### Model

Package in package "

Model
Version Phase 1.0 Proposed ivanc created on 23/11/2020. Last modified 23/11/2020

### **Use Case Model**

Package in package 'Model'

Use Case Model Version Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

### **Use Case Model diagram**

Use Case diagram in package 'Use Case Model'

Use Case Model
Version 1.0
nahue created on 21/11/2020. Last modified 23/11/2020

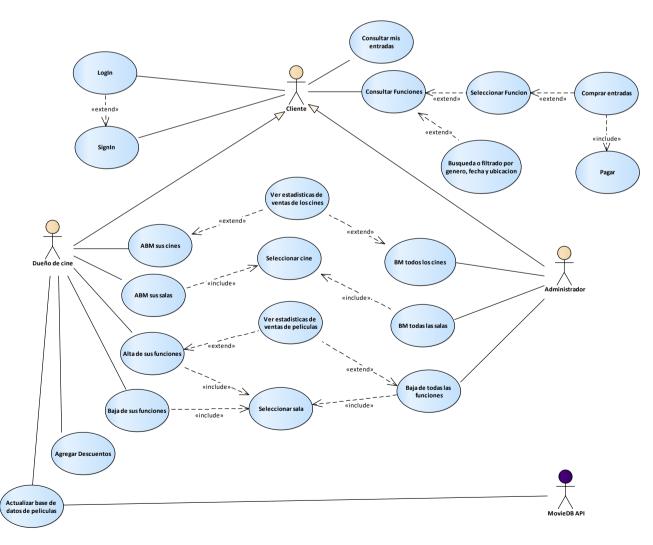


Figure 1: Use Case Model

### **Actors**

Package in package 'Use Case Model'

Actors Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

### **Actors diagram**

Use Case diagram in package 'Actors'

Actors Version 1.0 ivanc created on 21/11/2020. Last modified 21/11/2020



Figure 2: Actors

### User

Actor in package 'Actors'

User Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

### **OUTGOING BEHAVIORAL RELATIONSHIPS**

← Sequence from User to Object1

### CONNECTORS

✓ UseCaseLink Source -> Destination

From: User : Actor, Public

To: Use Case1 : UseCase, Public

UseCaseLink Source -> Destination

From: User : Actor, Public

To: Use Case2 : UseCase, Public



### **Primary Use Cases**

Package in package 'Use Case Model'

Primary Use Cases
Version 1.0 Phase 1.0 Proposed
nahue created on 21/11/2020. Last modified 21/11/2020

### Primary Use Cases diagram

Use Case diagram in package 'Primary Use Cases'

Primary Use Cases
Version 1.0
ivanc created on 21/11/2020. Last modified 21/11/2020

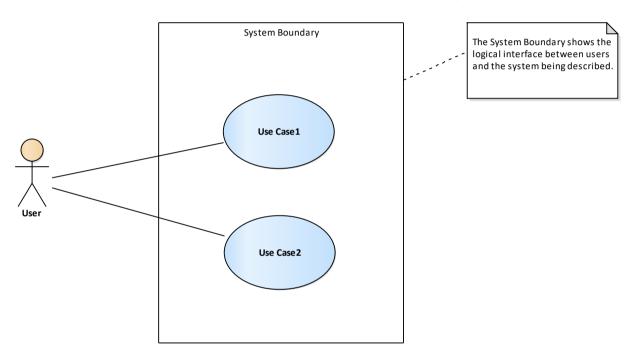


Figure 3: Primary Use Cases

### User

Actor in package 'Actors'

User
Version 1.0 Phase 1.0 Proposed
nahue created on 21/11/2020. Last modified 21/11/2020

### OUTGOING BEHAVIORAL RELATIONSHIPS

Sequence from User to Object1

### **CONNECTORS**

UseCaseLink Source -> Destination

From: User: Actor, Public

To: Use Case1 : UseCase, Public

### CONNECTORS

✓ UseCaseLink Source -> Destination

From: User: Actor, Public

To: Use Case2 : UseCase, Public

### **System Boundary**

Boundary in package 'Primary Use Cases'

System Boundary
Version 1.0 Phase 1.0 Proposed
nahue created on 21/11/2020. Last modified 21/11/2020
Extends

### Note

Note in package 'Primary Use Cases'

The System Boundary shows the logical interface between users and the system being described.

Note Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020 Extends

### Use Case1

UseCase in package 'Primary Use Cases'

Use Case1 Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

### **ELEMENTS OWNED BY Use Case1**

B Object1 : Sequence

### CONNECTORS

**✓ UseCaseLink** Source → Destination

From: User: Actor, Public

To: Use Case1 : UseCase, Public

### Use Case1 diagram

Interaction diagram in package 'Primary Use Cases'

Use Case1 Version 1.0 ivanc created on 21/11/2020. Last modified 21/11/2020

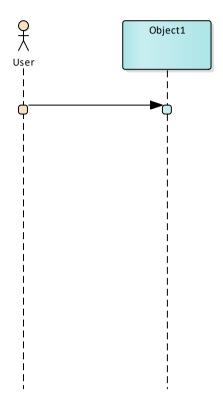


Figure 4: Use Case1

### User

Actor in package 'Actors'

User Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

### OUTGOING BEHAVIORAL RELATIONSHIPS

← Sequence from User to Object1

### CONNECTORS

UseCaseLink Source -> Destination

From: User: Actor, Public

To: Use Case1 : UseCase, Public

UseCaseLink Source -> Destination

From: User : Actor, Public

To: Use Case2 : UseCase, Public

### INTERACTION MESSAGES

■ 1.0" from 'User' sent to 'Object1'.

Synchronous Call.

[ Return is False. Iteration is False. New group is False. ]

### Object1

Sequence owned by 'Use Case1', in package 'Primary Use Cases'

Object1 Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

### INCOMING BEHAVIORAL RELATIONSHIPS

→ Sequence from User to Object1

### Use Case2

UseCase in package 'Primary Use Cases'

Use Case2 Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

### **CONNECTORS**

UseCaseLink

Source -> Destination

From: User : Actor, Public

To: Use Case2 : UseCase, Public

### **Administrador**

Actor in package 'Use Case Model'

Administrador Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

### **OUTGOING STRUCTURAL RELATIONSHIPS**

Generalization from Administrador to Cliente

[ Direction is 'Source -> Destination'. ]

### ASSOCIATIONS

Association (direction: Unspecified)

Target: Public (UseCase) BM todos los cines
Target: Public (UseCase) BM todas las salas
Target. Tubile (Osecase) Bivi todas las salas
Target: Public (UseCase) Baja de todas las
funciones

### Cliente

Actor in package 'Use Case Model'

Cliente Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

INCOMING STRUCTURAL RELATIONSHIPS	
⇒ Generalization from Administrador to Cliente	[ Direction is 'Source -> Destination'. ]
→ Generalization from Dueño de cine to Cliente	[ Direction is 'Source -> Destination'. ]



### Compañia de credito

Actor in package 'Use Case Model'

Compañia de credito Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

### Dueño de cine

Actor in package 'Use Case Model'

Dueño de cine Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

## OUTGOING STRUCTURAL RELATIONSHIPS Generalization from Dueño de cine to Cliente [ Direction is 'Source -> Destination'. ]

ASSOCIATIONS	
Association (direction: Unspecified)	
Source: Public (Actor) Dueño de cine	Target: Public (UseCase) Agregar Descuentos
Association (direction: Unspecified)	
Source: Public (Actor) Dueño de cine	Target: Public (UseCase) ABM sus salas
Association (direction: Unspecified)	
Source: Public (Actor) Dueño de cine	Target: Public (UseCase) Alta de sus funciones
Association (direction: Unspecified)	
Source: Public (Actor) Dueño de cine	Target: Public (UseCase) ABM sus cines
Association (direction: Unspecified)	
Source: Public (Actor) Dueño de cine	Target: Public (UseCase) Actualizar base de datos de peliculas
Association (direction: Unspecified)	
Source: Public (UseCase) Baja de sus funciones	Target: Public (Actor) Dueño de cine

### **MovieDB API**

Actor in package 'Use Case Model'

MovieDB API Version 1.0 Phase 1.0 Proposed ivanc created on 23/11/2020. Last modified 23/11/2020

### ASSOCIATIONS



Association (direction: Unspecified)

Source: Public (Actor) MovieDB API

Target: Public (UseCase) Actualizar base de datos de peliculas

### **UseCase**

UseCase in package 'Use Case Model'

UseCase Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

### **ABM** sus cines

UseCase in package 'Use Case Model'

Registro, modificacion y baja de los cines

ABM sus cines Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020 Alias 9

### RESPONSIBILITIES (INTERNAL REQUIREMENTS)

☑ Functional. LogIn

[ Proposed, Medium difficulty. ]

### **SCENARIOS**

Basic Path. Basic Path

1. Agregar, borrar o modificar cine seleccionado

Uses:

Dueño de cine

2. Efectuar cambio en la base de datos

Uses:

Sistema

### CONNECTORS

### CONNECTORS

**Extend** «extend» Source -> Destination

Ver estadisticas de ventas de los cines : UseCase, Public

ABM sus cines : UseCase, Public

### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Actor) Dueño de cine Target: Public (UseCase) ABM sus cines

### **ABM** sus salas

UseCase in package 'Use Case Model'

Registro, modificacion y baja de las salas

ABM sus salas Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020 Alias 11

### RESPONSIBILITIES (INTERNAL REQUIREMENTS)



☑ Functional. LogIn

[ Proposed, Medium difficulty. ]

### **SCENARIOS**

Basic Path. Basic Path

1. Agregar, borrar o modificar sala seleccionada

Uses:

Dueño de cine

2. Efectuar cambio en la base de datos

Uses:

Sistema

### CONNECTORS

**Include** «include» Source → Destination ABM sus salas : UseCase, Public To: Seleccionar cine: UseCase, Public

### ASSOCIATIONS



Association (direction: Unspecified)

### ASSOCIATIONS

Source: Public (Actor) Dueño de cine Target: Public (UseCase) ABM sus salas

### Actualizar base de datos de peliculas

UseCase in package 'Use Case Model'

Actualizar base de datos de peliculas Version 1.0 Phase 1.0 Proposed ivanc created on 23/11/2020. Last modified 23/11/2020

### RESPONSIBILITIES (INTERNAL REQUIREMENTS)

☑ Functional. LogIn

[ Proposed, Medium difficulty. ]

### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Actor) MovieDB API

Target: Public (UseCase) Actualizar base de datos

de peliculas

Association (direction: Unspecified)

Source: Public (Actor) Dueño de cine

Target: Public (UseCase) Actualizar base de datos

de peliculas

### **Agregar Descuentos**

UseCase in package 'Use Case Model'

Agregar Descuentos Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020 Alias 15

### RESPONSIBILITIES (INTERNAL REQUIREMENTS)

☑ Functional. La compañia de credito ofrezca descuento

[ Proposed, Medium difficulty. ]

☑ Functional. LogIn

[ Proposed, Medium difficulty. ]

### ASSOCIATIONS

Association (direction: Unspecified)

### ASSOCIATIONS

Source: Public (Actor) Dueño de cine Target: Public (UseCase) Agregar Descuentos

### Alta de sus funciones

UseCase in package 'Use Case Model'

Alta de sus funciones Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020 Alias 13

### RESPONSIBILITIES (INTERNAL REQUIREMENTS)

☑ Functional. LogIn

[ Proposed, Medium difficulty. ]

### **SCENARIOS**

Basic Path. Basic Path

1. Seleccionar Pelicula

Uses:

Dueño de cine

2. Seleccionar Horario y fecha

Uses:

Dueño de cine

Exception: 2a. Si el horario no esta disponible

Exception: 2b. Si ya esta exhibida en otra sala en el dia seleccionado

3. Agregar a la cartelera

Uses:

Sistema

Exception. Si el horario no esta disponible

Exception. Si ya esta exhibida en otra sala en el dia seleccionado

### CONNECTORS

From: Alta de sus funciones : UseCase, Public
To: Seleccionar sala : UseCase, Public

**Extend** «extend» Source -> Destination

From: Ver estadisticas de ventas de peliculas : UseCase, Public

To: Alta de sus funciones : UseCase, Public

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### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Actor) Dueño de cine

Target: Public (UseCase) Alta de sus funciones

### **BM todas las salas**

UseCase in package 'Use Case Model'

BM todas las salas Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020 Alias 18

### RESPONSIBILITIES (INTERNAL REQUIREMENTS)

☑ Functional. LogIn

[ Proposed, Medium difficulty. ]

### **SCENARIOS**

Basic Path. Basic Path

1. Modificar o borrar cine seleccionado

Uses:

Administrador

Exception: 1a. Si hay tickets vendidos no se borra

2. Efectuar cambio en la base de datos

Uses: Sistema

🛱 Exception. Si hay tickets vendidos no se borra

### CONNECTORS

Include «include» Source -> Destination From: BM todas las salas : UseCase, Public To: Seleccionar cine: UseCase, Public

### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Actor) Administrador

Target: Public (UseCase) BM todas las salas

### **BM todos los cines**

UseCase in package 'Use Case Model'

BM todos los cines Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020 Alias 17

### RESPONSIBILITIES (INTERNAL REQUIREMENTS)

☑ Functional. LogIn

[ Proposed, Medium difficulty. ]

### **SCENARIOS**

Basic Path. Basic Path

1. Modificar o borrar cine seleccionado

Uses:

Administrador

Exception: 1a. Si hay tickets vendidos no se borra

2. Efectuar cambio en la base de datos

Uses: Sistema

Exception. Si hay tickets vendidos no se borra

### CONNECTORS

**Extend** «extend» Source -> Destination

From: Ver estadisticas de ventas de los cines : UseCase, Public

To: BM todos los cines : UseCase, Public

### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Actor) Administrador Target: Public (UseCase) BM todos los cines

### Baja de sus funciones

UseCase in package 'Use Case Model'

Baja de sus funciones Version 1.0 Phase 1.0 Proposed ivanc created on 21/11/2020. Last modified 21/11/2020

### RESPONSIBILITIES (INTERNAL REQUIREMENTS)

### RESPONSIBILITIES (INTERNAL REQUIREMENTS)

☑ Functional. LogIn

[ Proposed, Medium difficulty. ]

### **SCENARIOS**

Basic Path. Basic Path

1. seleccionar funcion a eliminar

Exception: 1a. si la funcion ya tiene tickets comprados

2. se elimina la funcion de la base datos

Exception. si la funcion ya tiene tickets comprados

### CONNECTORS

**Include** «include» Source -> Destination Baja de sus funciones : UseCase, Public Seleccionar sala: UseCase, Public

### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (UseCase) Baja de sus funciones

Target: Public (Actor) Dueño de cine

### Baja de todas las funciones

UseCase in package 'Use Case Model'

Baja de todas las funciones Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020 Alias 19

### RESPONSIBILITIES (INTERNAL REQUIREMENTS)

☑ Functional. LogIn

[ Proposed, Medium difficulty. ]

### **SCENARIOS**

Basic Path. Basic Path

1. Modificar o borrar cine seleccionado

Uses:

Administrador

### **SCENARIOS**

Exception: 1a. Si hay tickets vendidos no se borra

2. Efectuar cambio en la base de datos

Uses: Sistema

Exception. Si hay tickets vendidos no se borra

### CONNECTORS

**Include** «include» Source -> Destination

Baja de todas las funciones : UseCase, Public

Seleccionar sala: UseCase, Public

Extend «extend» Source -> Destination

Ver estadisticas de ventas de peliculas : UseCase, Public

To: Baja de todas las funciones : UseCase, Public

### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Actor) Administrador

Target: Public (UseCase) Baja de todas las funciones

### **Borrar Funcion**

UseCase in package 'Use Case Model'

**Borrar Funcion** Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

### **Borrar Sala**

UseCase in package 'Use Case Model'

Borrar Sala Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

### **Borrar cine**

UseCase in package 'Use Case Model'

Borrar cine Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

### Busqueda o filtrado por genero, fecha y ubicacion

UseCase in package 'Use Case Model'

Busqueda o filtrado por genero, fecha y ubicacion Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020 Alias 5

### CONNECTORS

**Extend** «extend» Source -> Destination

From: Busqueda o filtrado por genero, fecha y ubicacion : UseCase, Public

To: Consultar Funciones : UseCase, Public

### **Comprar entradas**

UseCase in package 'Use Case Model'

Comprar entradas
Version 1.0 Phase 1.0 Proposed
nahue created on 21/11/2020. Last modified 21/11/2020
Alias 7

### **SCENARIOS**

🛱 Basic Path. Basic Path

1. Caso de uso Pagar

Uses:

Cliente

2. Generar y mostrar entradas compradas

Uses: Sistema

### **CONNECTORS**

From: Comprar entradas : UseCase, Public
To: Seleccionar Funcion : UseCase, Public

Include «include» Source -> Destination From: Comprar entradas : UseCase, Public

To: Pagar : UseCase, Public

**Extend** «extend» Source -> Destination From: Pagar Entradas : UseCase, Public To: Comprar entradas : UseCase, Public

### **Consultar Funciones**

UseCase in package 'Use Case Model'

Consultar Funciones
Version 1.0 Phase 1.0 Proposed
nahue created on 21/11/2020. Last modified 21/11/2020
Alias 4

### CONNECTORS

Extend «extend» Source -> Destination

From: Busqueda o filtrado por genero, fecha y ubicacion: UseCase, Public

To: Consultar Funciones : UseCase, Public

UseCaseLink Source -> Destination

From: Cliente: Actor, Public

To: Consultar Funciones : UseCase, Public

From: Seleccionar Funcion : UseCase, Public
To: Consultar Funciones : UseCase, Public

### **Consultar mis entradas**

UseCase in package 'Use Case Model'

ver la lista de entradas compradas habiles de la cuenta

Consultar mis entradas Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020 Alias 3

### RESPONSIBILITIES (INTERNAL REQUIREMENTS)

☑ Functional. LogIn

[ Proposed, Medium difficulty. ]

### CONNECTORS

✓ UseCaseLink Source -> Destination

From: Consultar mis entradas : UseCase, Public

To: Cliente : Actor, Public

### LogIn

UseCase in package 'Use Case Model'

LogIn

Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020 Alias 1

### RESPONSIBILITIES (INTERNAL REQUIREMENTS)

☑ Functional. SignIn

[ Proposed, Medium difficulty. ]

### CONNECTORS

UseCaseLink Source -> Destination
 From: LogIn: UseCase, Public
 To: Cliente: Actor, Public

**Extend** «extend» Source -> Destination

From: LogIn : UseCase, Public To: SignIn : UseCase, Public

### **Pagar**

UseCase in package 'Use Case Model'

Pagar Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020 Alias 8

### **SCENARIOS**

Basic Path. Basic Path

1. Sistema muestra si hay descuetos

Uses:

Sistema

2. Cargar datos de tarjeta

Uses:

Cliente

3. Realizar transaccion

Uses:

Banco

### CONNECTORS

Include «include» Source -> Destination From: Comprar entradas : UseCase, Public

To: Pagar : UseCase, Public

### **Pagar Entradas**

UseCase in package 'Use Case Model'

Pagar Entradas Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

### CONNECTORS

From: Pagar Entradas : UseCase, Public
To: Comprar entradas : UseCase, Public

### **Seleccionar Funcion**

UseCase in package 'Use Case Model'

seleccion de la funcion segun fecha, hora, ubicacion, precio y asientos disponibles

Seleccionar Funcion Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020 Alias 6

### RESPONSIBILITIES (INTERNAL REQUIREMENTS)

☑ Functional. LogIn

[ Proposed, Medium difficulty. ]

### CONNECTORS

From: Seleccionar Funcion : UseCase, Public
To: Consultar Funciones : UseCase, Public

From: Comprar entradas : UseCase, Public
To: Seleccionar Funcion : UseCase, Public

### Seleccionar cine

UseCase in package 'Use Case Model'

Seleccionar cine Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020 Alias 12

### CONNECTORS

### CONNECTORS

From: ABM sus salas : UseCase, Public
To: Seleccionar cine : UseCase, Public

From: BM todas las salas : UseCase, Public
To: Seleccionar cine : UseCase, Public

### Seleccionar sala

UseCase in package 'Use Case Model'

Seleccionar sala Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020 Alias 14

### **CONNECTORS**

From: Baja de sus funciones : UseCase, Public
To: Seleccionar sala : UseCase, Public

From: Alta de sus funciones : UseCase, Public
To: Seleccionar sala : UseCase, Public

**✓ Include** «include» Source → Destination

From: Baja de todas las funciones : UseCase, Public

To: Seleccionar sala : UseCase, Public

### SignIn

UseCase in package 'Use Case Model'

SignIn
Version 1.0 Phase 1.0 Proposed
nahue created on 21/11/2020. Last modified 21/11/2020
Alias 2

### CONNECTORS

 ✓ UseCaseLink
 Source → Destination

 From:
 SignIn: UseCase, Public

 To:
 Cliente: Actor, Public

### CONNECTORS

**Extend** «extend» Source -> Destination

From: LogIn : UseCase, Public To: SignIn : UseCase, Public

### Ver estadisticas de ventas de los cines

UseCase in package 'Use Case Model'

estadisiticas sobre la venta en pesos de un cine en especifico entre dos fechas seleccionadas

Ver estadisticas de ventas de los cines Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020 Alias 10

### **SCENARIOS**

🛱 Basic Path. Basic Path

1. Seleccionar rango de fechas

Uses:

Dueño de cine

2. Mostrar estadisticas segun el rango

Uses:

Sistema

### CONNECTORS

**Extend** «extend» Source -> Destination

From: Ver estadisticas de ventas de los cines : UseCase, Public

To: BM todos los cines : UseCase, Public

**Extend** «extend» Source -> Destination

From: Ver estadisticas de ventas de los cines : UseCase, Public

To: ABM sus cines : UseCase, Public

### Ver estadisticas de ventas de peliculas

UseCase in package 'Use Case Model'

estadisiticas sobre la venta en pesos de una pelicula en especifico entre dos fechas seleccionadas

Ver estadisticas de ventas de peliculas Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020 Alias 16

### **SCENARIOS**

### **SCENARIOS**

Basic Path. Basic Path

1. Seleccionar rango de fechas

Uses:

Dueño de cine

2. Mostrar estadisticas segun el rango

Uses:

Sistema

### CONNECTORS

**Extend** «extend» Source -> Destination

From: Ver estadisticas de ventas de peliculas : UseCase, Public

To: Baja de todas las funciones : UseCase, Public

**Extend** «extend» Source -> Destination

From: Ver estadisticas de ventas de peliculas : UseCase, Public

To: Alta de sus funciones : UseCase, Public

### **Class diagram**

Package in package 'Model'

Class diagram
Version Phase 1.0 Proposed
ivanc created on 20/11/2020. Last modified 21/11/2020

### Class diagram diagram

Class diagram in package 'Class diagram'

Class diagram
Version 1.0
ivanc created on 20/11/2020. Last modified 23/11/2020

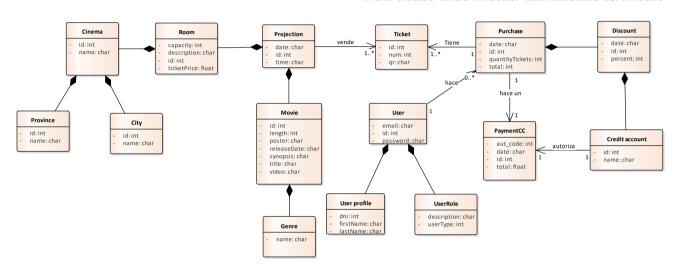


Figure 5: Class diagram

### **Admin**

Class in package 'Class diagram'

Admin Version 1.0 Phase 1.0 Proposed ivanc created on 20/11/2020. Last modified 20/11/2020

### **Cinema**

Class in package 'Class diagram'

Cinema Version 1.0 Phase 1.0 Proposed ivanc created on 20/11/2020. Last modified 20/11/2020

### **OUTGOING STRUCTURAL RELATIONSHIPS**

Aggregation from Cinema to Room

[ Direction is 'Source -> Destination'. ]

# INCOMING STRUCTURAL RELATIONSHIPS → Aggregation from Province to Cinema [ Direction is 'Source -> Destination'. ] → Aggregation from City to Cinema [ Direction is 'Source -> Destination'. ]

ATTRIBUTES	
id : int Private	[ Is static False. Containment is Not Specified. ]
name : char Private	[ Is static False. Containment is Not Specified. ]

### Cinema owner

Class in package 'Class diagram'

Cinema owner Version 1.0 Phase 1.0 Proposed ivanc created on 20/11/2020. Last modified 20/11/2020

### **City**

Class in package 'Class diagram'

City
Version 1.0 Phase 1.0 Proposed ivanc created on 21/11/2020. Last modified 21/11/2020

## OUTGOING STRUCTURAL RELATIONSHIPS Aggregation from City to Cinema [ Direction is 'Source -> Destination'. ]

ATTRIBUTES	
id: int Private	[ Is static False. Containment is Not Specified. ]
• name : char Private	[ Is static False. Containment is Not Specified. ]

### Client

Class in package 'Class diagram'

Client Version 1.0 Phase 1.0 Proposed ivanc created on 20/11/2020. Last modified 20/11/2020

### **Credit account**

Class in package 'Class diagram'

Credit account Version 1.0 Phase 1.0 Proposed ivanc created on 20/11/2020. Last modified 20/11/2020

### OUTGOING STRUCTURAL RELATIONSHIPS

Aggregation from Credit account to Discount

[ Direction is 'Source -> Destination'. ]

### ATTRIBUTES

id: int Private

[ Is static False. Containment is Not Specified. ]

name : char Private

[ Is static False. Containment is Not Specified. ]

### ASSOCIATIONS

Association (direction: Source -> Destination) autoriza

Source: Public (Class) Credit account

Cardinality: [1]

Target: Public (Class) PaymentCC

Cardinality: [1]

### **Discount**

Class in package 'Class diagram'

Discount Version 1.0 Phase 1.0 Proposed ivanc created on 20/11/2020. Last modified 20/11/2020

### OUTGOING STRUCTURAL RELATIONSHIPS

Aggregation from Discount to Purchase

[ Direction is 'Source -> Destination'. ]

### INCOMING STRUCTURAL RELATIONSHIPS

## INCOMING STRUCTURAL RELATIONSHIPS → Aggregation from Credit account to Discount [ Direction is 'Source -> Destination'. ]

ATTRIBUTES	
date: char Private	[ Is static False. Containment is Not Specified. ]
id : int Private	[ Is static False. Containment is Not Specified. ]
percent: int Private	[ Is static False. Containment is Not Specified. ]

### Genre

Class in package 'Class diagram'

Genre Version 1.0 Phase 1.0 Proposed ivanc created on 20/11/2020. Last modified 20/11/2020

## OUTGOING STRUCTURAL RELATIONSHIPS Aggregation from Genre to Movie [ Direction is 'Source -> Destination'. ]



### Movie

Class in package 'Class diagram'

Movie Version 1.0 Phase 1.0 Proposed ivanc created on 20/11/2020. Last modified 20/11/2020

## OUTGOING STRUCTURAL RELATIONSHIPS Aggregation from Movie to Projection [ Direction is 'Source -> Destination'. ]

## INCOMING STRUCTURAL RELATIONSHIPS → Aggregation from Genre to Movie [ Direction is 'Source -> Destination'. ]

ATTRIBUTES	
id:int Private	[ Is static False. Containment is Not Specified. ]
length: int Private	[ Is static False. Containment is Not Specified. ]
poster : char Private	[ Is static False. Containment is Not Specified. ]
releaseDate : char Private	[ Is static False. Containment is Not Specified. ]
synopsis: char Private	[ Is static False. Containment is Not Specified. ]
	[ Is static False. Containment is Not Specified. ]
	[ Is static False. Containment is Not Specified. ]

### **PaymentCC**

Class in package 'Class diagram'

 $\begin{array}{c} Payment CC\\ Version~1.0~Phase~1.0~Proposed\\ ivanc~created~on~20/11/2020.~Last~modified~21/11/2020\\ \end{array}$ 

ATTRIBUTES	
aut_code : int Private	[ Is static False. Containment is Not Specified. ]
	[ Is static False. Containment is Not Specified. ]
id:int Private	[ Is static False. Containment is Not Specified. ]

## ATTRIBUTES v total : float Private [ Is static False. Containment is Not Specified. ]

# ASSOCIATIONS Association (direction: Source -> Destination) hace un Source: Public (Class) Purchase Cardinality: [1] Association (direction: Source -> Destination) autoriza Source: Public (Class) Credit account Cardinality: [1] Target: Public (Class) PaymentCC Cardinality: [1] Cardinality: [1]

### **Projection**

Class in package 'Class diagram'

Projection
Version 1.0 Phase 1.0 Proposed ivanc created on 20/11/2020. Last modified 20/11/2020

INCOMING STRUCTURAL RELATIONSHIPS	
→ Aggregation from Movie to Projection	[ Direction is 'Source -> Destination'. ]
→ Aggregation from Room to Projection	[ Direction is 'Source -> Destination'. ]

ATTRIBUTES	
	[ Is static False. Containment is Not Specified. ]
id : int Private	[ Is static False. Containment is Not Specified. ]
v time: char Private	[ Is static False. Containment is Not Specified. ]

ASSOCIATIONS		

### ASSOCIATIONS

Association (direction: Source -> Destination) vende

Source: Public (Class) Projection Target: Public (Class) Ticket

Cardinality: [1..\*]

### **Province**

Class in package 'Class diagram'

Province Version 1.0 Phase 1.0 Proposed ivanc created on 21/11/2020. Last modified 21/11/2020

### **OUTGOING STRUCTURAL RELATIONSHIPS**

Aggregation from Province to Cinema

[ Direction is 'Source -> Destination'. ]

### **ATTRIBUTES**

id: int Private

[ Is static False. Containment is Not Specified. ]

name : char Private

[ Is static False. Containment is Not Specified. ]

### **Purchase**

Class in package 'Class diagram'

Purchase Version 1.0 Phase 1.0 Proposed ivanc created on 20/11/2020. Last modified 20/11/2020

### INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from Discount to Purchase

[ Direction is 'Source -> Destination'. ]

### **ATTRIBUTES**

date : char Private

[ Is static False. Containment is Not Specified. ]

id: int Private

[ Is static False. Containment is Not Specified. ]

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ATTRIBUTES	
quantityTickets: int Private	[ Is static False. Containment is Not Specified. ]
	[ Is static False. Containment is Not Specified. ]

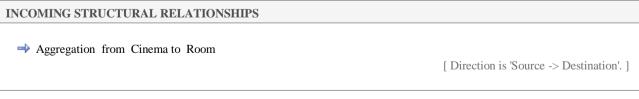
### ASSOCIATIONS Association (direction: Source -> Destination) Tiene Source: Public (Class) Purchase Target: Public (Class) Ticket Cardinality: [1] Cardinality: [1..\*] Association (direction: Source -> Destination) hace un Source: Public (Class) Purchase Target: Public (Class) PaymentCC Cardinality: [1] Cardinality: [1] Association (direction: Source -> Destination) hace Target: Public (Class) Purchase Source: Public (Class) User Cardinality: [1] Cardinality: [0..\*]

### Room

Class in package 'Class diagram'

Room Version 1.0 Phase 1.0 Proposed ivanc created on 20/11/2020. Last modified 20/11/2020

### **OUTGOING STRUCTURAL RELATIONSHIPS** Aggregation from Room to Projection [ Direction is 'Source -> Destination'. ]



### **ATTRIBUTES** capacity: int Private [ Is static False. Containment is Not Specified. ]

ATTRIBUTES	
description : char Private	[ Is static False. Containment is Not Specified. ]
id: int Private	[ Is static False. Containment is Not Specified. ]
	[ Is static False. Containment is Not Specified. ]

### **Ticket**

Class in package 'Class diagram'

ATTRIBUTES	
id: int Private	[ Is static False. Containment is Not Specified. ]
num: int Private	[ Is static False. Containment is Not Specified. ]
	[ Is static False. Containment is Not Specified. ]

ASSOCIATIONS		
Association (direction: Source -> Destination) vende		
Source: Public (Class) Projection	Target: Public (Class) Ticket Cardinality: [1*]	
Association (direction: Source -> Destination) Tiene		
Source: Public (Class) Purchase Cardinality: [1]	Target: Public (Class) Ticket Cardinality: [1*]	

### User

Class in package 'Class diagram'

User

Version 1.0 Phase 1.0 Proposed ivanc created on 20/11/2020. Last modified 20/11/2020

# INCOMING STRUCTURAL RELATIONSHIPS → Aggregation from UserRole to User [ Direction is 'Source -> Destination'. ] → Aggregation from User profile to User [ Direction is 'Source -> Destination'. ]

ATTRIBUTES	
• email : char Private	[ Is static False. Containment is Not Specified. ]
id: int Private	[ Is static False. Containment is Not Specified. ]
password : char Private	[ Is static False. Containment is Not Specified. ]

### ASSOCIATIONS

Association (direction: Source -> Destination) hace

Source: Public (Class) User Target: Public (Class) Purchase Cardinality: [1] Cardinality: [0..\*]

### **User profile**

Class in package 'Class diagram'

User profile

Version 1.0 Phase 1.0 Proposed ivanc created on 20/11/2020. Last modified 20/11/2020

### OUTGOING STRUCTURAL RELATIONSHIPS

Aggregation from User profile to User

[ Direction is 'Source -> Destination'. ]

### **ATTRIBUTES**

dni: int Private

[ Is static False. Containment is Not Specified. ]

ATTRIBUTES	
	[ Is static False. Containment is Not Specified. ]
	[ Is static False. Containment is Not Specified. ]

### **UserRole**

Class in package 'Class diagram'

UserRole Version 1.0 Phase 1.0 Proposed ivanc created on 20/11/2020. Last modified 21/11/2020

## OUTGOING STRUCTURAL RELATIONSHIPS Aggregation from UserRole to User [ Direction is 'Source -> Destination'. ]

ATTRIBUTES	
description : char Private	[ Is static False. Containment is Not Specified. ]
	[ Is static False. Containment is Not Specified. ]

### **Domain Model**

Package in package 'Model'

Domain Model Version Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

### **Domain Model diagram**

Class diagram in package 'Domain Model'

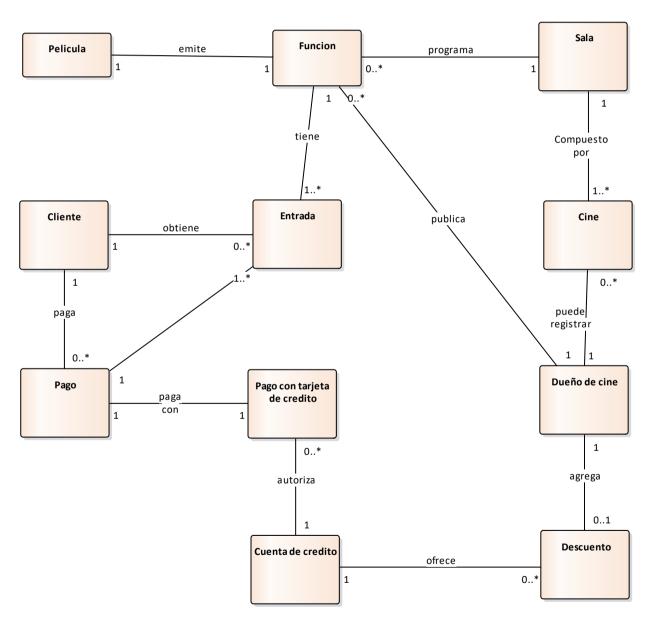


Figure 6: Domain Model

### **Domain Objects**

Package in package 'Domain Model'

Domain Objects Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

### **Domain Objects diagram**

Class diagram in package 'Domain Objects'

Domain Objects

Version 1.0
ivanc created on 21/11/2020. Last modified 21/11/2020

The Domain class model captures essential information about objects in the domain.

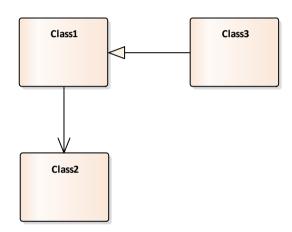


Figure 7: Domain Objects

### Note

Note in package 'Domain Objects'

The Domain class model captures essential information about objects in the domain.

Note Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020 Extends

### Class1

Class in package 'Domain Objects'

Class1 Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

### INCOMING STRUCTURAL RELATIONSHIPS

### INCOMING STRUCTURAL RELATIONSHIPS

→ Generalization from Class3 to Class1

[ Direction is 'Source -> Destination'. ]

### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Class) Class1

Target: Public (Class) Class2

### Class2

Class in package 'Domain Objects'

Class2 Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

### ASSOCIATIONS



Association (direction: Source -> Destination)

Source: Public (Class) Class1 Target: Public (Class) Class2

### Class3

Class in package 'Domain Objects'

Class3 Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020 Extends Class1

### **OUTGOING STRUCTURAL RELATIONSHIPS**

Generalization from Class3 to Class1

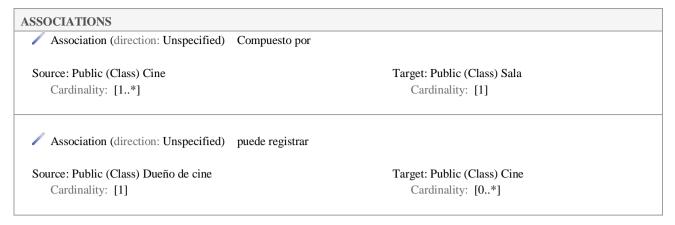
[ Direction is 'Source -> Destination'. ]

### Cine

Class in package 'Domain Model'

Cine Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

### ASSOCIATIONS



### Cliente

Class in package 'Domain Model'

Cliente Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

SSOCIATIONS		
Association (direction: Unspecified) paga		
Source: Public (Class) Cliente	Target: Public (Class) Pago	
Cardinality: [1]	Cardinality: [0*]	
Association (direction: Unspecified) obtiene		
Source: Public (Class) Cliente	Target: Public (Class) Entrada	
Cardinality: [1]	Cardinality: [0*]	

### Cuenta de credito

Class in package 'Domain Model'

Cuenta de credito Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

ASSOCIATIONS	
Association (direction: Unspecified) ofrece	
Source: Public (Class) Cuenta de credito Cardinality: [1]	Target: Public (Class) Descuento Cardinality: [0*]
Association (direction: Unspecified) autoriza	
Source: Public (Class) Pago con tarjeta de credito	Target: Public (Class) Cuenta de credito
Cardinality: [0*]	Cardinality: [1]

### ASSOCIATIONS

### **Descuento**

Class in package 'Domain Model'

Descuento Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

Association (direction: Unspecified) ofrece

Source: Public (Class) Cuenta de credito
Cardinality: [1]

Association (direction: Unspecified) agrega

Source: Public (Class) Dueño de cine
Cardinality: [1]

Target: Public (Class) Descuento
Cardinality: [1]

Cardinality: [0..1]

### Dueño de cine

Class in package 'Domain Model'

Dueño de cine Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

ASSOCIATIONS	
Association (direction: Unspecified) agrega	
Source: Public (Class) Dueño de cine Cardinality: [1]	Target: Public (Class) Descuento Cardinality: [01]
Association (direction: Unspecified) puede registrar	
Source: Public (Class) Dueño de cine	Target: Public (Class) Cine
Cardinality: [1]	Cardinality: [0*]
Association (direction: Unspecified) publica	
Source: Public (Class) Funcion	Target: Public (Class) Dueño de cine
Cardinality: [0*]	Cardinality: [1]

### **Entrada**

Class in package 'Domain Model'

ASSOCIATIONS		
Association (direction: Unspecified) tier	e	
Source: Public (Class) Entrada Cardinality: [1*]	Target: Public (Class) Funcion Cardinality: [1]	
Association (direction: Unspecified)		
Source: Public (Class) Pago Cardinality: [1]	Target: Public (Class) Entrada Cardinality: [1*]	
Association (direction: Unspecified) obt	iene	
Source: Public (Class) Cliente Cardinality: [1]	Target: Public (Class) Entrada Cardinality: [0*]	

### **Funcion**

Class in package 'Domain Model'

Funcion Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

Association (direction: Unspecified) publica	
Source: Public (Class) Funcion Cardinality: [0*]	Target: Public (Class) Dueño de cine Cardinality: [1]
Association (direction: Unspecified) programa	
Source: Public (Class) Funcion Cardinality: [0*]	Target: Public (Class) Sala Cardinality: [1]
Association (direction: Unspecified) tiene	
Source: Public (Class) Entrada  Cardinality: [1*]	Target: Public (Class) Funcion Cardinality: [1]

### ASSOCIATIONS

Source: Public (Class) Pelicula Target: Public (Class) Funcion

Cardinality: [1] Cardinality: [1]

### Pago

Class in package 'Domain Model'

Pago Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

ASSOCIATIONS	
Association (direction: Unspecified) paga con	
Source: Public (Class) Pago Cardinality: [1]	Target: Public (Class) Pago con tarjeta de credito Cardinality: [1]
Association (direction: Unspecified)	
Source: Public (Class) Pago Cardinality: [1]	Target: Public (Class) Entrada Cardinality: [1*]
Association (direction: Unspecified) paga	
Source: Public (Class) Cliente Cardinality: [1]	Target: Public (Class) Pago Cardinality: [0*]

### Pago con tarjeta de credito

Class in package 'Domain Model'

Pago con tarjeta de credito Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

SSOCIATIONS	
Association (direction: Unspecified) autoriza	
Source: Public (Class) Pago con tarjeta de credito Cardinality: [0*]	Target: Public (Class) Cuenta de credito Cardinality: [1]
Association (direction: Unspecified) paga con	
	Target: Public (Class) Pago con tarjeta de credito

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### Pelicula

Class in package 'Domain Model'

Pelicula Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

### ASSOCIATIONS

Association (direction: Unspecified) emite

Source: Public (Class) Pelicula

Cardinality: [1]

Target: Public (Class) Funcion

Cardinality: [1]

### Sala

Class in package 'Domain Model'

Sala Version 1.0 Phase 1.0 Proposed nahue created on 21/11/2020. Last modified 21/11/2020

### ASSOCIATIONS

Association (direction: Unspecified) Compuesto por

Source: Public (Class) Cine Cardinality: [1..\*]

Target: Public (Class) Sala Cardinality: [1]

Association (direction: Unspecified) programa

Source: Public (Class) Funcion Cardinality: [0..\*]

Target: Public (Class) Sala Cardinality: [1]