

Model Report

Version ●



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Nancy

EA Repository : C:\Users\Nancy\Documents\System Recomender\system_recomender.eap

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Table of Contents

| | |
|--|----------|
| 1 Model | 5 |
| 1.1 Comportamiento | 5 |
| 1.1.1 Caso de Uso | 5 |
| 1.1.1.1 Use Case Model diagram | 5 |
| 1.1.1.2 Note | 6 |
| 1.1.1.3 Note | 6 |
| 1.1.1.4 Actors..... | 7 |
| 1.1.1.5 Primary Use Cases | 7 |
| 1.1.1.6 Actors..... | 7 |
| 1.1.1.6.1 Actors diagram..... | 7 |
| 1.1.1.6.2 Cliente..... | 7 |
| 1.1.1.7 Primary Use Cases | 9 |
| 1.1.1.7.1 Primary Use Cases diagram | 9 |
| 1.1.1.7.2 Cliente..... | 9 |
| 1.1.1.7.3 Sistema Recomendador de Recorridos en Museos | 10 |
| 1.1.1.7.4 Note..... | 10 |
| 1.1.1.7.5 Realizar Encuesta..... | 10 |
| 1.1.1.7.5.1 Use Case1 diagram | 10 |
| 1.1.1.7.5.2 Cliente..... | 11 |
| 1.1.1.7.5.3 Object1 | 12 |
| 1.1.1.7.6 Realizar Recorrido Virtual | 12 |
| 1.2 Estructurales | 13 |
| 1.2.1 Clases..... | 13 |
| 1.2.1.1 Class Model diagram | 13 |
| 1.2.1.2 Note | 13 |
| 1.2.1.3 Note | 14 |
| 1.2.1.4 System..... | 14 |
| 1.2.1.5 Frameworks | 14 |
| 1.2.1.6 System..... | 14 |

| | | |
|------------|---------------------------------|----|
| 1.2.1.6.1 | System diagram..... | 14 |
| 1.2.1.6.2 | Artwork..... | 15 |
| 1.2.1.6.3 | Author | 16 |
| 1.2.1.6.4 | Gender..... | 16 |
| 1.2.1.6.5 | ItemSimilarityRecommender | 17 |
| 1.2.1.6.6 | Museum | 18 |
| 1.2.1.6.7 | TrainData | 18 |
| 1.2.1.6.8 | User..... | 19 |
| 1.2.1.6.9 | UserRating | 19 |
| 1.2.1.7 | Frameworks | 21 |
| 1.2.1.7.1 | Frameworks diagram | 21 |
| 1.2.1.7.2 | Note..... | 21 |
| 1.2.2 | Dominio | 22 |
| 1.2.2.1 | Domain Model diagram | 22 |
| 1.2.2.2 | Note | 22 |
| 1.2.2.3 | Domain Objects | 22 |
| 1.2.2.4 | Domain Objects | 22 |
| 1.2.2.4.1 | Domain Objects diagram | 23 |
| 1.2.2.4.2 | Note..... | 23 |
| 1.2.2.4.3 | Artwork..... | 23 |
| 1.2.2.4.4 | Author | 24 |
| 1.2.2.4.5 | Gender..... | 24 |
| 1.2.2.4.6 | ItemSimilarityRecommender | 24 |
| 1.2.2.4.7 | Museum | 25 |
| 1.2.2.4.8 | Train Data | 25 |
| 1.2.2.4.9 | User..... | 25 |
| 1.2.2.4.10 | UserRating | 26 |
| 1.2.3 | Estructurales | 27 |
| 1.2.3.1 | Deployment Model diagram | 27 |
| 1.2.3.2 | Note | 27 |
| 1.2.3.3 | Note | 27 |
| 1.2.3.4 | Servers | 27 |
| 1.2.3.5 | Servers | 28 |

| | | |
|-------------|---|----|
| 1.2.3.5.1 | Servers diagram | 28 |
| 1.2.3.5.2 | Internet..... | 28 |
| 1.2.3.5.3 | Database MySQL Server 5.7 | 29 |
| 1.2.3.5.4 | Client..... | 29 |
| 1.2.3.5.5 | Server | 29 |
| 1.2.3.5.5.1 | PythonEnviroment | 30 |
| 1.2.3.5.5.2 | Gunicorn | 30 |
| 1.2.3.5.5.3 | Ngnix Server | 30 |
| 1.2.4 | Paquetes | 32 |
| 1.2.4.1 | Paquetes diagram | 32 |
| 1.2.4.2 | Note | 32 |
| 1.2.4.3 | Controller..... | 33 |
| 1.2.4.4 | Model..... | 33 |
| 1.2.4.5 | View..... | 33 |
| 1.2.4.6 | Controller..... | 33 |
| 1.2.4.7 | Model..... | 34 |
| 1.2.4.8 | View..... | 35 |
| 1.3 | Extendidos | 36 |
| 1.3.1 | Metamodelo | 36 |
| 1.3.1.1 | Metamodelo diagram | 36 |
| 1.3.1.2 | Artwork..... | 37 |
| 1.3.1.3 | Author | 38 |
| 1.3.1.4 | Gender..... | 38 |
| 1.3.1.5 | User..... | 39 |
| 1.3.1.6 | UserRating | 39 |
| 1.3.2 | Requerimientos | 41 |
| 1.3.2.1 | Requerimientos diagram | 41 |
| 1.3.2.2 | 1. Responder Encuesta de Reconocimiento | 41 |
| 1.3.2.3 | 2. 1. Registrar resultados de encuesta de reconocimiento de usuario. | 41 |
| 1.3.2.4 | 2. 2. Evaluar las preferencias de otros usuarios para realizar una recomendación..... | 42 |
| 1.3.2.5 | 3. Generar recomendaciones a los usuarios de piezas de arte. | 42 |

1 Model

Package in package "

Model
Version Phase 1.0 Proposed
Nancy created on 05/07/2018. Last modified 05/07/2018

1.1 Comportamiento

Package in package 'Model'

Comportamiento
Version 1.0 Phase 1.0 Proposed
Nancy created on 29/06/2018. Last modified 29/06/2018

1.1.1 Caso de Uso

Package in package 'Comportamiento'

Caso de Uso
Version 1.0 Phase 1.0 Proposed
Nancy created on 29/06/2018. Last modified 29/06/2018

1.1.1.1 Use Case Model diagram

Use Case diagram in package 'Caso de Uso'

Use Case Model
Version 1.0
Nancy created on 26/06/2018. Last modified 26/06/2018

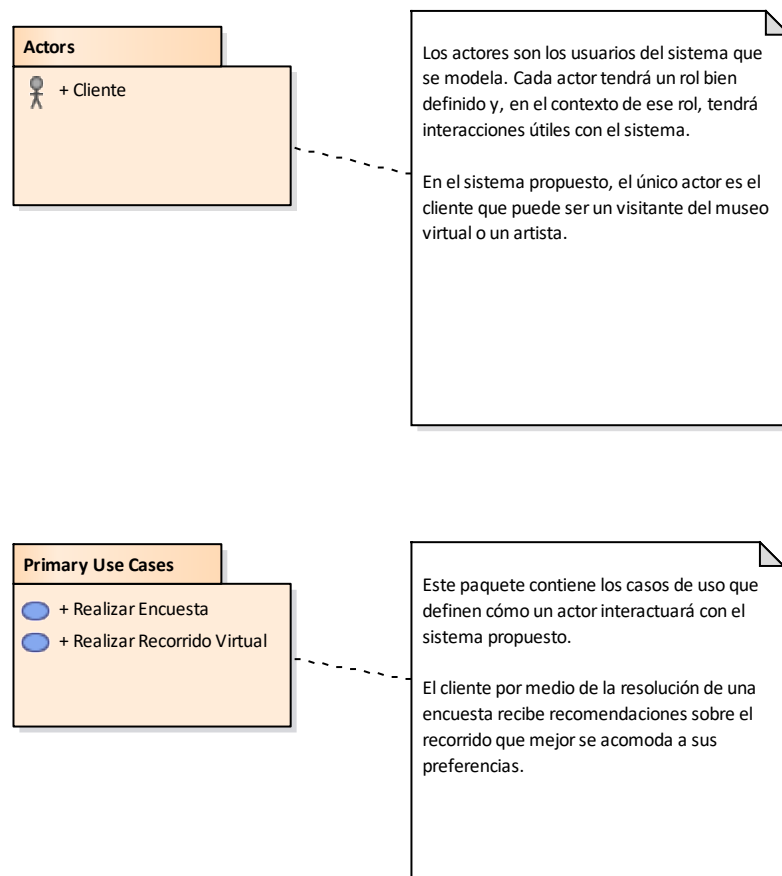


Figure 1: Use Case Model

1.1.1.2 Note

Note in package 'Caso de Uso'

Los actores son los usuarios del sistema que se modela. Cada actor tendrá un rol bien definido y, en el contexto de ese rol, tendrá interacciones útiles con el sistema.

En el sistema propuesto, el único actor es el cliente que puede ser un visitante del museo virtual o un artista.

Note

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Extends

1.1.1.3 Note

Note in package 'Caso de Uso'

Este paquete contiene los casos de uso que definen cómo un actor interactuará con el sistema propuesto.

El cliente por medio de la resolución de una encuesta recibe recomendaciones sobre el recorrido que mejor se acomoda a sus preferencias.

Note

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Extends

1.1.1.4 Actors

Package in package 'Caso de Uso'

Actors
Version 1.0 Phase 1.0 Proposed
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1.1.1.5 Primary Use Cases

Package in package 'Caso de Uso'

Primary Use Cases
Version 1.0 Phase 1.0 Proposed
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1.1.1.6 Actors

Package in package 'Caso de Uso'

Actors
Version 1.0 Phase 1.0 Proposed
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1.1.1.6.1 Actors diagram

Use Case diagram in package 'Actors'

Actors
Version 1.0
Nancy created on 26/06/2018. Last modified 26/06/2018

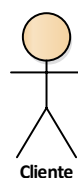





Figure 2: Actors

1.1.1.6.2 Cliente

Actor in package 'Actors'

Cliente
Version 1.0 Phase 1.0 Proposed
Nancy created on 26/06/2018. Last modified 26/06/2018

OUTGOING BEHAVIORAL RELATIONSHIPS Sequence from Cliente to Object1**CONNECTORS** **UseCaseLink** Source -> Destination
From: Cliente : Actor, Public
To: Realizar Recorrido Virtual : UseCase, Public **UseCaseLink** Source -> Destination
From: Cliente : Actor, Public
To: Realizar Encuesta : UseCase, Public

1.1.1.7 Primary Use Cases

Package in package 'Caso de Uso'

Primary Use Cases
Version 1.0 Phase 1.0 Proposed
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1.1.1.7.1 Primary Use Cases diagram

Use Case diagram in package 'Primary Use Cases'

Primary Use Cases
Version 1.0
Nancy created on 26/06/2018. Last modified 26/06/2018

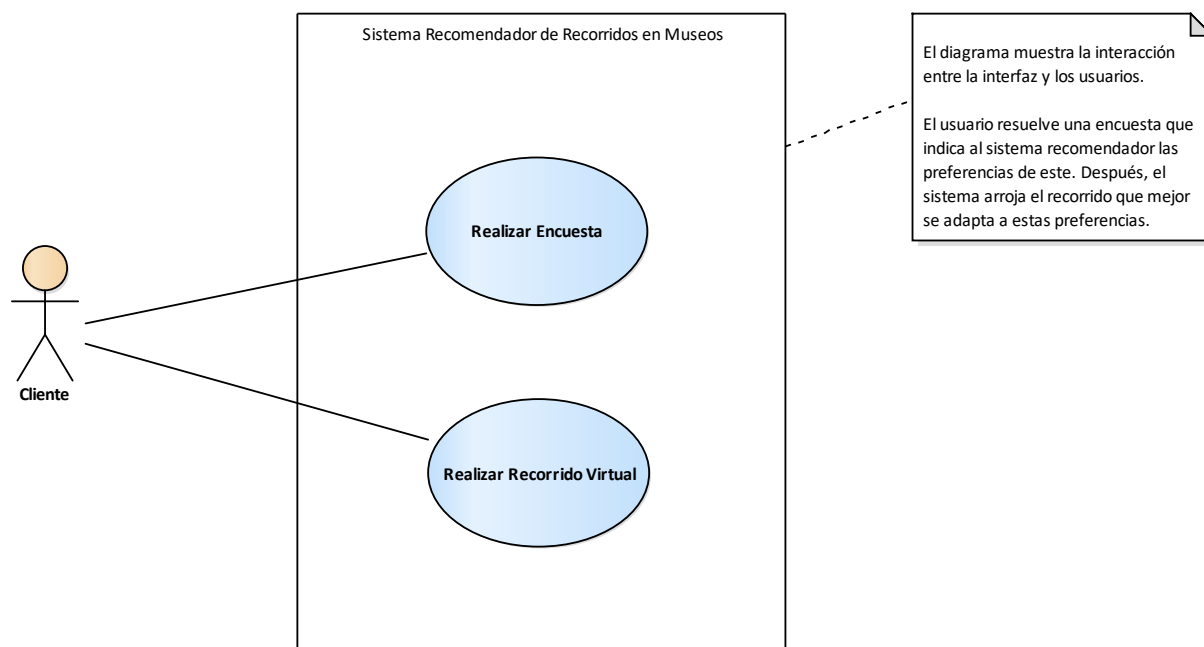


Figure 3: Primary Use Cases

1.1.1.7.2 Cliente

Actor in package 'Actors'

Cliente
Version 1.0 Phase 1.0 Proposed
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OUTGOING BEHAVIORAL RELATIONSHIPS

Sequence from Cliente to Object1

CONNECTORS

UseCaseLink Source -> Destination
From: Cliente : Actor, Public
To: Realizar Recorrido Virtual : UseCase, Public

CONNECTORS

 **UseCaseLink** Source -> Destination
 From: Cliente : Actor, Public
 To: Realizar Encuesta : UseCase, Public

1.1.1.7.3 Sistema Recomendador de Recorridos en Museos*Boundary in package 'Primary Use Cases'*

Sistema Recomendador de Recorridos en Museos
 Version 1.0 Phase 1.0 Proposed
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 Extends

1.1.1.7.4 Note*Note in package 'Primary Use Cases'*

El diagrama muestra la interacción entre la interfaz y los usuarios.


El usuario resuelve una encuesta que indica al sistema recomendador las preferencias de este. Después, el sistema arroja el recorrido que mejor se adapta a estas preferencias.

Note
 Version 1.0 Phase 1.0 Proposed
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 Extends


1.1.1.7.5 Realizar Encuesta*UseCase in package 'Primary Use Cases'*

Realizar Encuesta
 Version 1.0 Phase 1.0 Proposed
 Nancy created on 26/06/2018. Last modified 26/06/2018

ELEMENTS OWNED BY Realizar Encuesta

 Object1 : Sequence

CONNECTORS

 **UseCaseLink** Source -> Destination
 From: Cliente : Actor, Public
 To: Realizar Encuesta : UseCase, Public

1.1.1.7.5.1 Use Case1 diagram*Interaction diagram in package 'Primary Use Cases'*

Use Case1
Version 1.0

Nancy created on 26/06/2018. Last modified 26/06/2018

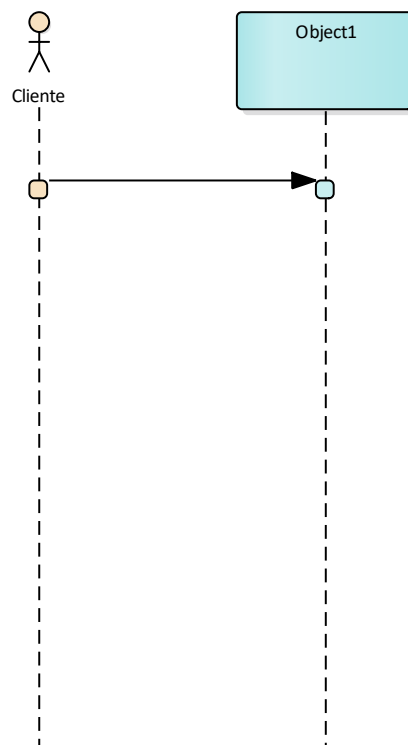


Figure 4: Use Case1

1.1.1.7.5.2 Cliente

Actor in package 'Actors'

Cliente

Version 1.0 Phase 1.0 Proposed

Nancy created on 26/06/2018. Last modified 26/06/2018

OUTGOING BEHAVIORAL RELATIONSHIPS

Sequence from Cliente to Object1

CONNECTORS

UseCaseLink Source -> Destination
 From: Cliente : Actor, Public
 To: Realizar Recorrido Virtual : UseCase, Public

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

INTERACTION MESSAGES

✉ **1.0 "** from 'Cliente' sent to 'Object1'.

Synchronous Call.

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

1.1.1.7.5.3 Object1

Sequence owned by 'Realizar Encuesta', in package 'Primary Use Cases'

Object1

Version 1.0 Phase 1.0 Proposed

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INCOMING BEHAVIORAL RELATIONSHIPS

➡ Sequence from Cliente to Object1

1.1.1.7.6 Realizar Recorrido Virtual

UseCase in package 'Primary Use Cases'

Realizar Recorrido Virtual

Version 1.0 Phase 1.0 Proposed

Nancy created on 26/06/2018. Last modified 26/06/2018

CONNECTORS

➡ **UseCaseLink** Source -> Destination
From: Cliente : Actor, Public
To: Realizar Recorrido Virtual : UseCase, Public

1.2 Estructurales

Package in package 'Model'

Estructurales

Version 1.0 Phase 1.0 Proposed

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1.2.1 Clases

Package in package 'Estructurales'

Clases

Version 1.0 Phase 1.0 Proposed

Nancy created on 29/06/2018. Last modified 29/06/2018

1.2.1.1 Class Model diagram

Class diagram in package 'Clases'

Class Model

Version 1.0

Nancy created on 26/06/2018. Last modified 04/07/2018

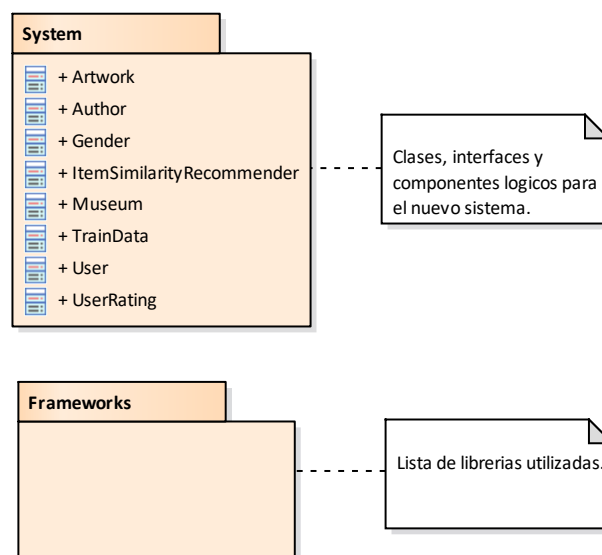


Figure 5: Class Model

1.2.1.2 Note

Note in package 'Clases'

Clases, interfaces y componentes logicos para el nuevo sistema.

Note

Version 1.0 Phase 1.0 Proposed

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Extends

1.2.1.3 Note

Note in package 'Clases'

Lista de librerías utilizadas.

Note
Version 1.0 Phase 1.0 Proposed
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Extends

1.2.1.4 System

Package in package 'Clases'

System
Version 1.0 Phase 1.0 Proposed
Nancy created on 26/06/2018. Last modified 29/06/2018

1.2.1.5 Frameworks

Package in package 'Clases'

Frameworks
Version 1.0 Phase 1.0 Proposed
Nancy created on 26/06/2018. Last modified 29/06/2018

1.2.1.6 System

Package in package 'Clases'

System
Version 1.0 Phase 1.0 Proposed
Nancy created on 26/06/2018. Last modified 29/06/2018

1.2.1.6.1 System diagram

Class diagram in package 'System'

System
Version 1.0
Nancy created on 26/06/2018. Last modified 04/07/2018

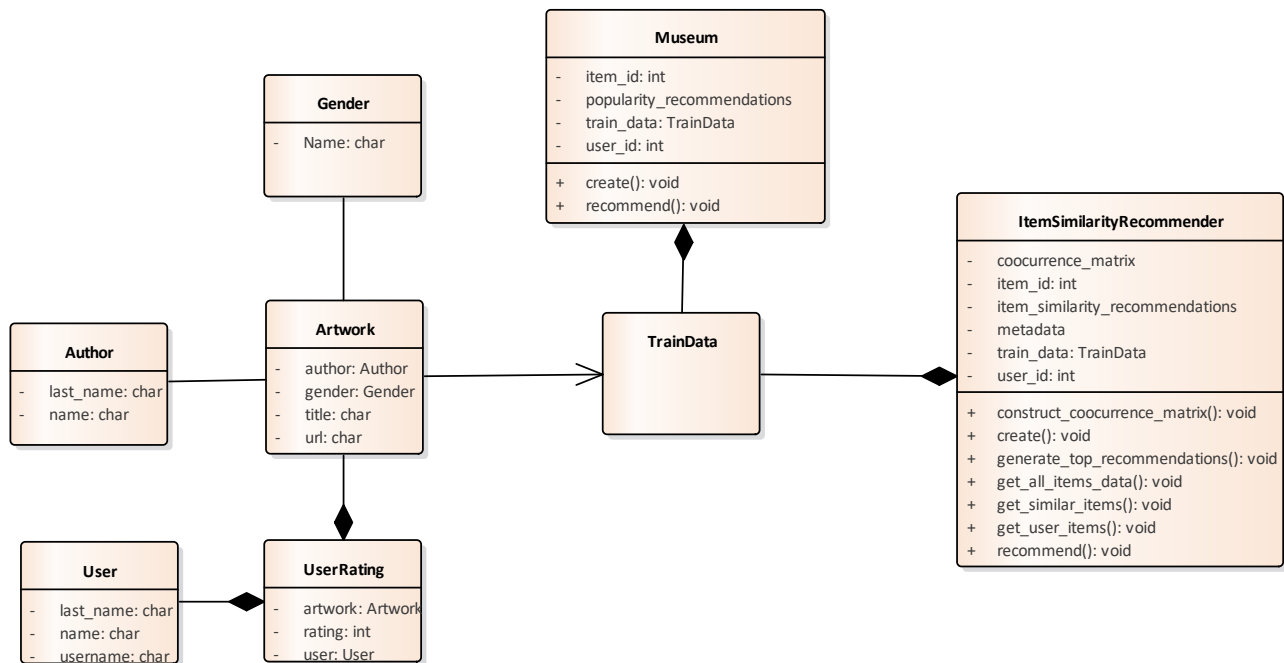


Figure 6: System

1.2.1.6.2 Artwork

Class in package 'System'

Artwork
Version 1.0 Phase 1.0 Proposed
Nancy created on 04/07/2018. Last modified 04/07/2018

OUTGOING STRUCTURAL RELATIONSHIPS

← Aggregation from Artwork to UserRating

[Direction is 'Source -> Destination'.]

ATTRIBUTES

author : Author Private

[Is static False. Containment is Not Specified.]

gender : Gender Private

[Is static False. Containment is Not Specified.]

title : char Private



[Is static False. Containment is Not Specified.]

url : char Private

[Is static False. Containment is Not Specified.]

ASSOCIATIONS



Association (direction: Unspecified)

| ASSOCIATIONS | |
|--|----------------------------------|
| Source: Public (Class) Artwork | Target: Public (Class) Author |
|  Association (direction: Unspecified) | |
| Source: Public (Class) Artwork | Target: Public (Class) Gender |
|  Association (direction: Source -> Destination) | |
| Source: Public (Class) Artwork | Target: Public (Class) TrainData |

1.2.1.6.3 Author

Class in package 'System'

Author
Version 1.0 Phase 1.0 Proposed
Nancy created on 04/07/2018. Last modified 04/07/2018


| ATTRIBUTES | |
|--|--|
|  last_name : char Private | [Is static False. Containment is Not Specified.] |
|  name : char Private | [Is static False. Containment is Not Specified.] |

| ASSOCIATIONS | |
|--|-------------------------------|
|  Association (direction: Unspecified) | |
| Source: Public (Class) Artwork | Target: Public (Class) Author |

1.2.1.6.4 Gender

Class in package 'System'

Gender
Version 1.0 Phase 1.0 Proposed
Nancy created on 04/07/2018. Last modified 04/07/2018

| ATTRIBUTES | |
|---|--|
|  Name : char Private | [Is static False. Containment is Not Specified.] |

| ASSOCIATIONS | |
|--|-------------------------------|
|  Association (direction: Unspecified) | |
| Source: Public (Class) Artwork | Target: Public (Class) Gender |

1.2.1.6.5 ItemSimilarityRecommender

Class in package 'System'

ItemSimilarityRecommender
Version 1.0 Phase 1.0 Proposed
Nancy created on 26/06/2018. Last modified 26/06/2018

| INCOMING STRUCTURAL RELATIONSHIPS | |
|---|---|
| ⇒ Aggregation from TrainData to ItemSimilarityRecommender | [Direction is 'Source -> Destination'.] |

| ATTRIBUTES | |
|---|--|
| ◆ cooccurrence_matrix : Private | [Is static False. Containment is Not Specified.] |
| ◆ item_id : int Private | [Is static False. Containment is Not Specified.] |
| ◆ item_similarity_recommendations : Private | [Is static False. Containment is Not Specified.] |
| ◆ metadata : Private | [Is static False. Containment is Not Specified.] |
| ◆ train_data : TrainData Private | [Is static False. Containment is Not Specified.] |
| ◆ user_id : int Private | [Is static False. Containment is Not Specified.] |

| OPERATIONS | |
|--|---|
| ◆ construct_cooccurrence_matrix () : void Public | [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] |
| ◆ create () : void Public | [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] |
| ◆ generate_top_recommendations () : void Public | [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] |
| ◆ get_all_items_data () : void Public | [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] |
| ◆ get_similar_items () : void Public | [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] |
| ◆ get_user_items () : void Public | [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] |

OPERATIONS

 **recommend () : void Public**
 [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

1.2.1.6.6 Museum

Class in package 'System'

Museum
 Version 1.0 Phase 1.0 Proposed
 Nancy created on 26/06/2018. Last modified 04/07/2018

INCOMING STRUCTURAL RELATIONSHIPS

 Aggregation from TrainData to Museum
 [Direction is 'Source -> Destination'.]

ATTRIBUTES

 **item_id : int Private**
 [Is static False. Containment is Not Specified.]

 **popularity_recommendations : Private**
 [Is static False. Containment is Not Specified.]

 **train_data : TrainData Private**
 [Is static False. Containment is Not Specified.]

 **user_id : int Private**
 [Is static False. Containment is Not Specified.]

OPERATIONS

 **create () : void Public**
 [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]


 **recommend () : void Public**
 [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

1.2.1.6.7 TrainData

Class in package 'System'

TrainData
 Version 1.0 Phase 1.0 Proposed
 Nancy created on 26/06/2018. Last modified 26/06/2018

OUTGOING STRUCTURAL RELATIONSHIPS


| OUTGOING STRUCTURAL RELATIONSHIPS | |
|---|---|
|  Aggregation from TrainData to ItemSimilarityRecommender | [Direction is 'Source -> Destination'.] |
|  Aggregation from TrainData to Museum | [Direction is 'Source -> Destination'.] |




| ASSOCIATIONS | |
|--|----------------------------------|
|  Association (direction: Source -> Destination) | |
| Source: Public (Class) Artwork | Target: Public (Class) TrainData |

1.2.1.6.8 User

Class in package 'System'

User
Version 1.0 Phase 1.0 Proposed
Nancy created on 04/07/2018. Last modified 04/07/2018

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


| ATTRIBUTES | |
|--|--|
|  last_name : char Private | [Is static False. Containment is Not Specified.] |
|  name : char Private | [Is static False. Containment is Not Specified.] |
|  username : char Private | [Is static False. Containment is Not Specified.] |

1.2.1.6.9 UserRating

Class in package 'System'

UserRating
Version 1.0 Phase 1.0 Proposed
Nancy created on 04/07/2018. Last modified 04/07/2018


| INCOMING STRUCTURAL RELATIONSHIPS | |
|--|---|
|  Aggregation from Artwork to UserRating | [Direction is 'Source -> Destination'.] |

INCOMING STRUCTURAL RELATIONSHIPS Aggregation from User to UserRating


[Direction is 'Source -> Destination'.]

ATTRIBUTES artwork : Artwork Private

[Is static False. Containment is Not Specified.]

 rating : int Private

[Is static False. Containment is Not Specified.]

 user : User Private

[Is static False. Containment is Not Specified.]

1.2.1.7 Frameworks

Package in package 'Clases'

Frameworks
Version 1.0 Phase 1.0 Proposed
Nancy created on 26/06/2018. Last modified 29/06/2018

1.2.1.7.1 Frameworks diagram

Class diagram in package 'Frameworks'

Frameworks
Version 1.0
Nancy created on 26/06/2018. Last modified 26/06/2018

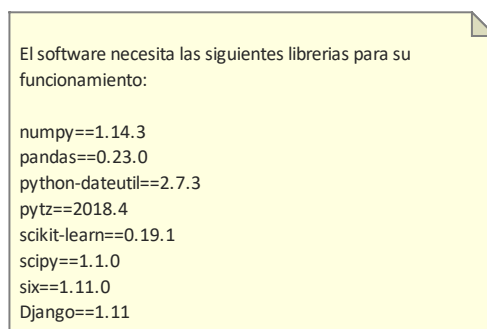


Figure 7: Frameworks

1.2.1.7.2 Note

Note in package 'Frameworks'

El software necesita las siguientes librerías para su funcionamiento:

```
numpy==1.14.3
pandas==0.23.0
python-dateutil==2.7.3
pytz==2018.4
scikit-learn==0.19.1
scipy==1.1.0
six==1.11.0
Django==1.11
```

Note
Version 1.0 Phase 1.0 Proposed
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1.2.2 Dominio

Package in package 'Estructurales'

Dominio
Version 1.0 Phase 1.0 Proposed
Nancy created on 29/06/2018. Last modified 29/06/2018

1.2.2.1 Domain Model diagram

Class diagram in package 'Dominio'

Domain Model
Version 1.0
Nancy created on 26/06/2018. Last modified 26/06/2018

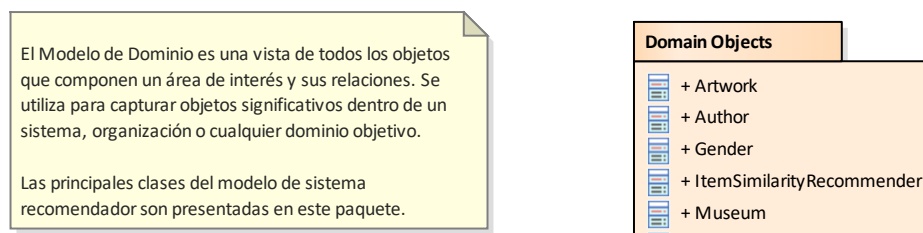


Figure 8: Domain Model

1.2.2.2 Note

Note in package 'Dominio'

El Modelo de Dominio es una vista de todos los objetos que componen un área de interés y sus relaciones. Se utiliza para capturar objetos significativos dentro de un sistema, organización o cualquier dominio objetivo.

Las principales clases del modelo de sistema recomendador son presentadas en este paquete.

Note
Version 1.0 Phase 1.0 Proposed
Nancy created on 26/06/2018. Last modified 26/06/2018
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1.2.2.3 Domain Objects

Package in package 'Dominio'

Domain Objects
Version 1.0 Phase 1.0 Proposed
Nancy created on 26/06/2018. Last modified 29/06/2018

1.2.2.4 Domain Objects

Package in package 'Dominio'

Domain Objects
Version 1.0 Phase 1.0 Proposed

Nancy created on 26/06/2018. Last modified 29/06/2018

1.2.2.4.1 Domain Objects diagram

Class diagram in package 'Domain Objects'

Domain Objects

Version 1.0

Nancy created on 26/06/2018. Last modified 04/07/2018

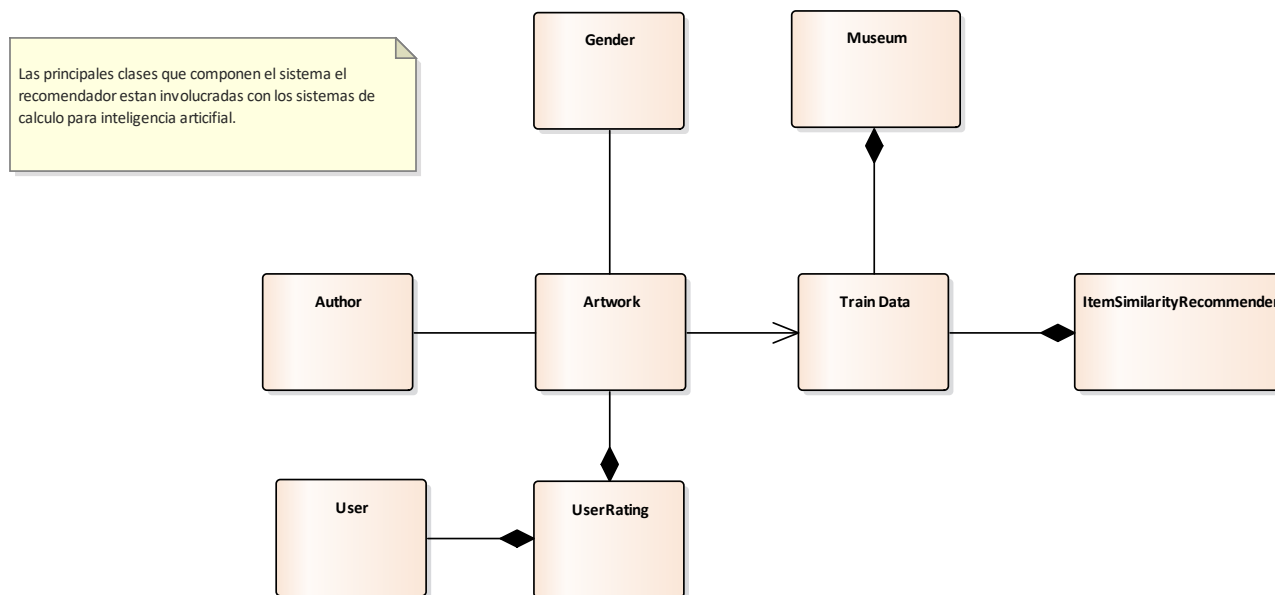


Figure 9: Domain Objects

1.2.2.4.2 Note

Note in package 'Domain Objects'

Las principales clases que componen el sistema el recomendador estan involucradas con los sistemas de calculo para inteligencia artificial.

Note

Version 1.0 Phase 1.0 Proposed

Nancy created on 26/06/2018. Last modified 26/06/2018

Extends

1.2.2.4.3 Artwork

Class in package 'Domain Objects'

Artwork

Version 1.0 Phase 1.0 Proposed

Nancy created on 04/07/2018. Last modified 04/07/2018

OUTGOING STRUCTURAL RELATIONSHIPS

OUTGOING STRUCTURAL RELATIONSHIPS
 Aggregation from Artwork to UserRating

[Direction is 'Source -> Destination'.]

ASSOCIATIONS
 Association (direction: Unspecified)

Source: Public (Class) Artwork

Target: Public (Class) Gender

 Association (direction: Source -> Destination)

Source: Public (Class) Artwork

Target: Public (Class) Train Data

 Association (direction: Unspecified)

Source: Public (Class) Author

Target: Public (Class) Artwork

1.2.2.4.4 Author*Class in package 'Domain Objects'*

Author

Version 1.0 Phase 1.0 Proposed

Nancy created on 04/07/2018. Last modified 04/07/2018

ASSOCIATIONS
 Association (direction: Unspecified)

Source: Public (Class) Author

Target: Public (Class) Artwork

1.2.2.4.5 Gender*Class in package 'Domain Objects'*

Gender

Version 1.0 Phase 1.0 Proposed

Nancy created on 04/07/2018. Last modified 04/07/2018

ASSOCIATIONS
 Association (direction: Unspecified)

Source: Public (Class) Artwork

Target: Public (Class) Gender

1.2.2.4.6 ItemSimilarityRecommender*Class in package 'Domain Objects'*

ItemSimilarityRecommender

Version 1.0 Phase 1.0 Proposed

Nancy created on 26/06/2018. Last modified 26/06/2018

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Aggregation from Train Data to ItemSimilarityRecommender

[Direction is 'Source -> Destination'.]

1.2.2.4.7 Museum*Class in package 'Domain Objects'*

Museum

Version 1.0 Phase 1.0 Proposed

Nancy created on 26/06/2018. Last modified 04/07/2018

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Aggregation from Train Data to Museum

[Direction is 'Source -> Destination'.]

1.2.2.4.8 Train Data*Class in package 'Domain Objects'*

Train Data

Version 1.0 Phase 1.0 Proposed

Nancy created on 26/06/2018. Last modified 26/06/2018

OUTGOING STRUCTURAL RELATIONSHIPS

⇐ Aggregation from Train Data to ItemSimilarityRecommender

[Direction is 'Source -> Destination'.]

⇐ Aggregation from Train Data to Museum

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination)

Source: Public (Class) Artwork

Target: Public (Class) Train Data


1.2.2.4.9 User*Class in package 'Domain Objects'*

User

Version 1.0 Phase 1.0 Proposed

Nancy created on 04/07/2018. Last modified 04/07/2018

OUTGOING STRUCTURAL RELATIONSHIPS

OUTGOING STRUCTURAL RELATIONSHIPS Aggregation from User to UserRating


[Direction is 'Source -> Destination'.]

1.2.2.4.10 UserRating*Class in package 'Domain Objects'*


UserRating

Version 1.0 Phase 1.0 Proposed

Nancy created on 04/07/2018. Last modified 04/07/2018

INCOMING STRUCTURAL RELATIONSHIPS Aggregation from User to UserRating

[Direction is 'Source -> Destination'.]

 Aggregation from Artwork to UserRating

[Direction is 'Source -> Destination'.]

1.2.3 Estructurales

Package in package 'Estructurales'

Estructurales

Version 1.0 Phase 1.0 Proposed

Nancy created on 29/06/2018. Last modified 29/06/2018

1.2.3.1 Deployment Model diagram

Deployment diagram in package 'Estructurales'

Deployment Model

Version 1.0

Nancy created on 26/06/2018. Last modified 26/06/2018

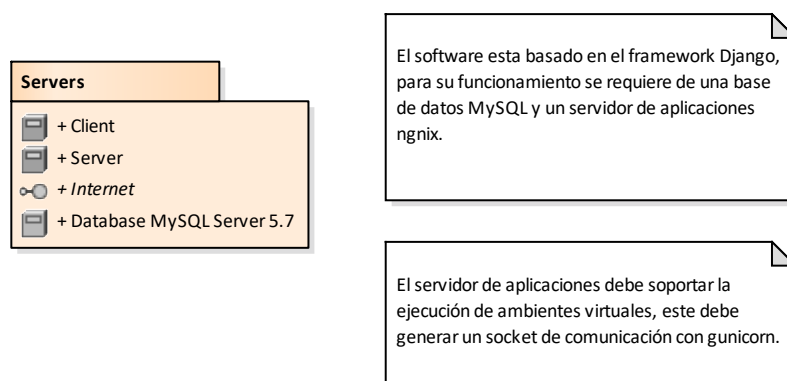


Figure 10: Deployment Model

1.2.3.2 Note

Note in package 'Estructurales'

El software esta basado en el framework Django, para su funcionamiento se requiere de una base de datos MySQL y un servidor de aplicaciones nginx.

Note

Version 1.0 Phase 1.0 Proposed

Nancy created on 26/06/2018. Last modified 26/06/2018

Extends

1.2.3.3 Note

Note in package 'Estructurales'

El servidor de aplicaciones debe soportar la ejecución de ambientes virtuales, este debe generar un socket de comunicación con gunicorn.

Note

Version 1.0 Phase 1.0 Proposed

Nancy created on 26/06/2018. Last modified 26/06/2018

Extends

1.2.3.4 Servers

Package in package 'Estructurales'

Servers

Version 1.0 Phase 1.0 Proposed

Nancy created on 26/06/2018. Last modified 29/06/2018

1.2.3.5 Servers

Package in package 'Estructurales'

Servers

Version 1.0 Phase 1.0 Proposed

Nancy created on 26/06/2018. Last modified 29/06/2018

1.2.3.5.1 Servers diagram

Deployment diagram in package 'Servers'

Servers

Version 1.0

Nancy created on 26/06/2018. Last modified 26/06/2018

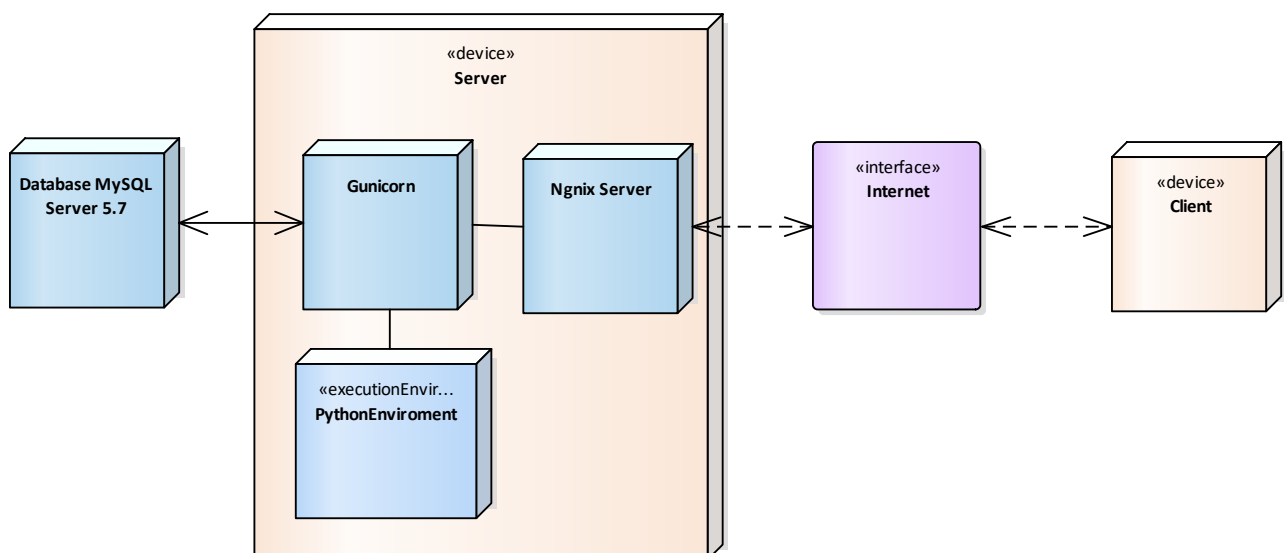


Figure 11: Servers

1.2.3.5.2 Internet

Interface in package 'Servers'

Internet

Version 1.0 Phase 1.0 Proposed

Nancy created on 26/06/2018. Last modified 26/06/2018

CONNECTORS

CONNECTORS

Dependency Bi-Directional
 From: Ngnix Server : Node, Public
 To: Internet : Interface, Public



Dependency Bi-Directional
 From: Client : Device, Public
 To: Internet : Interface, Public

1.2.3.5.3 Database MySQL Server 5.7

Node in package 'Servers'

Database MySQL Server 5.7
 Version 1.0 Phase 1.0 Proposed
 Nancy created on 26/06/2018. Last modified 26/06/2018

OUTGOING STRUCTURAL RELATIONSHIPS

CommunicationPath from Database MySQL Server 5.7 to Unicorn

[Direction is 'Bi-Directional'.]

1.2.3.5.4 Client

Device in package 'Servers'

Client
 Version 1.0 Phase 1.0 Proposed
 Nancy created on 26/06/2018. Last modified 26/06/2018

CONNECTORS

Dependency Bi-Directional
 From: Client : Device, Public
 To: Internet : Interface, Public

1.2.3.5.5 Server

Device in package 'Servers'

Server
 Version 1.0 Phase 1.0 Proposed
 Nancy created on 26/06/2018. Last modified 26/06/2018

ELEMENTS OWNED BY Server

PythonEnviroment : ExecutionEnvironment



Unicorn : Node



Ngnix Server : Node

1.2.3.5.5.1 PythonEnviroment

ExecutionEnvironment owned by 'Server', in package 'Servers'


PythonEnviroment
Version 1.0 Phase 1.0 Proposed
Nancy created on 26/06/2018. Last modified 26/06/2018



| ASSOCIATIONS | |
|--|--|
|  Association (direction: Unspecified) | |
| Source: Public (Node) Unicorn | Target: Public (ExecutionEnvironment) PythonEnviroment |

1.2.3.5.5.2 Unicorn

Node owned by 'Server', in package 'Servers'

Unicorn
Version 1.0 Phase 1.0 Proposed
Nancy created on 26/06/2018. Last modified 26/06/2018


| INCOMING STRUCTURAL RELATIONSHIPS | |
|---|--|
|  CommunicationPath from Database MySQL Server 5.7 to Unicorn | |
| [Direction is 'Bi-Directional'.] | |

| ASSOCIATIONS | |
|--|--|
|  Association (direction: Unspecified) | |
| Source: Public (Node) Unicorn | Target: Public (Node) Ngnix Server |
|  Association (direction: Unspecified) | |
| Source: Public (Node) Unicorn | Target: Public (ExecutionEnvironment) PythonEnviroment |

1.2.3.5.5.3 Ngnix Server

Node owned by 'Server', in package 'Servers'

Ngnix Server
Version 1.0 Phase 1.0 Proposed
Nancy created on 26/06/2018. Last modified 26/06/2018

| CONNECTORS | |
|--|--|
|  Dependency Bi-Directional | |
| From: Ngnix Server : Node, Public | |
| To: Internet : Interface, Public | |

ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Node) Unicorn

Target: Public (Node) Ngnix Server

1.2.4 Paquetes

Package in package 'Estructurales'

Paquetes

Version 1.0 Phase 1.0 Proposed

Nancy created on 04/07/2018. Last modified 04/07/2018

1.2.4.1 Paquetes diagram

Package diagram in package 'Paquetes'

Paquetes

Version 1.0

Nancy created on 04/07/2018. Last modified 04/07/2018

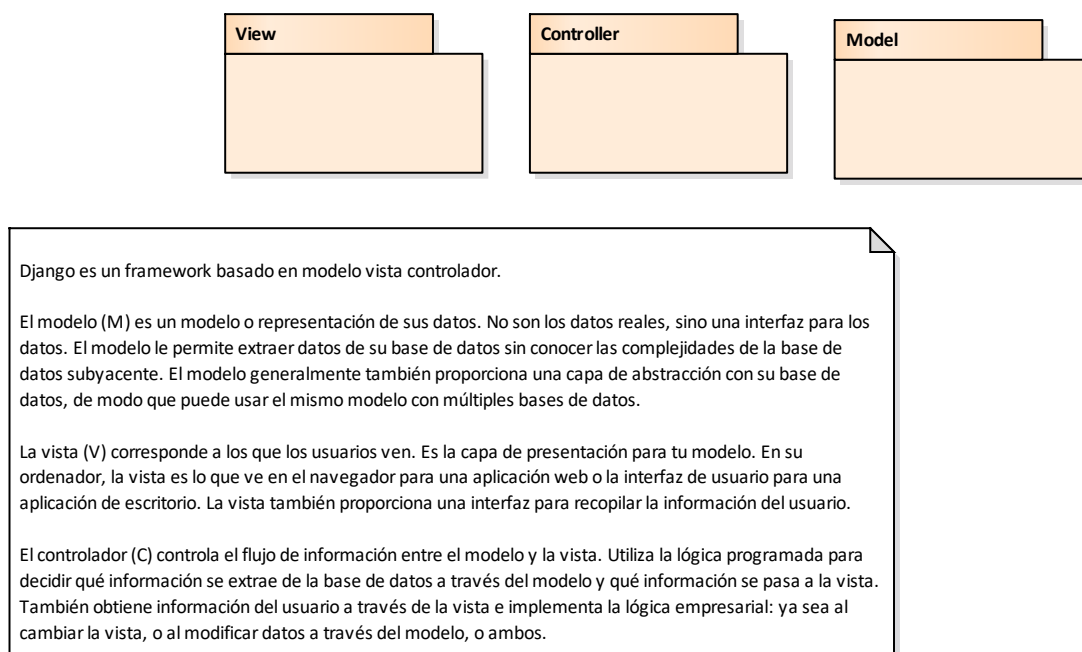


Figure 12: Paquetes

1.2.4.2 Note

Note in package 'Paquetes'

Django es un framework basado en modelo vista controlador.

El modelo (M) es un modelo o representación de sus datos. No son los datos reales, sino una interfaz para los datos. El modelo le permite extraer datos de su base de datos sin conocer las complejidades de la base de datos subyacente. El modelo generalmente también proporciona una capa de abstracción con su base de datos, de modo que puede usar el mismo modelo con múltiples bases de datos.

La vista (V) corresponde a los que los usuarios ven. Es la capa de presentación para tu modelo. En su ordenador, la vista es lo que ve en el navegador para una aplicación web o la interfaz de usuario para una aplicación de escritorio. La vista también proporciona una interfaz para recopilar la información del usuario.

El controlador (C) controla el flujo de información entre el modelo y la vista. Utiliza la lógica programada para decidir qué información se extrae de la base de datos a través del modelo y qué información se pasa a la vista. También obtiene información del usuario a través de la vista e implementa la lógica empresarial: ya sea al cambiar la vista, o al modificar datos a través del modelo, o ambos.

Note

Version 1.0 Phase 1.0 Proposed
Nancy created on 04/07/2018. Last modified 04/07/2018
Extends

1.2.4.3 Controller

Package in package 'Paquetes'

Controller
Version 1.0 Phase 1.0 Proposed
Nancy created on 04/07/2018. Last modified 04/07/2018

1.2.4.4 Model

Package in package 'Paquetes'

Model
Version 1.0 Phase 1.0 Proposed
Nancy created on 04/07/2018. Last modified 04/07/2018

1.2.4.5 View

Package in package 'Paquetes'

View
Version 1.0 Phase 1.0 Proposed
Nancy created on 04/07/2018. Last modified 04/07/2018

1.2.4.6 Controller

Package in package 'Paquetes'

Controller
Version 1.0 Phase 1.0 Proposed
Nancy created on 04/07/2018. Last modified 04/07/2018

1.2.4.7 Model

Package in package 'Paquetes'

Model
Version 1.0 Phase 1.0 Proposed
Nancy created on 04/07/2018. Last modified 04/07/2018

1.2.4.8 [View](#)

Package in package 'Paquetes'

[View](#)

Version 1.0 Phase 1.0 Proposed

Nancy created on 04/07/2018. Last modified 04/07/2018

1.3 Extendidos

Package in package 'Model'

Extendidos

Version 1.0 Phase 1.0 Proposed

Nancy created on 29/06/2018. Last modified 29/06/2018

1.3.1 Metamodelo

Package in package 'Extendidos'

Metamodelo

Version 1.0 Phase 1.0 Proposed

Nancy created on 04/07/2018. Last modified 04/07/2018

1.3.1.1 Metamodelo diagram

Data Modeling diagram in package 'Metamodelo'

Metamodelo

Version 1.0

Nancy created on 04/07/2018. Last modified 05/07/2018

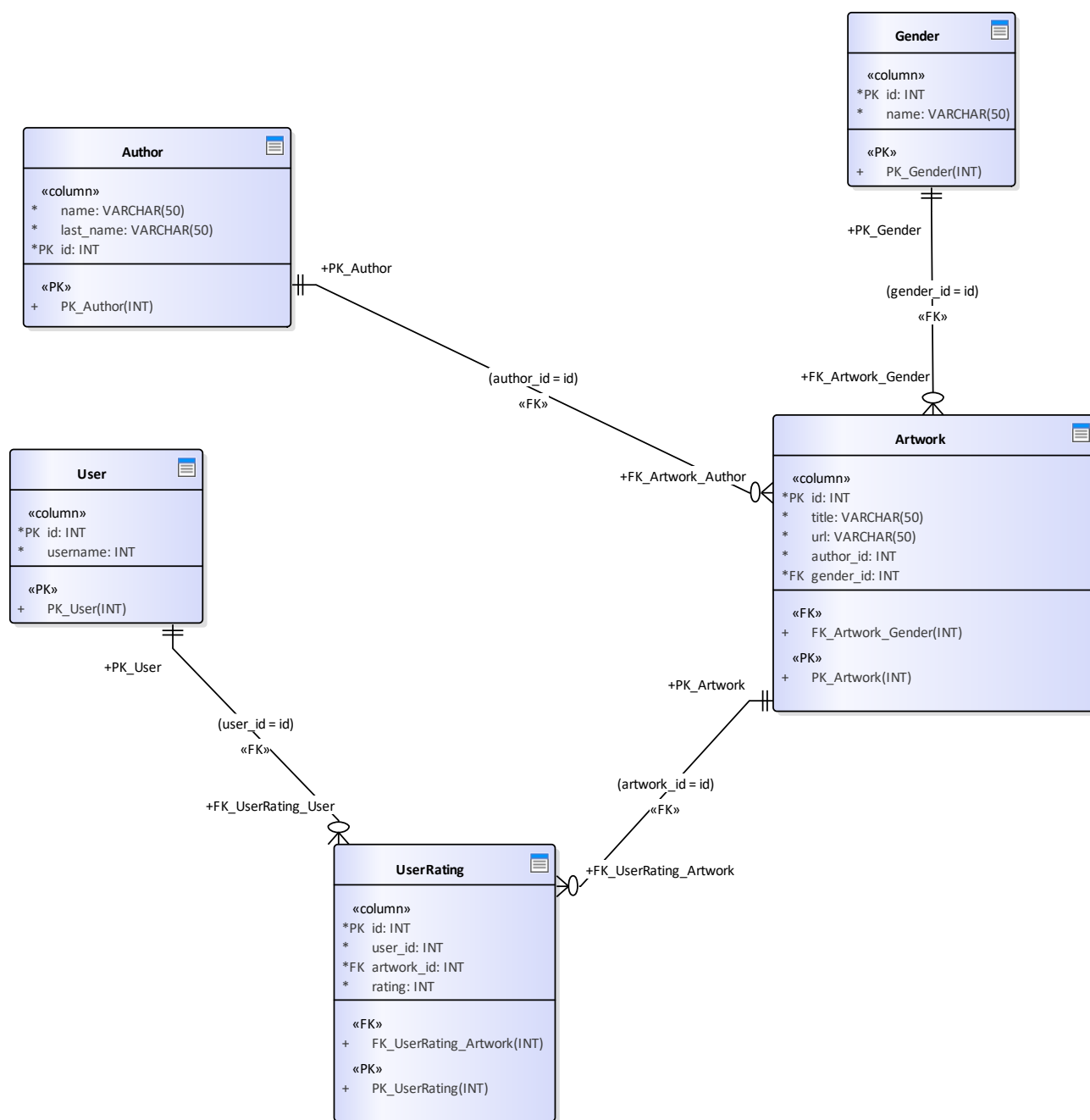







Figure 13: Metamodelo


1.3.1.2 Artwork



Database table in package 'Metamodelo'

Artwork
Version 1.0 Phase 1.0 Proposed
Nancy created on 05/07/2018. Last modified 05/07/2018
DBMS MySql

| COLUMN NAME | DATATYPE | NOT NULL | COMMENTS |
|--|----------|----------|---|
|  id | INT | True | Properties: AutoNum = True property = AutoNum=True; |

| COLUMN NAME | DATATYPE | NOT NULL | COMMENTS |
|---|-------------|----------|----------|
|  title | VARCHAR(50) | True | |
|  url | VARCHAR(50) | True | |
|  author_id | INT | True | |
|  gender_id | INT | True | |




| PRIMARY KEY NAME | COLUMNS | COMMENTS |
|--|---------|----------|
|  PK_Artwork | id | |


| FOREIGN KEY NAME | COLUMNS | REFERENCES |
|---|-----------|------------|
|  FK_Artwork_Gender | gender_id | Gender(id) |
|  FK_Artwork_Author | | Author() |

1.3.1.3 Author

Database table in package 'Metamodelo'

Author
Version 1.0 Phase 1.0 Proposed
Nancy created on 05/07/2018. Last modified 05/07/2018
DBMS MySQL

| COLUMN NAME | DATATYPE | NOT NULL | COMMENTS |
|---|-------------|----------|---|
|  name | VARCHAR(50) | True | |
|  last_name | VARCHAR(50) | True | |
|  id | INT | True | Properties: AutoNum = True property = AutoNum=True; |



| PRIMARY KEY NAME | COLUMNS | COMMENTS |
|---|---------|----------|
|  PK_Author | id | |


1.3.1.4 Gender

Database table in package 'Metamodelo'

Gender

Version 1.0 Phase 1.0 Proposed
 Nancy created on 05/07/2018. Last modified 05/07/2018
 DBMS MySQL



| COLUMN NAME | DATATYPE | NOT NULL | COMMENTS |
|--|-------------|----------|---|
|  id | INT | True | Properties: AutoNum = True property = AutoNum=True; |
|  name | VARCHAR(50) | True | |


| PRIMARY KEY NAME | COLUMNS | COMMENTS |
|---|---------|----------|
|  PK_Gender | id | |

1.3.1.5 User

Database table in package 'Metamodelo'

User
 Version 1.0 Phase 1.0 Proposed
 Nancy created on 05/07/2018. Last modified 05/07/2018
 DBMS MySQL


| COLUMN NAME | DATATYPE | NOT NULL | COMMENTS |
|--|----------|----------|---|
|  id | INT | True | Properties: AutoNum = True property = AutoNum=True; |
|  username | INT | True | |




| PRIMARY KEY NAME | COLUMNS | COMMENTS |
|---|---------|----------|
|  PK_User | id | |


1.3.1.6 UserRating



Database table in package 'Metamodelo'

UserRating
 Version 1.0 Phase 1.0 Proposed
 Nancy created on 05/07/2018. Last modified 05/07/2018
 DBMS MySQL

| COLUMN NAME | DATATYPE | NOT NULL | COMMENTS |
|--|----------|----------|---|
|  id | INT | True | Properties: AutoNum = True property = AutoNum=True; |
| | | | |

| COLUMN NAME | DATATYPE | NOT NULL | COMMENTS |
|--|----------|----------|----------|
|  user_id | INT | True | |
|  artwork_id | INT | True | |
|  rating | INT | True | |

| PRIMARY KEY NAME | COLUMNS | COMMENTS |
|---|---------|----------|
|  PK_UserRating | id | |

| FOREIGN KEY NAME | COLUMNS | REFERENCES |
|---|------------|-------------|
|  FK_UserRating_Artwork | artwork_id | Artwork(id) |
|  FK_UserRating_User | user_id | User(id) |

1.3.2 Requerimientos

Package in package 'Extendidos'

Requerimientos

Version 1.0 Phase 1.0 Proposed

Nancy created on 04/07/2018. Last modified 04/07/2018

1.3.2.1 Requerimientos diagram

Requirements diagram in package 'Requerimientos'

Requerimientos

Version 1.0

Nancy created on 29/06/2018. Last modified 04/07/2018

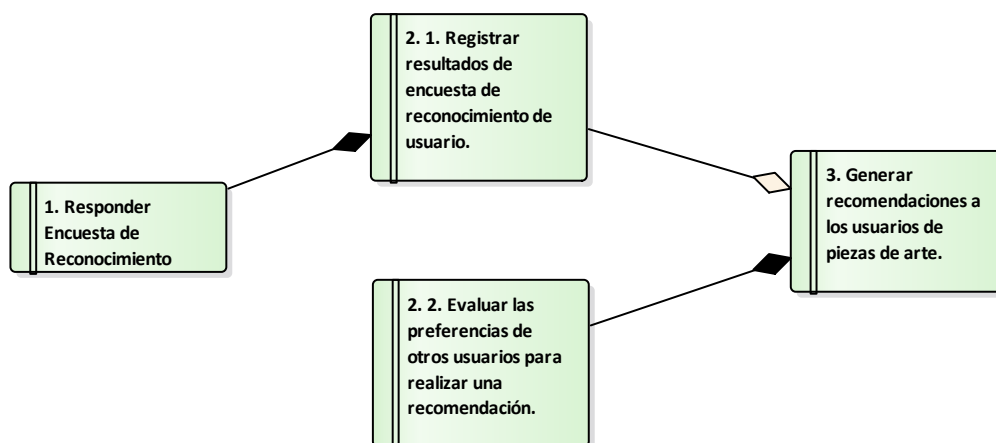


Figure 14: Requerimientos

1.3.2.2 1. Responder Encuesta de Reconocimiento

Requirement «Functional» in package 'Requerimientos'

1. Responder Encuesta de Reconocimiento

Version 1.0 Phase 1.0 Proposed

Nancy created on 04/07/2018. Last modified 04/07/2018

OUTGOING STRUCTURAL RELATIONSHIPS

← Aggregation from «Functional» 1. Responder Encuesta de Reconocimiento to «Functional» 2. 1. Registrar resultados de encuesta de reconocimiento de usuario.

[Direction is 'Source -> Destination'.]

1.3.2.3 2. 1. Registrar resultados de encuesta de reconocimiento de usuario.

Requirement «Functional» in package 'Requerimientos'

2. 1. Registrar resultados de encuesta de reconocimiento de usuario.

Version 1.0 Phase 1.0 Proposed

Nancy created on 04/07/2018. Last modified 04/07/2018

OUTGOING STRUCTURAL RELATIONSHIPS

⇐ Aggregation from «Functional» 2. 1. Registrar resultados de encuesta de reconocimiento de usuario. to «Functional» 3. Generar recomendaciones a los usuarios de piezas de arte.

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Aggregation from «Functional» 1. Responder Encuesta de Reconocimiento to «Functional» 2. 1. Registrar resultados de encuesta de reconocimiento de usuario.

[Direction is 'Source -> Destination'.]

1.3.2.4 2. 2. Evaluar las preferencias de otros usuarios para realizar una recomendación.

Requirement «Functional» in package 'Requerimientos'

2. 2. Evaluar las preferencias de otros usuarios para realizar una recomendación.

Version 1.0 Phase 1.0 Proposed

Nancy created on 04/07/2018. Last modified 04/07/2018

OUTGOING STRUCTURAL RELATIONSHIPS

⇐ Aggregation from «Functional» 2. 2. Evaluar las preferencias de otros usuarios para realizar una recomendación. to «Functional» 3. Generar recomendaciones a los usuarios de piezas de arte.

[Direction is 'Source -> Destination'.]

1.3.2.5 3. Generar recomendaciones a los usuarios de piezas de arte.

Requirement «Functional» in package 'Requerimientos'

3. Generar recomendaciones a los usuarios de piezas de arte.

Version 1.0 Phase 1.0 Proposed

Nancy created on 04/07/2018. Last modified 04/07/2018

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Aggregation from «Functional» 2. 1. Registrar resultados de encuesta de reconocimiento de usuario. to «Functional» 3. Generar recomendaciones a los usuarios de piezas de arte.

[Direction is 'Source -> Destination'.]

⇒ Aggregation from «Functional» 2. 2. Evaluar las preferencias de otros usuarios para realizar una recomendación. to «Functional» 3. Generar recomendaciones a los usuarios de piezas de arte.

[Direction is 'Source -> Destination'.]