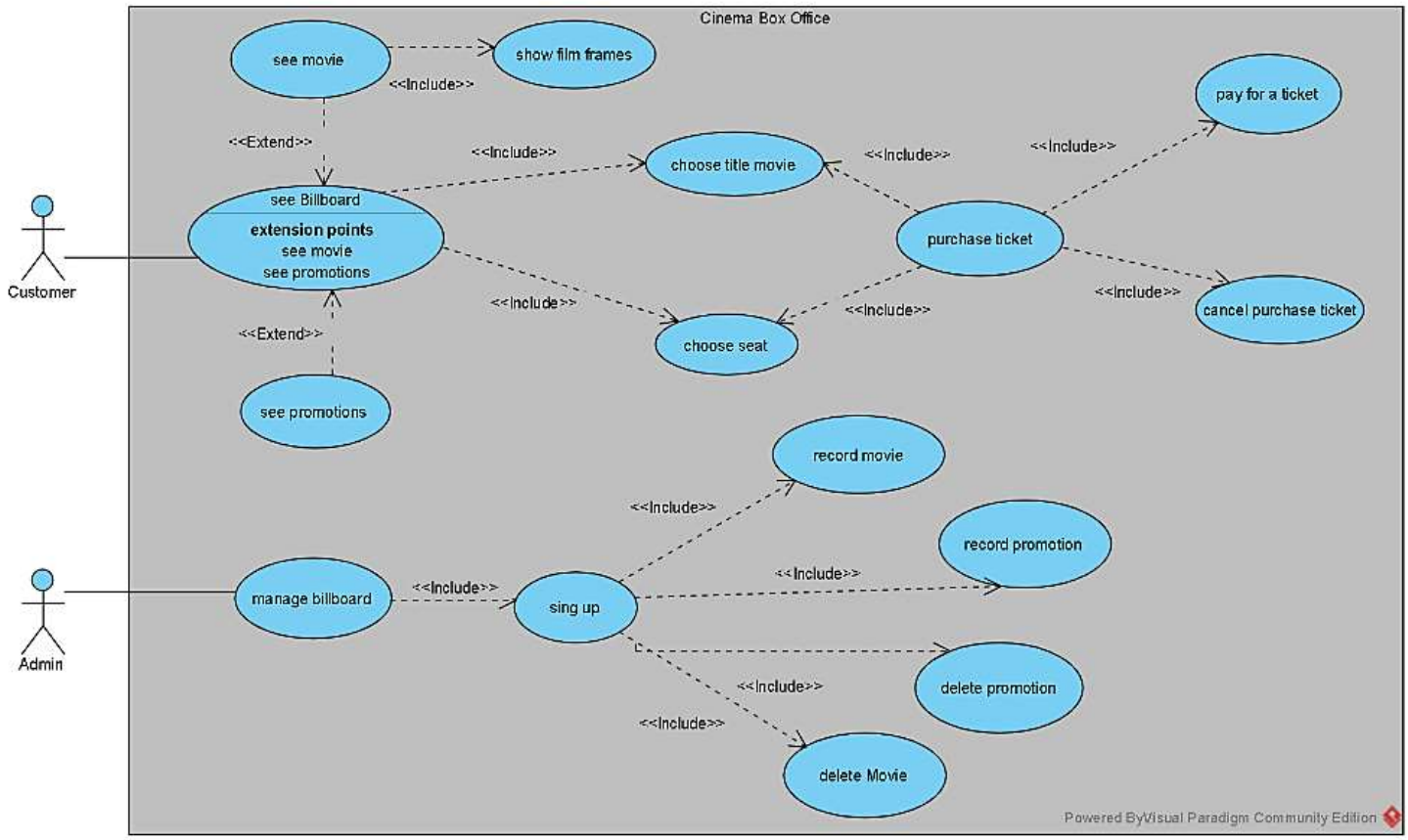
Name	**Josue Aleman**
Role	Analyst, developer, tester.
Professional category	Software Engineering Student
Responsibilities	Code Development and Review
Contact information	jjalemanespe.edu.ec
Approval	Yes

Name	**Jhoel Chicaiza**
Role	Analyst, developer, tester, documentation
Professional category	Software Engineering Student
Responsibilities	Code Development and Review, help in documentation work
Contact information	Jdchicaiza9@espe.edu.ec
Approval	Yes

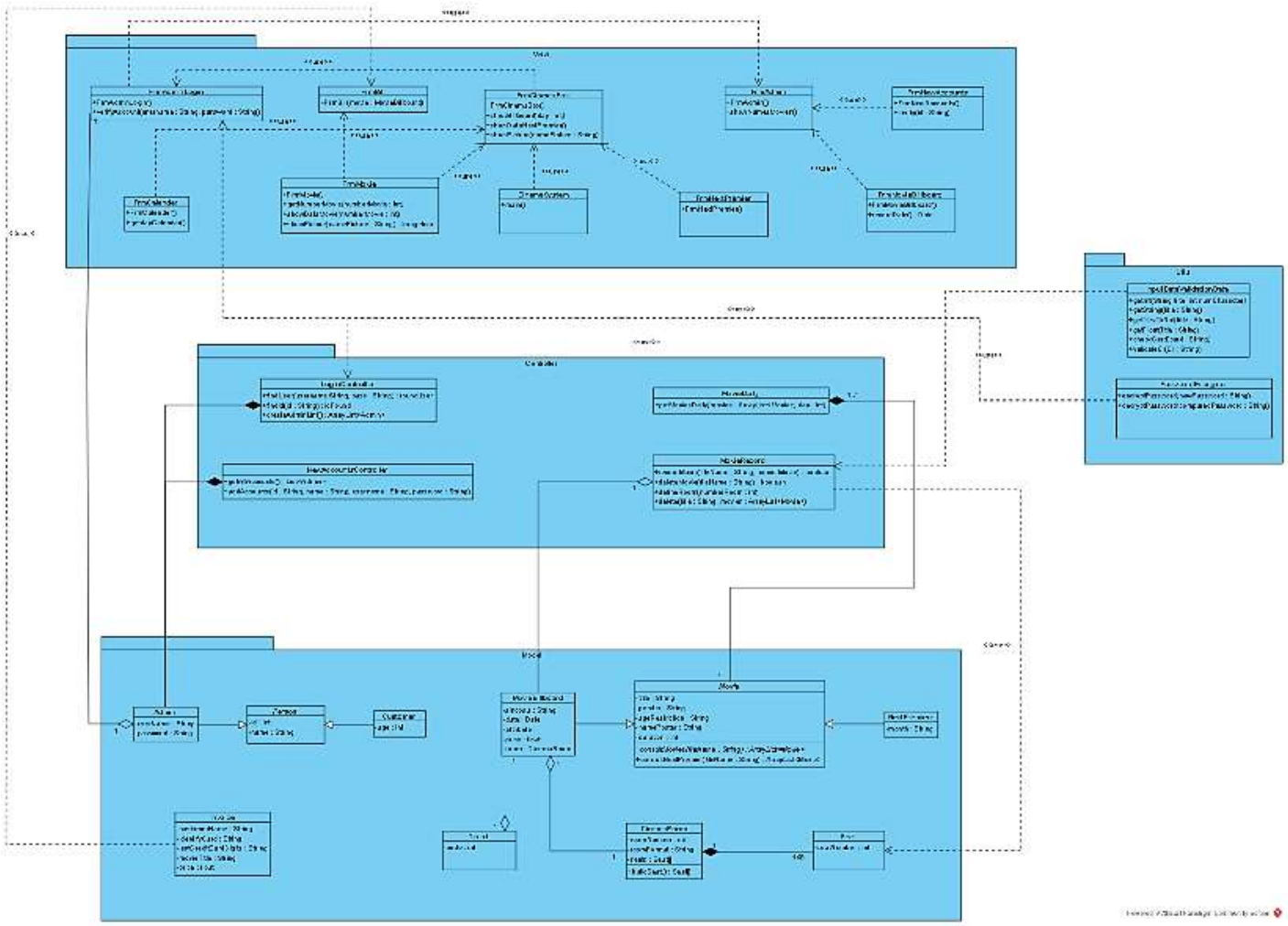
Name	**Kevin Chuquimarca**
Role	Analyst, developer, tester.
Professional category	Software Engineering Student
Responsibilities	Code Development and Review
Contact information	kchuquimarcaespe.edu.ec
Approval	Yes

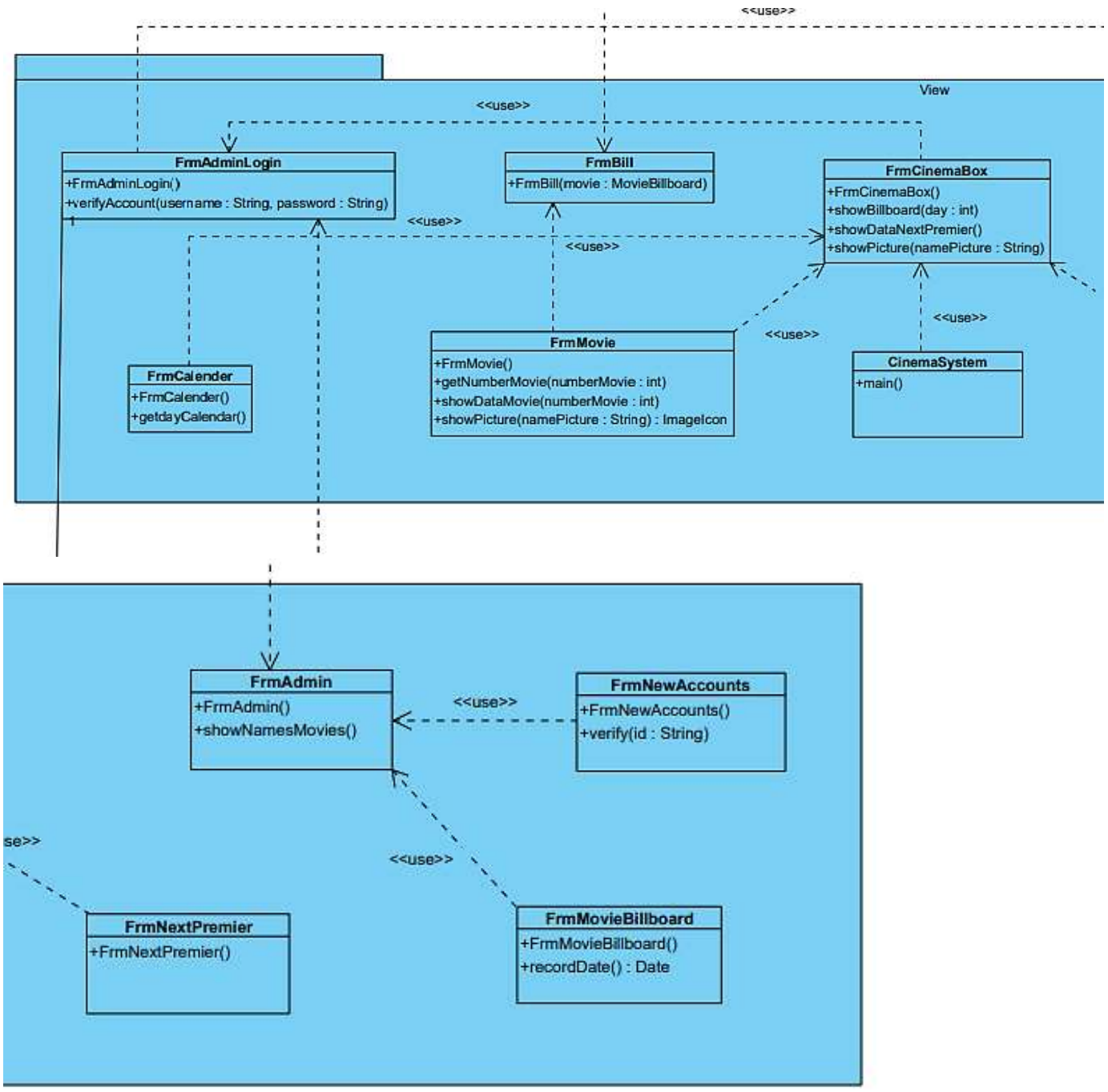
Name	**Alisson Clavijo**
Role	Analyst, developer, tester, documentation
Professional category	Software Engineering Student
Responsibilities	Code Development and Review, help in documentation work
Contact information	anclavijo@espe.edu.ec
Approval	Yes

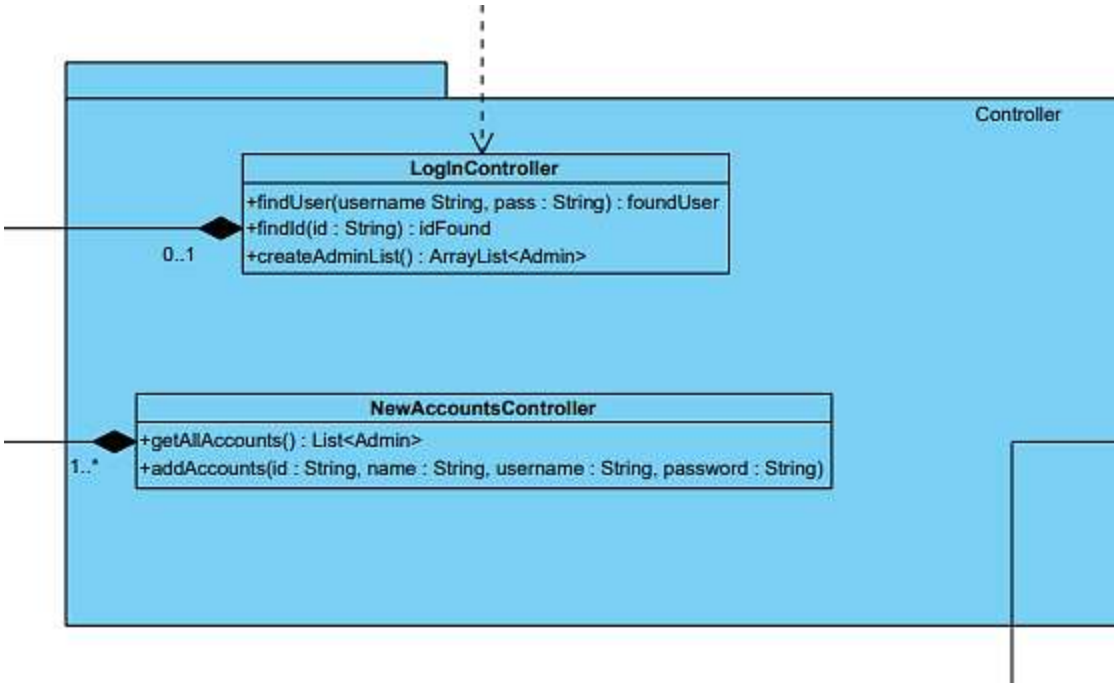
13. Diagrams Case of Use



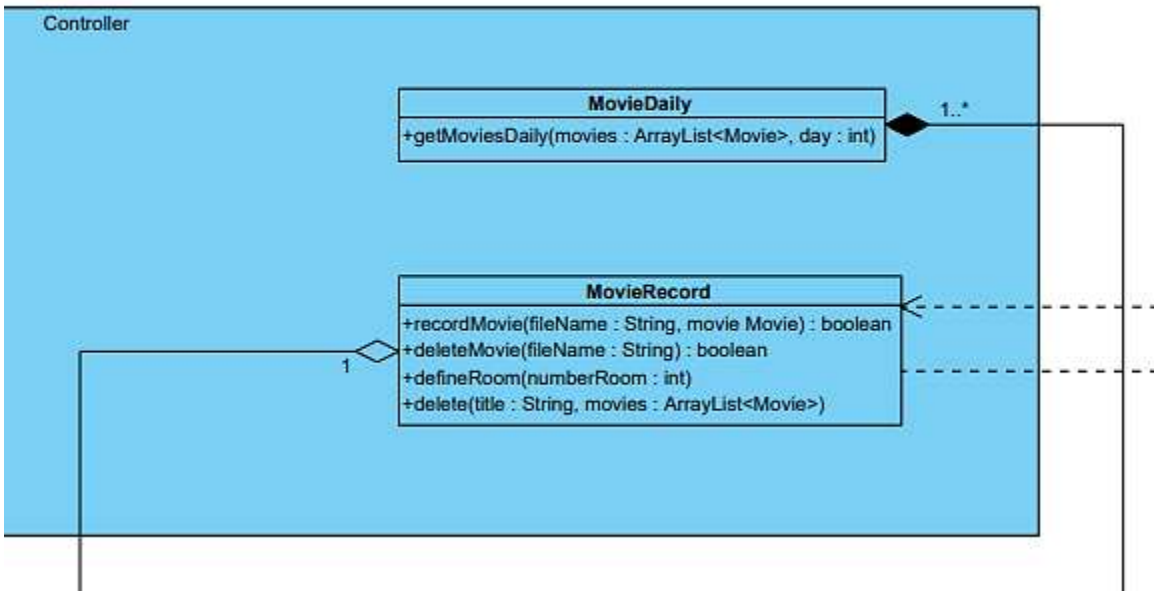
14. Diagram of classesis

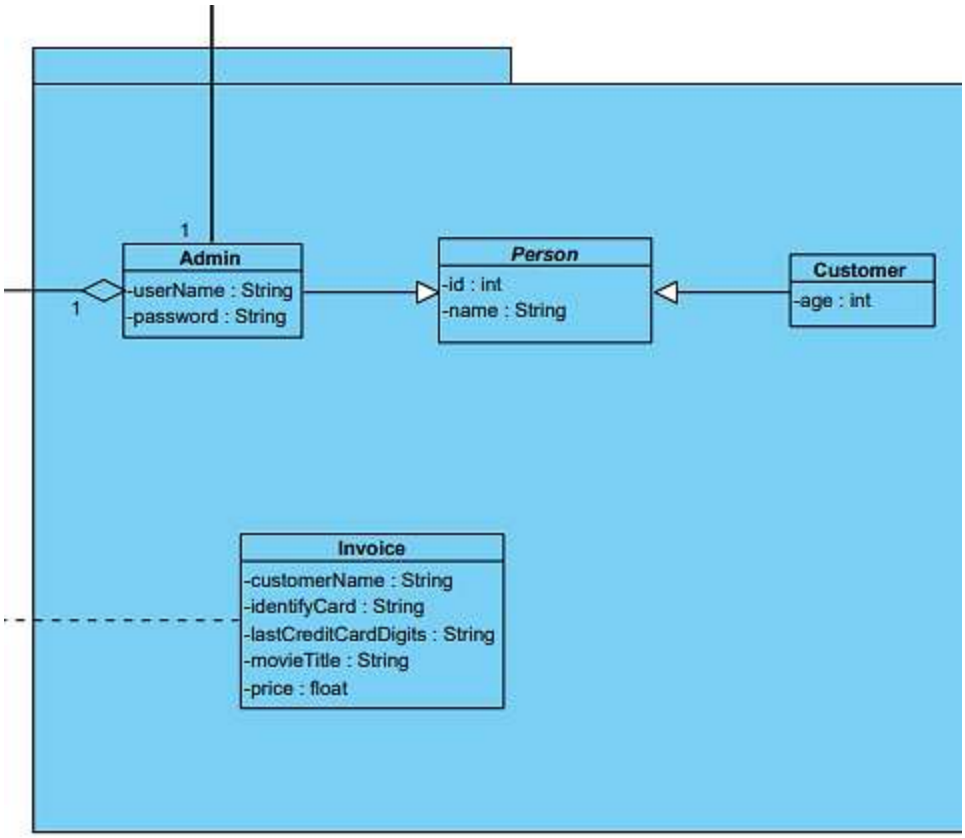


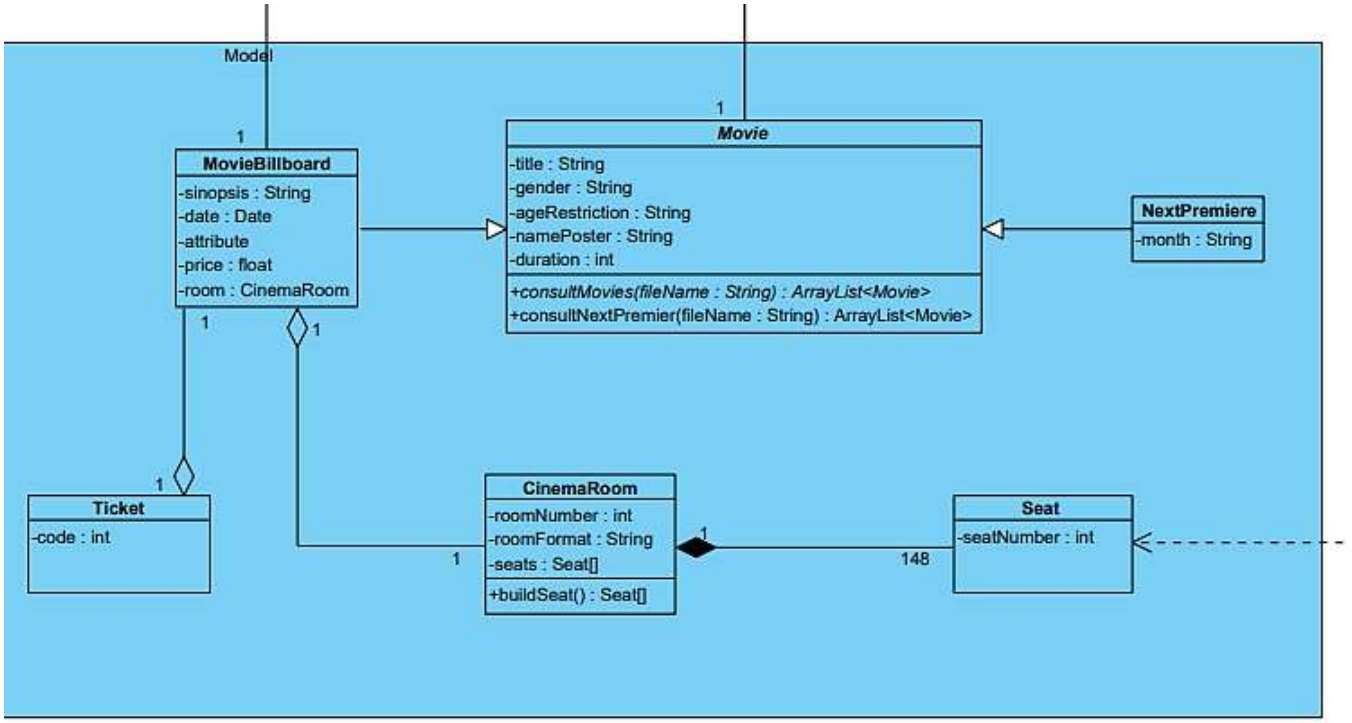

View
<<use>>
FrmAdminLogin
+FrmAdminLogin()
+verifyAccount(username : String, password : String)
FrmBill
+FrmBill(movie : MovieBillboard)
FrmCinemaBox
+FrmCinemaBox()
+showBillboard(day : int)
+showDataNextPremier()
+showPicture(namePicture : String)
FrmCalender
+FrmCalender()
+getdayCalendar()
FrmMovie
+FrmMovie()
+getNumberMovie(numberMovie : int)
+showDataMovie(numberMovie : int)
+showPicture(namePicture : String) : ImageIcon
CinemaSystem
+main()
FrmAdmin
+FrmAdmin()
+showNamesMovies()
FrmNewAccounts
+FrmNewAccounts()
+verify(id : String)
FrmNextPremier
+FrmNextPremier()
FrmMovieBillboard
+FrmMovieBillboard()
+recordDate() : Date

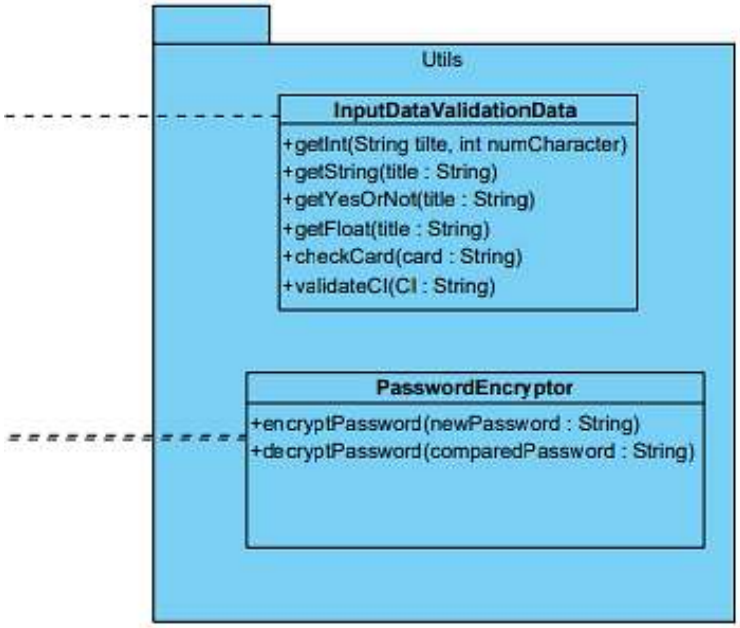

Controller
LogInController
+findUser(username String, pass : String) : foundUser
+findId(id : String) : idFound
+createAdminList() : ArrayList<Admin>
0..1
NewAccountsController
+getAllAccounts() : List<Admin>
+addAccounts(id : String, name : String, username : String, password : String)
1..*

<<use>>


Controller
MovieDaily
+getMoviesDaily(movies : ArrayList<Movie>, day : int)
1..*
MovieRecord
+recordMovie(fileName : String, movie Movie) : boolean
+deleteMovie(fileName : String) : boolean
+defineRoom(numberRoom : int)
+delete(title : String, movies : ArrayList<Movie>)
1


1
Admin
-userName : String
-password : String
1
Person
-id : int
-name : String
Customer
-age : int
Invoice
-customerName : String
-identifyCard : String
-lastCreditCardDigits : String
-movieTitle : String
-price : float


Model
1
1
MovieBillboard
-sinopsis : String
-date : Date
-attribute
-price : float
-room : CinemaRoom
1
Movie
-title : String
-gender : String
-ageRestriction : String
-namePoster : String
-duration : int
+consultMovies(fileName : String) : ArrayList<Movie>
+consultNextPremier(fileName : String) : ArrayList<Movie>
NextPremiere
-month : String
1
1
Ticket
-code : int
1
CinemaRoom
-roomNumber : int
-roomFormat : String
-seats : Seat[]
+buildSeat() : Seat[]
1
148
Seat
-seatNumber : int



15. Expected results

- Development of the system program source code, at the time of coding, we apply the knowledge acquired during the 1st partial.
- Tests were performed with input of flat files, with a lot of textual or numerical information to avoid inconveniences.

16. Viability

16.1. Technical

Software			
Amount	Description	Unit Price	V. Total
5	Netbeans	0.00	0.00
5	Windows 10 Home	120.00	600.00
2	Microsoft Office	76.00	152.00
		Total	752.00

Administrative			
Amount	Description	Unit Price	V. Total
0	Paper Resma	0.0	0.0
0	Ink Cartridges	0.0	0.0
1	Material Extra	18.00	18.00
		Total	18.00

Hardware			
Amount	Description	Unit Price	V. Total
1	Core i3-6006computer,4 GB RAM ,1 Tera.	500	500
1	Core i3 computer, 6 GB RAM	600	600
1	Core i7 computer, 12Gb RAM, 1 Tera.	700	700
1	Core i3 computer, 4 Gb RAM	800	800
1	HP Pavilion x360 Convertible, Core i3-10110, 8 Gb RAM, 120 Gb.	400	400
		Total	3000.00

* The hardware detailed in the table above is owned by the work computer.

TOTAL BUDGET	
Hardware	3000.00
Software	752.00
Administrative	18.00
Total	3770.00

16.2. Human

16.2.1. Business Tutor

Ing. Edison Lascano.

16.2.2. Students

- Gabriel Aguirre
- Josue Aleman
- Jhoel Chicaiza
- Kevin Chuquimarca
- Alisson Clavijo

17. Bibliography

[1] World Wide Web Consortium, 2008, Web Accessibility Brief Guide. http://www.w3c.es/divulgacion/guiasbreves/Accesibilidad

[2] Nielsen, J., 2003. Usability 101: Introduction to Usability. http://www.useit.com/alertbox/20030825.html

[3] PHP. DesarrolloWeb.com. Retrieved 8 May 2018, from https://www.desarrolloweb.com/articulos/392.php

[4] Alvarez, M. (2018). What is a CMS. DesarrolloWeb.com. Retrieved 8 May 2018, from https://desarrolloweb.com/articulos/que-es-un-cms.htmlAlvarez, M. (2018). What is it

Drupal.org. (2015). Drupal.org. Retrieved 8 May 2018, from https://www.drupal.org/drupalorg