6.0 hours

Project 8

Movie API Analysis

Why can’t I submit this project yet?

You must first complete all prior Techdegree content before you can submit this project. Additionally, you cannot submit more than one project at a time.

Submit for Review

Your current activity is Graphing Video Game Sales.

- Getting Started
- Instructions
- How You'll Be Graded

Project Instructions

To complete this project, follow the instructions below. If you get stuck, ask a question on Slack or in the Treehouse Community.

11 steps

- **Create a project folder and set up a virtual environment in this folder and install Python’s `requests` library.**
- **Create a `requirements.txt` file.**
- **Create a python file called movie_requests.py to hold your code**
- **At the top of the file, import `requests`, `csv`, and your API key**
- **Create a function to request data from the OMDb API for each movie in the CSV file using their IMDB ids.**
- **Save the returned data to a new CSV file named `movies.csv`. It should include:**
    - Movie Title (string)
    - Runtime (integer)
    - Genre (string)
    - Award Wins (integer)
    - Award Nominations (integer)
    - Box Office (integer)

  Note: When the grader runs your file it should make the requests and create the CSV file without errors.
- **Open your project folder in JupyterLab and create a new notebook file called `movie_analysis`**

- **At the top of your notebook file, import pandas, matplotlib, and your movies.csv file**

- **Answer the following questions in your notebook file:**

    - (Graph) What was the runtime for each movie?
    - What movie had the longest runtime?
    - Is there any relationship between the length of the movie (runtime) and the number of awards a movie won?
    - (Graph) How many awards and nominations did each movie receive?

- **Use markdown cells in your Jupyter Notebook file to separate out each question. Write out how you got your answers and make sure to clearly note the answer to each question.**

- **Create a presentation of your analysis using Google Sheets. It should include:**

    - a title page
    - Information about the data used
    - details about your analysis (more than 1 page)
    - Conclusion

Extra Credit

To get an "exceeds" rating, complete all of the steps below:

4 steps

- **Add 5 movies of your choice. You can either add them to the CSV or add them via your python file. The python program should then call the movie API to gather data on these 5 movies as well and add them to the CSV for analysis. They should be included in each analysis question.**

    Note: To find a movie's IMDB id, you can search for the movie on IMDB, and then in the address bar, you will see a URL similar to this one for The Grand Budapest Hotel `https://www.imdb.com/title/tt2278388/?ref_=hm_tpks_tt_i_7_pd_tp1_cp`*. The IMDB id is* `tt2278388` *for this movie.*

- **Add 3 additional columns of information to the movies.csv file. Ex:**

    - Rated
    - Director
    - Released
    - Language
    - etc.

- **Answer the following additional questions:**

    - Is there a relationship between the amount of box office earnings a movie had and the amount of total nominations the movie received (total nominations = awards wins + award nominations)?
    - Is there a relationship between box office earnings and movie runtimes?
    - (Graph) How much did each movie earn at the box office?
    - (Graph) What is the total count of each genre present in the dataset? (How many times does fantasy, drama, adventure, etc. show up)

- **Use markdown cells in your Jupyter Notebook file to separate out each question. Write out how you got your answers and make sure to clearly note the answer to each question.**

- **NOTE: Getting an "Exceed Expectations" grade.**

    - See the rubric in the "**How You'll Be Graded**" tab above for details on what you need to receive an "Exceed Expectations" grade.
    - Passing grades are final. If you try for the "Exceeds Expectations" grade, but miss an item and receive a “Meets Expectations” grade, you won’t get a second chance. Exceptions can be made for items that have been misgraded in review.
    - Always mention in the comments of your submission or any resubmission, what grade you are going for. Some students want their project to be rejected if they do not meet all Exceeds Expectations Requirements, others will try for all the "exceeds" requirement but do not mind if they pass with a Meets Expectations grade. Leaving a comment in your submission will help the reviewer understand which grade you are specifically going for

Project Resources

Project Files

Oscar Winners

Workshop

Data from APIs

Course

Introduction to REST APIs

Need Help?

Have questions about this project? Start a discussion with the community and Treehouse staff.

Get Help