

Documentation Python project

Task 1

API: Studio Ghibli

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The first task of the project aimed at collecting data from an API, “Studio Ghibli API” was chosen. The latter grants relevant information on the films that the Japanese studio has produced within a certain time frame.

Therefore, after having accessed and viewed the relevant data, the following 5 different APIs were observed:

- /films: provides insights on films
- /people: gives information about the characters of each film
- /locations: specifies the names of the locations in which the films are set and their climate properties
- /vehicles: outlines the 3 main types of vehicles employed in the films
- /species: defines the living species present in the films, addressing attention on their imaginary nature

Indeed, the link used to access the information concerning the Studio Ghibli API was the following <https://ghibliapi.herokuapp.com/#section/Studio-Ghibli-API>. From the latter, insights about the 5 APIs were derived by simply adding to the end of this link <https://ghibliapi.herokuapp.com> the specific APIs connotation (/films, /people, /species, /vehicles, /locations) according to which dataframe were to be generated.

The objective of this first task was to build a full dataset. This entailed the construction of a .csv file: a plain text file containing a list of data.

Since there are 5 different APIs contained in the Studio Ghibli API, the procedure carried out in order to obtain the 5 .csv files has been the same for each of them.

1. A request has been made to the url in order to access the API (the url has been changed according to which of the 5 different APIs was selected).
2. Json files were transformed in order to get a dataframe for each of the 5 APIs.
3. Pandas library (important library exploited for data analysis) has been imported so to allow this transformation and to enable operations on the data
4. 5 distinct dataframes for each of the APIs were obtained
5. For the sake of building readable and interpretable dataframes, unnecessary information was eliminated by dropping redundant variables from the initial dataset of each API.
6. Finally, .csv files for each of the 5 dataframes were generated

In conclusion, the data collection procedure has shed light on the advantages of transforming a Json file into a .csv file:

- The .csv file is of smaller size compared to a Json file, so the advantage is that it can be stored and saved easily.
- Text editors (Word, Notepad, Textpad, Microsoft edit, WordPad ect.) open the csv.files efficiently.