#### Studio Ghibli Chatbot

## STUDIO GHIBLI CHATBOT – PROJECT REPORT

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## 1) STUDIO GHIBLI CHATBOT

# a. Description

This chatbot is about studio Ghibli movies. It allows you to know general information on studio Ghibli like the list of their movies, what animal species or vehicles are seen in the films or the names of the characters. It also allows you to know specific information about each studio Ghibli movie. For example, you can ask the chatbot for the release time, length, director, original title... of each Studio Ghibli film.

The information used to code the chatbot was found on Studio Ghibli API https://ghibliapi.herokuapp.com/

## b. Setup

The Studio Ghibli Chatbot is coded in Node.js. To use it, just follow these steps:

• You need first to install all the packages required:

\$ cd ../movieBot \$ npm install I \$ npm install express

- Start the project with *nodemon server.js*
- Create a Facebook messenger app on Facebook for developer
- Get a token and verify token then copy it in your /development.json

Install ngrok

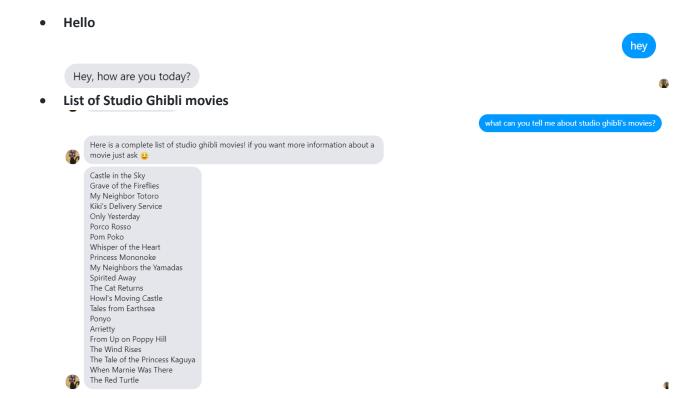
# \$ npm i ngrok

- Start a ngrok server in your cmd with ngrok http 3000 then create and connect your webhook
- Send a message to your Facebook Page, try "hello" Chatbot is ready!

### c. Demonstration

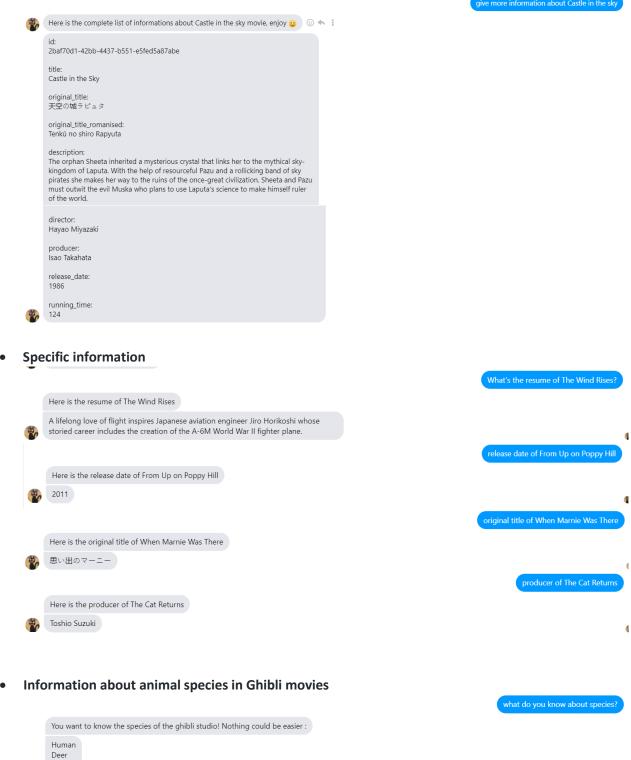
To demonstrate how the chatbot works, we made a demonstration video on YouTube : <a href="https://www.youtube.com/watch?v=z4e8lvSg4-Y">https://www.youtube.com/watch?v=z4e8lvSg4-Y</a>

Here are some screenshots showing all the questions you can ask our API:



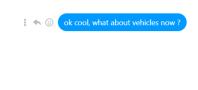
#### Studio Ghibli Chatbot

• Information about a movie: title - original\_title - original\_title\_romanised - description - director - producer - release\_date



Spirit God Cat Totoro Information about vehicles species in Ghibli movies





# 2) ANIME RECOMMENDER

#### a. How to use it

To use the recommender for our anime chatbot you have to:

- Open either the python file or the .ipynb (collab works well)
- Link the script to the ratings csv and the hhe csv.

Once that is done you have to run the script and follow the guided menu. The recommendation may take quite a bit of time since we are using extremely large amounts of data. The code asks to choose your favourite anime out of ten propositions. It does this 3 times and then it suggests 3 new animes that you could enjoy.

The script retrieves data from the 2 csv files and then links all the animes to the users ratings. Once we have a dictionary with all the users and their ratings on different animes we use collaborative filtering. We took the base from the week six project and adapted it to our anime list. In our project we used the cosine similarity measure which treats missing ratings as negative. This way of measure calculates the similarity between two vectors of an inner product space. It is measured by the cosine of the angle between two vectors and determines whether two vectors and pointing in roughly the same direction.

### b. Demonstration

Choosing the favourite proposition out of ten proposition

```
[0 rows x 73 columns]
selon ces 10 animes lequel tu préfère?
choisit un index
0: Kimagure Orange☆Road: Ano Hi ni Kaeritai
1: Hokuto no Ken: Raoh Gaiden Ten no Haoh
2: Yahari Ore no Seishun Love Comedy wa Machigatteiru.
3: Detective Conan Magic File 5: Niigata - Tokyo Omiyage Capriccio
4: Sousei no Aquarion
5: Black★Rock Shooter (OVA)
6: Vampire Hunter D
7: Zetsuen no Tempest
8: Rozen Maiden: Träumend
9: Seikai no Danshou: Tanjou
3
 selon ces 10 animes lequel tu préfère?
  choisit un index
 0: Dragon Ball Super
 1: Joker Game
 2: Tenchi Muyou! in Love
 3: Eve no Jikan
 4: Haikara-san ga Tooru
 5: Rosario to Vampire Capu2
 6: Top wo Nerae! Gunbuster
 7: Nogizaka Haruka no Himitsu: Finale
 8: Love Hina Haru Special: Kimi Sakura Chiru Nakare!!
 9: Mobile Suit Gundam II: Soldiers of Sorrow
  0
        un index entre 1 et 10 svp
        selon ces 10 animes lequel tu préfère?
         choisit un index
        0: Blood+
        1: One Piece: Adventure of Nebulandia
        2: Daicon Opening Animations
        3: Kyoukai no Kanata Movie: I'11 Be Here - Kako-hen
        4: Bishoujo Senshi Sailor Moon: Sailor Stars - Hero Club
        5: Tamako Market
        6: Tasogare Otome x Amnesia
        7: Ghost in the Shell: Stand Alone Complex - The Laughing Man
        8: Biohazard: Damnation
        9: Psycho-Pass Movie
        1
```

• The final recommendation based on the user's choices:

nous vous recommendons les series suivantes:

- 1) Kuroshitsuji
- 2) Kuroshitsuji II
- 3) Nabari no Ou