**API Document**

**Name： Movies Recommendation System**

#### Resources: TMDB 5000 Movie Dataset, MovieLens 1M Dataset

**API:**

**1:** Recommend Movies by Features given by user.

# Detail: Get a list of similar movies based on dataset of other users’ ratings. This is same as the "Recommendation" rely on Collaborative Filtering.

**Method**: *GET /movielist*

**REQUEST URL** : *http://127.0.0.1:5000/movielist?rating=6&year=2015&genre=Crime*

**Request Parameters Form**

|  |  |
| --- | --- |
| Input Parameters Name | Type |
| Rating | Int (0,10) |
| Year (released date) | Int |
| Genre | String |

**Response Form**

|  |  |
| --- | --- |
| Output | type |
| id | int |
| title | String |
| tagline | String |
| overview | String |
| Release\_date | Date |
| popularity | Int |
| genres | String |
| keywords | String |
| Spoken languages | String |
| Production companies | String |
| Production countries | String |
| Vote average | float |
| Vote count | Int |
| Home page | String |
| index | Int |

**Response code**: 200 – Successful

404 -Movie was not found

**2: Recommend Movies by movie given by user.**

**Detail:** Get a list of Movies based on Features given by user.

**Method**: *GET /movies/{name}*

**REQUEST URL** : [*http://127.0.0.1:5000/movies/{name}*](http://127.0.0.1:5000/movies/%7bname%7d)

Request Parameters Form

|  |  |
| --- | --- |
| Input Parameters Name | Type |
| Movie name | String |

Response Form

Same as Response Form in 1.

Response code: 200 – Successful

404 -Movie was not found

**3: Authorization**

**Detail**: Implement Authorization based on JWT token.

**Method**: *GET /token*

**REQUEST URL** : *http://127.0.0.1:5000/token?username=admin&password=admin*

Request Parameters Form

|  |  |
| --- | --- |
| Input Parameters Name | Type |
| username | String |
| password | String |

Response Form

|  |  |
| --- | --- |
| Output | Type |
| token | String |

Response code: 200 – Successful

401 - authorization has been refused for those credentials.

**4: View API Usage Information**

**Detail:** Store information before each request.

**Method**: *GET /visit\_report*

**REQUEST URL** : *http://127.0.0.1:5000/visit\_report*

Request Parameters Form

|  |  |
| --- | --- |
| Input Parameters Name | Type |
| Log.csv | file |

Ps. Log.csv stores IP, URL, Timestamp of each request.

Response Form

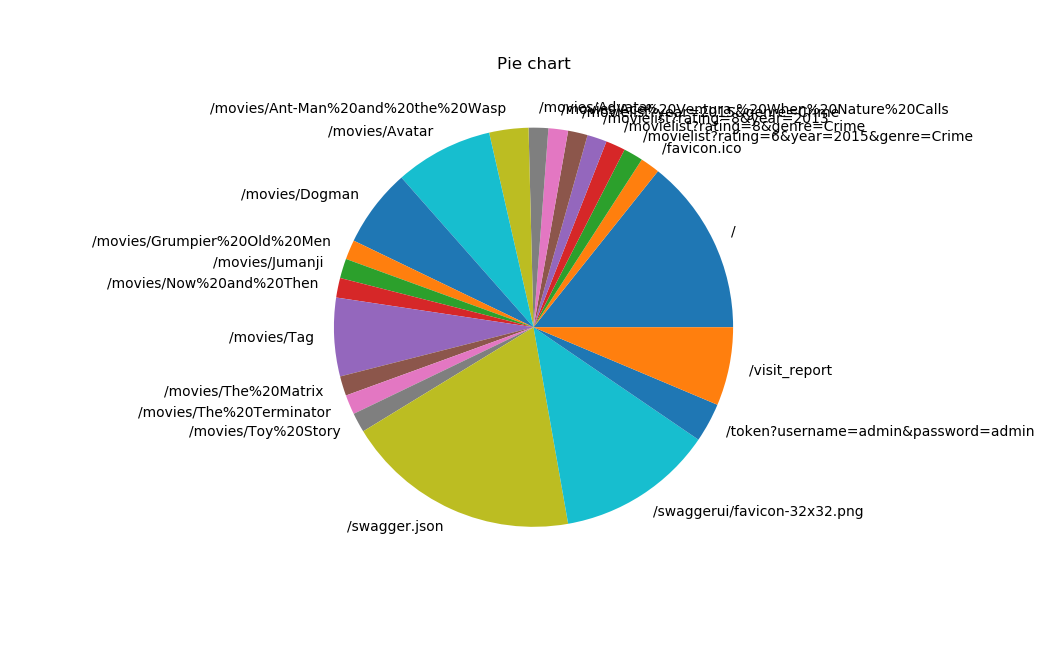
|  |  |
| --- | --- |
| Output | Type |
| IP | String |
| Request\_url | String |
| Timestamp | String |
| index | int |

Response code: 200 – Successful

404 -- File do not exists.

**5. Graph:**

Contain a graph shows the interaction between the number of request and request URL by running graph.py, graph like below:

****