

requests

Introduction

This is a project that pulls data off starwar API

Setup

- Create `virtualenv`

```
virtualenv venv
```

- Activate virtualenv

```
source venv/bin/activate # UNIX  
venv\Scripts\activate # WINDOWS
```

- Install dependencies (using virtual environment is recommended):

```
pip install -r requirements.txt
```

Usage

- Activate virtual env `source venv/bin/activate`
- Start the app with entry-point will be `python task_one.py`

Development notes

`starwars API` has following resources

- people (aka characters in the series)
 - film
 - species
 - vehicle
 - planets
 - starships
- Each character has `many-to-many` relationship with other resources

For example,

```
people (aka characters) <--> film      :: many-to-many
people                  <--> species  :: many-to-many
people                  <--> vehicles :: many-to-many
people                  <--> planets  :: many-to-many
people                  <--> starships :: many-to-many
```

coding style

- Since the code has been written in Python3.11, `function annotations` and `type-hinting` must be used across.
- `doc-strings` must be used to describe functions/classes/modules.
- Creating a decorator function to print log, every time you hit `starwar API endpoints`.
- Set your IDE (`pycharm`) character limit per line to maximum 100 (recommendation)

```
settings > preferences > editor > code style > Python > hard wrap > wrapping

# default value is 80 characters.
# you can change it to 100
```

- Set your configurations via `settings/secrets.yaml`; Do *NOT* commit file containing secrets.
- The generic functionality has been maintained under `commons`.

Task 1

The Star Wars API lists 82 main characters in the Star Wars saga. For the first task, we would like you to use a random number generator that picks a number between 1-82. Using these random numbers you will be pulling 15 characters from the API using Python.

SAMPLE OUTPUT OF TASK 1

```
[
  {
    "film": "Attack of the Clones",
    "characters": [
      {
        "name": "Anakin Skywalker",
        "homeworld": "<https://swapi.co/api/planets/1/>",
        "gender": "male"
      }
    ]
  },
  {
    "film": "Revenge of the Sith",
    "characters": [
      {
        "name": "Anakin Skywalker",
        "homeworld": "<https://swapi.co/api/planets/1/>",
        "gender": "male"
      }
    ]
  },
  {
    "film": "The Phantom Menace",
    "characters": [
      {
        "name": "Anakin Skywalker",
        "homeworld": "<https://swapi.co/api/planets/1/>",
        "gender": "male"
      }
    ]
  }
]
```

Task 2

The task 2 goes like following:

- Pull data for the the first movie in star wars
- Write the json data into a file named `output.txt`

- **SUBTASKS -**

1. Output should be only list of names (first name & last name) of characters in the movie.
2. Output should only print list of planet names used in the movie
3. Output should only print list of vehicle names used in the movie.

Notes/Warnings

Random number generator may produce some integers IDs within `range(1, 82)` which may not yield any results from `starwars API` (404s). In which case, we skip those IDs and store the rest.