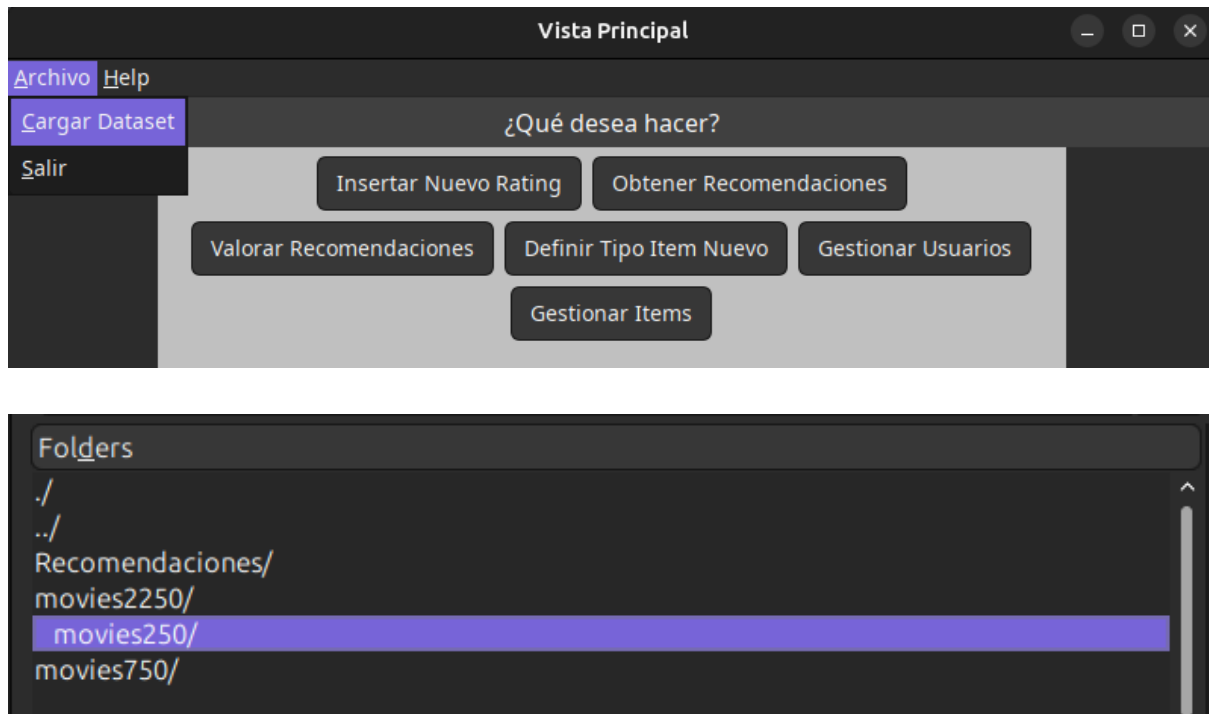


Once the program is executed, the main window (main view) will appear.

Testing the recommender

Step 1: Load directory



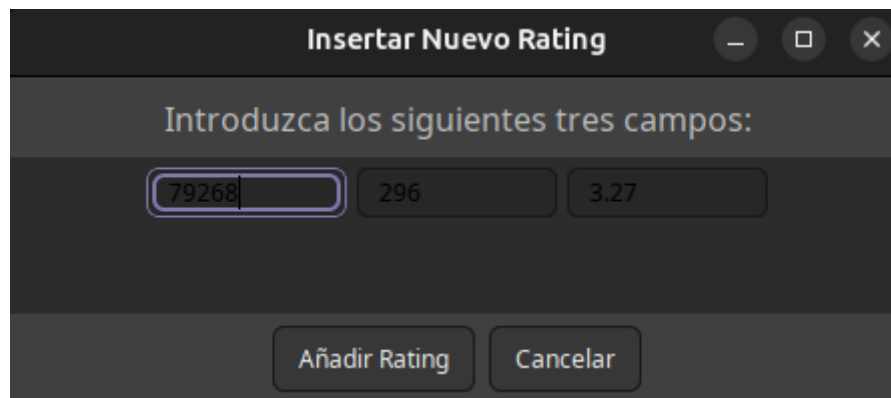
To use the different functionalities of the program, the first thing we have to do is load a directory. Let's go to the File tab, and choose any of the folders:

- moviesxxx
- seriesxxx Where xxx can be: 250, 750, 2250

Use one of the user id's corresponding to each directory

- Directory movies250,
 - We can use the following id's = 79268, 16498, 93998
 - We can use the following itemId's: 296, 318, 527 (items.csv)
- Directory movies750,
 - we can use the following id's = 35368, 96428, 252578
- Directory movies2250,
 - we can use the following id's = 205948, 247718, 5158

1) **Insert new rating:** use a valid userId = 79268 and itemId = 296

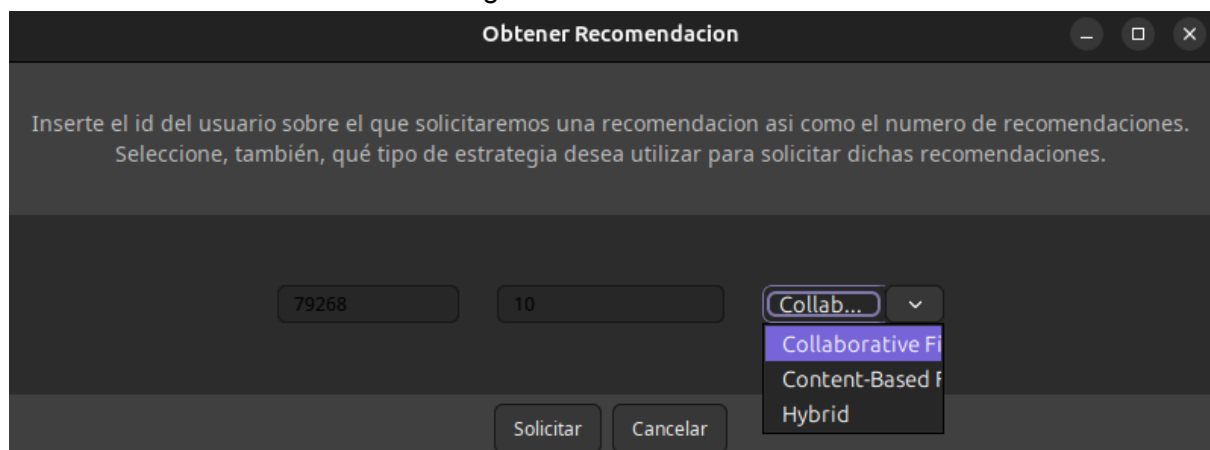


The screenshot shows a dark-themed dialog box titled "Insertar Nuevo Rating". It contains a prompt "Introduzca los siguientes tres campos:" followed by three input fields. The first field contains "79268", the second contains "296", and the third contains "3.27". At the bottom, there are two buttons: "Añadir Rating" and "Cancelar".

2) **Get recommendation,** requires :

- userId = 79268
- number of recommendations = 10
- We choose between the three possible algorithms:
 - Collaborative filtering
 - Content Baset filtering
 - Hybrid

Choose: Collaborative filtering

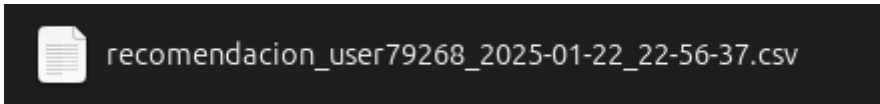


The screenshot shows a dark-themed dialog box titled "Obtener Recomendacion". It contains a prompt: "Inserte el id del usuario sobre el que solicitaremos una recomendacion asi como el numero de recomendaciones. Seleccione, también, qué tipo de estrategia desea utilizar para solicitar dichas recomendaciones." Below the prompt are three input fields: the first contains "79268", the second contains "10", and the third is a dropdown menu showing "Collab...". The dropdown menu is open, showing three options: "Collaborative Fi", "Content-Based f", and "Hybrid". At the bottom, there are two buttons: "Solicitar" and "Cancelar".

Result: Recommended items with their respective rating for the user with id = 79268 that fit their profile, using the Collaborative Filtering algorithm (kmeans + slopeOne).

Mostrar Recomendaciones Obtenidas	
Estas son las recomendaciones que hemos obtenido.	
userId:	79268
item-id	rating
2019	4.904166666666667
858	4.8566978193146415
1250	4.836633663366337
5060	4.8
913	4.757575757575758
318	4.747152619589977
1213	4.696
912	4.683510638297872
750	4.673245614035087
296	4.660753880266076

Recommended items with their respective ratings for the user with id =79268 are stored in the Recommendations folder



Evaluate recommendations: evaluates the quality of the recommendations produced by the recommender algorithms.

Obtener Recomendacion

Inserte el id del usuario sobre el que solicitaremos una recomendacion.
Y aprete [Solicitar y Valorar] para poder ver la calidad de dichas recomendaciones.

79268 Collab...

Solicitar y Valorar Cancelar

Mostrar Valoracion de Calidad Obtenida

Estas son las recomendaciones que hemos obtenido para el usuario: 79268
Y esta es la calidad de las mismas


userId:	79268
item-id	rating
6016	2.6135231223172175
4973	2.5884640508583443
44191	2.100779219231747
318	2.0799999999942083
912	2.0799999999735017
2959	2.014493708643781
111	2.0000047355669337
4995	2.0000033946307756

< >

nDCG: 0.6790544457771972

OK

Recommended items with their respective ratings for the user with id =79268 are stored in the Recommendations folder

 recomendacion_user79268_2025-01-22_23-12-29.csv

Define new item type: We define a new item type, it requires:

- moviesxxx directory
- item type: bool, num, text, categorical.
- type name

Definir Tipo Item Nuevo

Selecione, primero, la carpeta de datasets sobre la que quiere definir el nuevo tipo de item.
Defina el nuevo tipo de item, añadiendo los atributos uno a uno:

Seleccionar Dataset

Dataset Seleccionado: movies250

Añadir Tipo Atributo

Guardar y Finalizar

Cancelar Operacion

Obtener Recomendacion

Selecione, primero, el tipo de atributo que desea añadir
y, posteriormente, inserte el nombre de dicho atributo

categorico

Type Test

Añadir

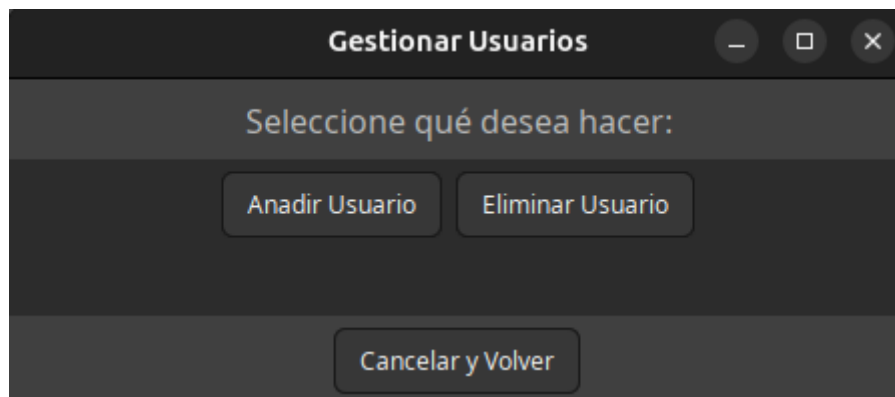
Cancelar

```
categorico , Type Test
archivos/movies250
|-- Escritura del tipos realizada correctamente
```

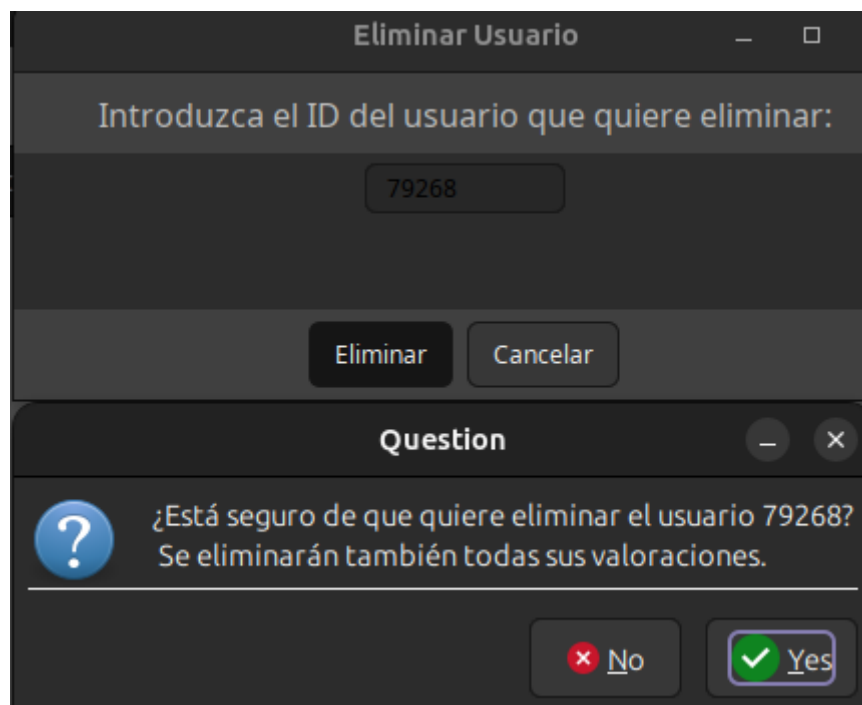
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
production_countries	release_date	revenue	runtime	spoken_languages	status	tagline	title	video	vote_average	vote_count	keywords	typetest
text	text	num	num	categorico	categorico	text	text	bool	num	num	categorico	categorico

Result: Item type “**typeTest**” has been added successfully.

Manage users: two options add and delete users.



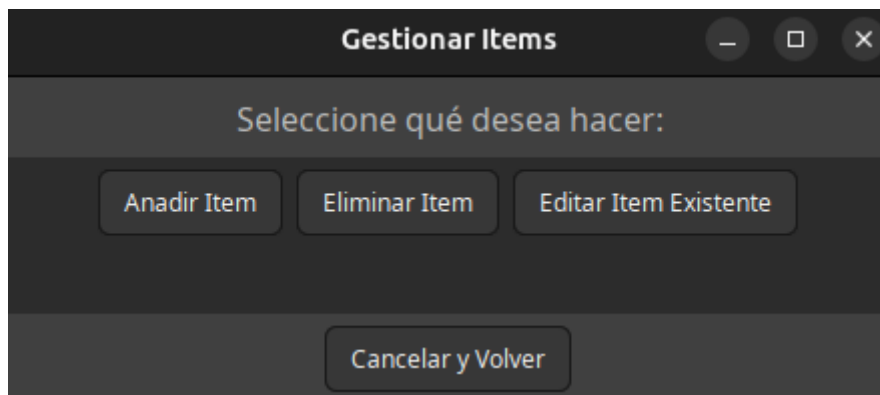
Delete users: requires a valid user, in the example we have used the user with id = 79268



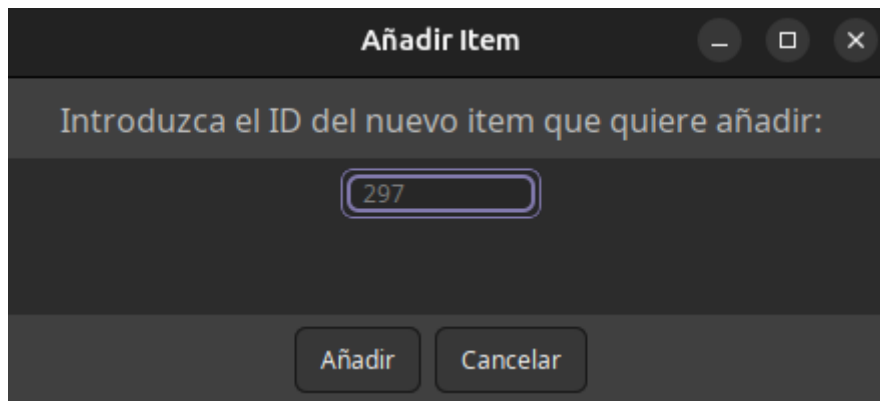
Changes are saved in a new folder when you close the program.

The changes are saved in a new folder **"files/date_time"** which contains a copy of the **.csv** files from the **moviesxxx** folder we have chosen.

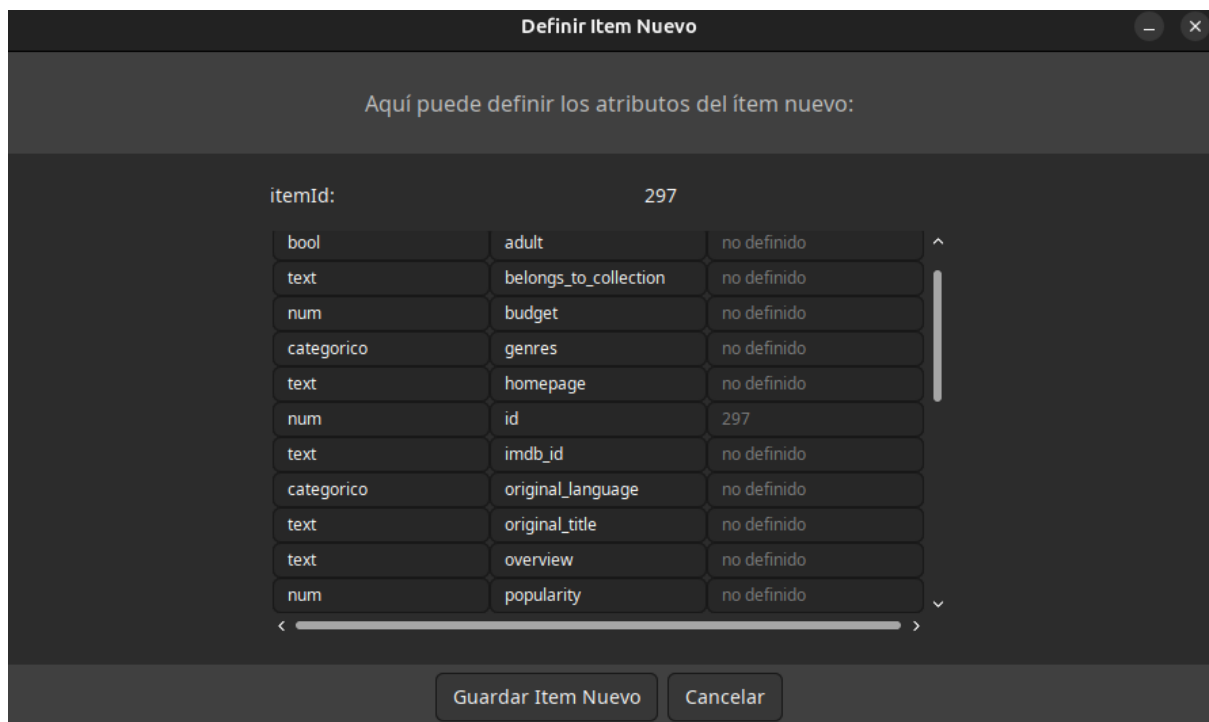
Manage Items: add item, delete item, edit existing item.



A dark-themed dialog box titled "Gestionar Items" with standard window controls (minimize, maximize, close). The main text says "Seleccione qué desea hacer:". Below it are three buttons: "Añadir Item", "Eliminar Item", and "Editar Item Existente". At the bottom is a button labeled "Cancelar y Volver".



A dark-themed dialog box titled "Añadir Item" with standard window controls. The main text says "Introduzca el ID del nuevo item que quiere añadir:". Below it is a text input field containing the number "297". At the bottom are two buttons: "Añadir" and "Cancelar".



A dark-themed dialog box titled "Definir Item Nuevo" with standard window controls. The main text says "Aquí puede definir los atributos del ítem nuevo:". Below it, the text "itemId: 297" is displayed. A table lists various attributes with their data types and current values. The table has three columns: data type, attribute name, and value. The "id" attribute is pre-filled with "297". At the bottom are two buttons: "Guardar Item Nuevo" and "Cancelar".

	itemId:	297
bool	adult	no definido
text	belongs_to_collection	no definido
num	budget	no definido
categorico	genres	no definido
text	homepage	no definido
num	id	297
text	imdb_id	no definido
categorico	original_language	no definido
text	original_title	no definido
text	overview	no definido
num	popularity	no definido

When closing the program, a copy is saved with the new item with itemId = 297

Eliminar Item

Introduzca el ID del item que quiere eliminar:

297

Eliminar Cancelar

Editar Item

Introduzca el ID del item que quiere editar:

296

Editar Item Cancelar

Editar Item Existente

Aquí puede editar los atributos del ítem:

itemId: 296

Tipo Atributo	Nombre Atributo	Valor Atributo
bool	adult	False
text	belongs_to_collection	no definido
num	budget	200000000
categorico	genres	7;79;150
text	homepage	no definido
num	id	296
text	imdb_id	tt0181852
categorico	original_language	0
text	original_title	Terminator 3: Ri
text	overview	"It's been 10 ye

Guardar Item Cancelar

When closing the program, a copy is saved with the edited item with itemId = 296

Status of the Project

The program is fully functional and implements all the intended core functionalities, such as loading datasets, processing data, and generating recommendations. However, please note that some adjustments to the graphical interface are still a work in progress.

These pending improvements are primarily focused on refining the visual design, enhancing user experience, and ensuring optimal usability. While the current graphical interface is basic, it does not affect the program's core functionality, which works as intended.

If you're reviewing this project for evaluation purposes, please focus on the functionality rather than the graphical aspects, as further polishing is planned for future updates.