



Final Project

Chatbot and Recommendation Systems

A4 – S8

ESILV

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Our movie guide Chatbot: 'MovieBot'

1. Presentation

Welcome to our movie guide 'MovieBot'.

For a chatbot, we choose to develop something inspired by the 2nd and 6th workshops with a recommendation system added. In fact, we used the movies.csv and ratings.csv files.

Our chatbot 'MovieBot' is a movie guide, as its name may say. In fact, it allows to discuss about film, and have several abilities concerning movie recommendation, but can also make a simple conversation.

```
C:\Windows\System32\cmd.exe - node app.js
Microsoft Windows [version 10.0.19041.804]
(c) 2020 Microsoft Corporation. Tous droits réservés.

C:\Users\theop\Desktop\FinalProject-Chatbot>node app.js
>hi
hi ! My name is MG, MG is for MovieGuide, how are you?
>fine and you ?
Very good, thank you !
how can I help you ?
You can ask me to advise you some movies
You can ask me informations about a movie
You can ask me the grades of the movie
>_

Thank you
You are welcome, can I do something else for you ?
>_
```

2. Movie Research and Information

The chatbot can search and give information about a given movie. For example, let's make a research about the movie Wayne's World, which is declined in a saga of two movies. Furthermore, we will make the research using just the name 'Wayne' and not the entire name, in order to show that the bot can find it despite of that.

```
>can you give me informations about the movies
Give me the title of the movie you want to know about gender
Wayne
I founded more than one movie containing the word : Wayne
for the film : Wayne's World (1992), the genders of the movies are :
Comedy
for the film : Wayne's World 2 (1993), the genders of the movies are :
Comedy
```

Now, we will search about the film 'Woman in Red', but we ask about its ratings.

```
C:\Windows\System32\cmd.exe - node app.js
Woman in Red
These are the genders of the movie : Woman in Red, The (1984)
Comedy
Romance
thank you
You are welcome, can I do something else for you ?
>can you give me the grades of the movie
Give me the title of the movie you want to know the grade
Woman in Red
I'm calculing the average for the movie: Woman in Red, The (1984)
the grades are :
2
3
2
2
the average is : 2.25 on 5
```

3. Movie Recommendation

The main ability of our chatbot is the movie recommendation. Two paths are possible to access movie recommendation. As a new user it is possible to have a recommendation based on your favorite movie genres. For a current user, your recommendation is based on what you like.

3.1. The registered User

```
>can you give me a movie
Are you a new user?
yes/no>
no
What is your user Id :
12
Loading of your 3 movies, please wait...
The best genre of user 12 are Mystery with a moyenne of 5 and Drama with a moyenne of 4.4375

Here is a list of Movie that you might like :

All Good Things (2010)
Sixth Sense, The (1999)
Gleaming the Cube (1989)

C:\Users\theop\Desktop\FinalProject-Chatbot>
```

3.2. The new User

```
>can you give me some movie
Are you a new user?
yes/no>
yes
Can you please choose a first genre ? It will allow me to get to know you better :
1 : Thriller
2 : Adventure
3 : Animation
4 : Children
5 : Comedy
6 : Fantasy
7 : Romance
8 : Drama
9 : Action
10 : Crime
11 : Horreur
12 : Sci-Fi
13 : Mystery
14 : War
first>1
Thriller Can you please choose a second one ?
second>12
You choice are Thriller and Sci-Fi
Loading of your 3 movies, please wait...
Here is a list of Movie that you might like :

Next (2007)
Host, The (Gwoemul) (2006)
ARQ (2016)
```

4. Deployment

4.1. Creating a Webhook using Heroku

First we create a new app on Heroku, in order to deploy our project. We install Heroku and connect our local folder to the Heroku website using Git.

```
C:\Windows\System32\cmd.exe
Microsoft Windows [version 10.0.19041.804]
(c) 2020 Microsoft Corporation. Tous droits réservés.

C:\Users\theop\Desktop\FinalProject-Chatbot>heroku login
heroku: Press any key to open up the browser to login or q to exit:
Opening browser to https://cli-auth.heroku.com/auth/cli/browser/bcef1e27-2a19-4679-a6f2-c21313b81154?requestor=SFMyNTY.g
2gDbQAAAA04Ni4yMTguNjQuMTc4bgYAVtATc3gBYgABUYA.Mk_izXOA-UXWu7lBXfZWNVw_5zHYPNKsIR811z7EM5s
Logging in... done
Logged in as theo.philippe@edu.devinci.fr

C:\Users\theop\Desktop\FinalProject-Chatbot>git init
Reinitialized existing Git repository in C:/Users/theop/Desktop/FinalProject-Chatbot/.git/

C:\Users\theop\Desktop\FinalProject-Chatbot>git add .
warning: LF will be replaced by CRLF in package.json.
The file will have its original line endings in your working directory

C:\Users\theop\Desktop\FinalProject-Chatbot>git commit -m "first"
[master c46146d] first
2 files changed, 37 insertions(+), 89 deletions(-)
rewrite matcher/index.js (78%)
rename package-lock.json => package.json (98%)

C:\Users\theop\Desktop\FinalProject-Chatbot>heroku git:remote -a at-chatbot
set git remote heroku to https://git.heroku.com/at-chatbot.git

C:\Users\theop\Desktop\FinalProject-Chatbot>
```

After a final ‘>> git push heroku master’, the app is deployed as we can see in Heroku, and we can get the webhook.

```
C:\Users\theop\Desktop\FinalProject-Chatbot>heroku git:remote -a at-chatbot
set git remote heroku to https://git.heroku.com/at-chatbot.git
```

webhook

← → ↻ dashboard.heroku.com/apps/at-chatbot

Salesforce Platform

HEROKU Jump to Favorites, Apps, Pipelines, Spaces...

Personal > at-chatbot ☆ Open app More ▾

Overview Resources Deploy Metrics Activity Access Settings

Installed add-ons \$0.00/month [Configure Add-ons](#)

There are no add-ons for this app
You can add add-ons to this app and they will show here. [Learn more](#)

Dyno formation \$0.00/month [Configure Dynos](#)

This app is using free dynos

web npm start ON

Collaborator activity [Manage Access](#)

theo.philippe@edu.devinci.fr 1 deploy

Latest activity [All Activity](#)

- theo.philippe@edu.devinci.fr: Deployed 4b57e996
Today at 11:19 AM · v3
- theo.philippe@edu.devinci.fr: Build succeeded
Today at 11:19 AM · [View build log](#)
- theo.philippe@edu.devinci.fr: Build failed
Today at 11:08 AM · [View build log](#)
- theo.philippe@edu.devinci.fr: Build failed
Today at 11:04 AM · [View build log](#)
- theo.philippe@edu.devinci.fr: Build failed
Today at 11:02 AM · [View build log](#)
- theo.philippe@edu.devinci.fr: Build failed
Today at 10:57 AM · [View build log](#)

app deployed

Now troubles begin, because there are some logs problems I couldn't identify and Heroku did not give any hints, even in the Heroku CLI where the problem is not showed.

← → ↻ at-chatbot.herokuapp.com

Application error

An error occurred in the application and your page could not be served. If you are the application owner, [check your logs for details](#).
You can do this from the Heroku CLI with the command

```
heroku logs --tail
```

Log error in the browser

```

C:\> Invite de commandes - heroku logs --tail
2021-03-27T12:03:28.381860+00:00 heroku[web.1]: State changed from starting to crashed
2021-03-27T12:52:24.243353+00:00 heroku[router]: at=error code=H10 desc="App crashed" method=GET path="/" host=at-chatbot.herokuapp connect= service= status=503 bytes= protocol=https
2021-03-27T12:52:24.531618+00:00 heroku[router]: at=error code=H10 desc="App crashed" method=GET path="/favicon.ico" host=at-chatbot.herokuapp connect= service= status=503 bytes= protocol=https
2021-03-27T12:53:17.018694+00:00 heroku[router]: at=error code=H10 desc="App crashed" method=GET path="/" host=at-chatbot.herokuapp connect= service= status=503 bytes= protocol=https
2021-03-27T12:53:17.270961+00:00 heroku[router]: at=error code=H10 desc="App crashed" method=GET path="/favicon.ico" host=at-chatbot.herokuapp connect= service= status=503 bytes= protocol=https

```

Code error 'H10' identify in the CLI which is not documented

4.2. Messenger deployment

Now we have to enter the webhook in Facebook Developer, but as our app doesn't work on the internet, we cannot render the webhook.

FACEBOOK for Developers

Documentation Outils Assistance Mes applications Rechercher dans la documentation développeur

at chatbot ID d'app : 280501206916330 Type d'app : Entreprise Voir Analytics Aide

Page.

Modifier l'URL de rappel

URL de rappel

Les demandes de validation et les notifications de Webhook pour cet objet seront envoyées à cette URL.

Vérifier le jeton

Token que vous renverra Facebook dans le cadre de la vérification de l'URL de rappel.

En savoir plus Annuler Vérifier et enregistrer

Pour recevoir des messages et d'autres événements envoyés par les utilisateurs de Messenger, l'app doit activer l'intégration webhooks.

Appeler l'URL de rappel

Est-ce que vos Pages seront affectées par les mises à jour dues aux nouvelles règles de confidentialité en Europe ?

Vérifiez si votre Page est affectée par les mises à jour que nous effectuons en raison des nouvelles règles de confidentialité en Europe. Consultez la [documentation pour les développeurs](#) pour obtenir plus d'informations sur les critères.

Entrez les ID de Page séparés par une virgule « , », un point-virgule « ; » ou une espace « ».

Annuler Envoyer