Movie Recommendation Chatbot

Group ID: 14

Assignment 4

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Overview

In today's digital era, the realm of entertainment has transformed, offering a vast array of captivating content. Among the diverse and popular forms of entertainment, movies have emerged as a compelling and immersive medium, captivating audience of all ages with their unique storytelling, intriguing characters, and cinematic worlds. With an ever-expanding library of movie titles across various genres, it can be overwhelming for enthusiasts to discover the perfect film that resonates with their individual tastes and preferences. To address this challenge and create a personalized movie-watching experience, we introduce the concept of a "Movie Recommender Chatbot."

The Movie Recommender Chatbot is an innovative and interactive solution designed to assist movie enthusiasts in effortlessly discovering their ideal film selections. Powered by advanced artificial intelligence techniques, natural language processing, and recommendation algorithms, the chatbot serves as a knowledgeable companion, understanding user preferences and offering tailored movie suggestions. Its user-friendly interface provides a seamless and engaging experience, enabling users to explore the cinematic world with ease.
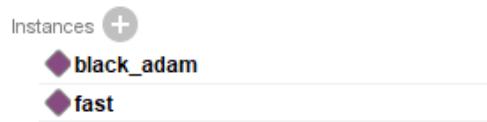
Step 1: prepare and choose the topic for the chatbot:

We aim to build an advanced and user-centric chatbot, our chatbot recommends a movie in cinema.
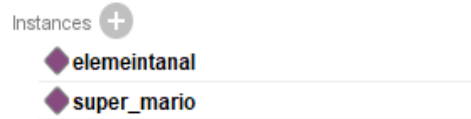
Step 2: create the ontology using protégé:

- **Create cinema-popcorn-reservation-tickets classes:**

- **Create a movie category class and sub-classes:**
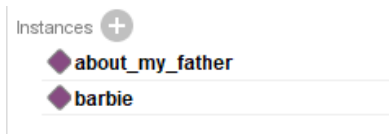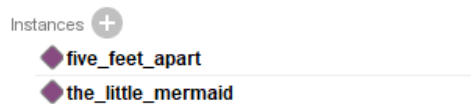
- **Create the instances of action:**

Instances ⊕
- ◆ black_adam
- ◆ fast

- **Create the instances of animation:**

Instances ⊕
- ◆ elemeintanal
- ◆ super_mario

- **Create the instances of drama:**

Instances ⊕
- ◆ air
- ◆ family

- **Create the instances of funny:**

Instances ⊕
- ◆ about_my_father
- ◆ barbie

- **Create the instances of Romantic:**

Instances ⊕
- ◆ five_feet_apart
- ◆ the_little_mermaid

- **Relations between the classes:**

▼ ▪ owl:topObjectProperty
  - ▪ has_category
  - ▪ showing_at
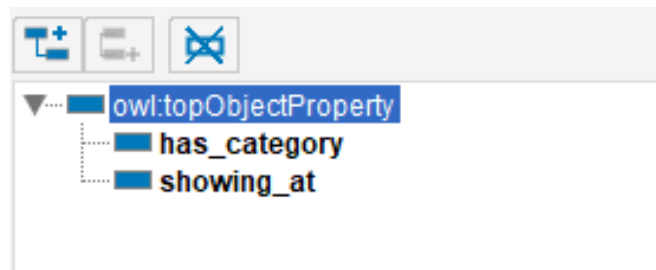
- **Ontology Diagram:**
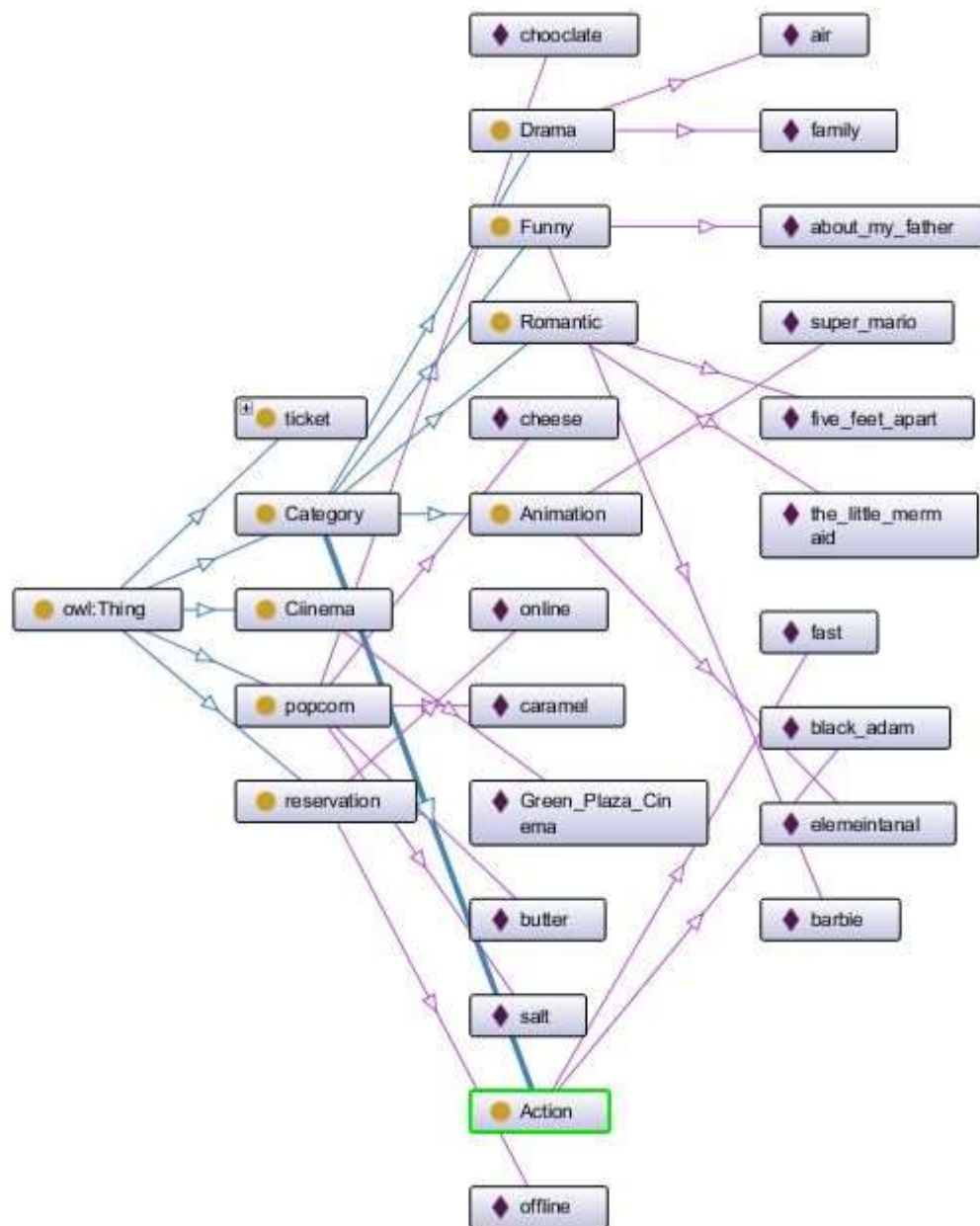
Step 3: Prepare the intent:
1. Popcorn
2. Reservation
3. Tickets
4. movie_categories
5. party_time

Step 4: **Design the test cases questions:**

<mark>Popcorn</mark>

Prompts for "popcorn"

NAME	ENTITY	VALUE
popcorn	@popcorn	$popcorn

PROMPTS

1. which popcorn flavor do you want ?
2. flavors
3. Do you have a favorite popcorn flavor in mind?
4. which flavor do you prefer?

<mark>reservation</mark>

Prompts for "reservation"

NAME	ENTITY	VALUE
reservation	@reservation	$reservation

PROMPTS

1. online or offline ?
2. do you want to reserve a ticket here or from the cinema ?
3. which method of paying you prefer?
4. online reservation ?
5. offline reservation ?

<mark>Tickets</mark>

Prompts for "ticket"

NAME	ENTITY	VALUE
ticket	@ticket	$ticket

PROMPTS

1. Do you want vip or normal ticket ?
2. which ticket do you want ?

Prompts for "movies_categories"

NAME	ENTITY	VALUE
movies_categories	@movies_categories	$movies_categories

PROMPTS

1. which category you prefer ?
2. What genre do you prefer?
3. Do you have a favorite movie genre?
4. What type of films do you lean towards?
5. which type of these you prefer : action , drama , animation , funny , romantic
6. Enter a prompt variant

CLOSE

Prompts for "party_time"

NAME	ENTITY	VALUE
party_time	@party_time	$party_time

PROMPTS

1. which party do you prefer ?
2. which party midday or midnight ?
3. what is the time of the party ?
4. tell me the party time .
5. can you tell me the party time .
6. Enter a prompt variant

CLOSE

Step 5: Training Questions-Answers using Dialog Flow:

> Are there any new releases or specific films I can watch at the cinema?

> I'm interested in knowing the current movie lineup at the cinema. What are my options?

> Can you provide a list of the movies available for viewing at the cinema?

> What films are showing at the cinema right now?

> which movies are avilable in the cinema ?

> cinema

> i prefer funny movies

> action

> i prefer action

> romantic films

> i like romantic movies

> drama movies

> i like drama movies

> animation movies

> funny movies

- midday
- midnight
- midnight party
- midday party
- offline reservation
- onlline reservation
- offline
- online
- cheese
- chocolate
- butter
- caramel popcorn
- salt popcorn
- ticket

Step 6: Verify and Evaluate:

CineBot

POWERED BY Dialogflow

hello

Hello! How can I help you?

what movies are available ?

which ticket do you want ?

normal

Ask something...

CineBot

POWERED BY Dialogflow

which popcorn flavor do you want ?

cheese

do you want to reserve a ticket here or from the cinema ?

online

which category you prefer ?

Ask something...

CineBot

POWERED BY Dialogflow

which category you prefer ?

drama

what is the time of the party ?

midnight

the avilable movie is family

Ask something...

Evaluate to isolate weaknesses:

We did not use a full sentence and long sentences for questions answer use case.

Conclusion:

Throughout this assignment, we gained insights into several crucial aspects. We explored the process of constructing a movie ontology to establish a well-structured knowledge representation. Additionally, we delved into the design of a movie recommender chatbot, leveraging dialog flow to facilitate smooth and natural interactions. Moreover, we dived into the creation of movie-related intents and entities, which are essential for effectively training and evaluating the chatbot's performance.

Chatbot Link:

[CineBot](#)