# **Movie Lookup System**

This project demonstrates data mining techniques by using an API key to the OMDb API website (<a href="https://omdbapi.com/">https://omdbapi.com/</a>). The system allows users to input any movie title into the 'search\_movie' function as an argument to retrieve detailed information about that movie. It will parse through the retrieved data from the website and present it to the user in an easy-to-read format. The system will also retrieve the movie's poster and save it to the user's current directory, printing a success message, along with the directory it was saved into. If the user inputs an invalid movie title, the system will let the user know by displaying an error message that the movie was not found.

## **System Features**

This movie lookup system retrieves movie details, such as the title, release year, genre, director, and plot, using the OMDb API based on the argument (or movie title) given in the search function. It will also download the movie's poster into the user's current directory, printing out a success message if there is one available. If an invalid movie title is given as an argument, the system will display an error message stating that the movie was not found.

### **Installations and Requirements**

This system will require the following Python libraries to be imported in order to retrieve information from the API call, parse through the data, handle errors, and save files to the current directory:

- urllib.request
- urllib.parse
- urllib.error
- ison
- os

You are also required to obtain your own OMDb API key to call information. You can do so by signing up <a href="here">here</a>. Once you have obtained your own API key, you can either dump it into a JSON file dictionary using 'json.dump' within the same directory as your script (this is what I did), or you can simply add your key to cell number 4, where it says "apikey = '&apikey=' + my\_key" and replace the 'my\_key' portion with your key. The system will not work without an API key.

## **Using the System**

You can use the lookup system in either Jupyter Notebook or any other Python IDE, such as PyCharm. This system could also be run in a Python terminal. If you wish to use it in Jupyter Notebook, download the .ipynb file for use in your own Jupyter Notebook or copy each cell into your Jupyter Notebook. You may also copy and paste the code into another Python IDE if you prefer a different IDE besides Jupyter Notebook. If you wish to use it in a Python

terminal, copy and paste the cells into the terminal and run it using the search\_movie() function with a movie title as the argument.

The script receives a movie title input as an argument within the search\_movie() function. After receiving the input, it will make an API call to OMDb, retrieve the movie information, and print it out in a user-friendly format. If a poster is available, it will be downloaded to the user's current directory, and a success message will be displayed. In cases where the input movie title is invalid, the user will be informed with an error message.

#### Contact

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