### **Problem Statement:**

For a movie rating app, create a django rest api using django rest framework. The app needs to have the capability to

* list movies,
* logged in users can save movies to a watchlist or mark them watched.
* logged in users can view list of movies in their watchlist or watched list.

Build the corresponding rest APIs.

To populate the movies in your database, create a scraper to scrape IMDb’s top list (<https://www.imdb.com/chart/top/>). The scrapper should follow each movie’s url and extract details from the movie’s page. The details you want to save are up to you. The more the better.  
This scraper should ideally be triggered by an endpoint in your django api and accept any similar url e.g. <https://www.imdb.com/india/top-rated-indian-movies>.

Already existing movies should be only updated. Not replaced/duplicated.

Few points to keep in mind -

* use django-rest-framework
* use pipenv/virtualenv etc to make the project easy to setup for anyone, add a setup file
* use sqlite as database for portability
* users should be able to sign up and login, use token authentication
* take care of permissions - users cannot delete a movie, view other users’ watched list etc

Pass => rahul@trainman

### **API Documentation:**

The application is hosted in IP Address => <http://13.233.106.236/>

Base URL: <http://13.233.106.236:8000/apiv/v1/movie>

Authentication API:

**Login API: [POST]**

=> <http://13.233.106.236:8000/api/v1/movie/user/login/>

Data\_to\_pas =>

{

‘username’: ‘rahuladream’.

‘password’: ‘rahul@trainman’

}

What to expect:

{

"status": true,

"token": "eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJ1c2VyX2lkIjoxLCJ1c2VybmFtZSI6InJhaHVsYWRyZWFtIiwiZXhwIjoxNTk4MjA2NTk3LCJlbWFpbCI6InJhaHVsLnNpbmdoNDgwMEBnbWFpbC5jb20ifQ.TT0xX7MWNuRhTqBQLFYs2zP8ZgsZyfqjdx-3m9RaFk8"

}

**Register API: [POST]**

=> <http://13.233.106.236:8000/api/v1/movie/user/register/>

Data to pass =>

{

‘username’: ‘’,

‘email’ : ‘’,

‘password’: ‘’,

‘first\_name’: ‘’,

‘last\_name’: ‘’

}

What to expect:

{

"email": "sample\_user@gmail.com",

"username": "sample\_user",

"first\_name": "Sample",

"last\_name": "User",

"token": "eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJ1c2VyX2lkIjoyLCJ1c2VybmFtZSI6InNhbXBsZV91c2VyIiwiZXhwIjoxNTk4MjA2OTQ1LCJlbWFpbCI6InNhbXBsZV91c2VyQGdtYWlsLmNvbSJ9.thDf7olhmg4rrRQPrX4\_4kC8AOONOEVoc-YN4ZMKxVE"

}

How to sync or run scrapping Server:

1. It will run asynchronously with the help of rabbimq
2. Multithreading makes it as fast as possible
3. Normal time to complete 2min of 250 data

Please note: sync\_imdb API can be performed only by the API Authentication credentials

**Scrapper IMDB [POST]**

[POST]

<http://13.233.106.236:8000/api/v1/movie/sync_imdb/>

s

What to pass =>

{

‘imdb\_url’ : ‘<https://www.imdb.com/chart/top/>’

}

What to expect:

We are scrapping IMDB. We will notify once done.

**Movies List [GET]**

=> [http://13.233.106.236:8000/api/v1/movie/movie\_lists](http://127.0.0.1:8000/api/v1/movie/movie_lists)

What to pass =>

**Nothing**

What to Expect:

{

"status": true,

"data": [

{

"id": 224,

"title": "Gol Maal",

"movieId": "tt0079221",

"release\_date": 1979,

"star\_cast": "Amol Palekar, Bindiya Goswami, Deven Verma |",

"rating": 8.5,

"votes": "8.6 based on 17,329 user ratings",

"links": "/title/tt0079221/",

"trailer": "https://www.imdb.com//video/imdb/vi1489026841?playlistId=tt0079221",

"summary": "Ramprasad is a recent college graduate who finds a job with a finicky man, Bhavani Shankar, who believes that a man without a mustache is a man without a character. Bhavani Shankar is also against any of his employees indulging in recreation of any kind. When Ramprasad is caught by his boss at a hockey match, he has to invent a twin brother, the clean-shaven Laxman Prasad, to save his job. When Bhavani's daughter falls in love with the clean-shaven Laxman Prasad, and insists on marrying him, and Bhavani insists she should marry Ramprasad, things take a whacky turn. A fake mother and a hilarious chase are other enjoyable features involved in this comedy.",

"img\_source": "https://m.media-amazon.com/images/M/MV5BMjA4OTczODgxNF5BMl5BanBnXkFtZTgwMDAzMTU2NDE@.\_V1\_UY67\_CR2,0,45,67\_AL\_.jpg",

"taglines": "No Tagline Found",

"certificate": "No Certificate Found",

"trivia": "The Name of Bhavani Shankar's (Utpal Dutt's Bungalow) in the movie is Bindiya. Bindiya Gowsami, plays the role of Bhavani Shankar's daughter, Urmila in the movie.You can see that in the scene, where Amol Palekar gets caught and Bhavani Shankar is taking his car out of the gate to chase him See more »",

"goofs": "No Goofs Found",

"country": "No Country Origin Found",

"language": "No Language Found",

"budget": "No Budget Detail Found",

"gross": "No Gross Record Found",

"cumulative": "No Cumulative Record Found",

"created\_at": "2020-08-22T10:56:49.328312Z",

"updated\_at": "2020-08-22T10:56:49.328368Z"

},

{

"id": 225,

"title": "Pather Panchali",

"movieId": "tt0048473",

"release\_date": 1955,

"star\_cast": "Kanu Bannerjee, Karuna Bannerjee, Subir Banerjee |",

"rating": 8.5,

"votes": "8.6 based on 22,078 user ratings",

"links": "/title/tt0048473/",

"trailer": "https://www.imdb.com//video/imdb/vi3114774553?playlistId=tt0048473",

"summary": "The story of a young boy, Apu, and life in his small Indian village. His parents are quite poor - his father Harihar, a writer and poet, gave away the family's fruit orchard to settle his brother's debts. His sister Durga and an old aunt also still lives with them. His mother Sarbojaya bears the brunt of the family's situation. She scrapes by and sells her personal possessions to put food on the table and has to bear the taunts of her neighbors as Durga is always stealing fruit from their orchard. Things get worse when Harihar disappears for five months and Durga falls ill. Even after Harihar returns, the family is left with few alternatives.",

"img\_source": "https://m.media-amazon.com/images/M/MV5BNDE5YmMxYjEtZjNjNC00NjM2LWE2ZjctOTkyNGMxODRiMGNiXkEyXkFqcGdeQXVyNTgyNTA4MjM@.\_V1\_UY67\_CR1,0,45,67\_AL\_.jpg",

"taglines": "No Tagline Found",

"certificate": "No Certificate Found",

"trivia": "The original negative for the film was burned in a fire in 1993. Amazingly, the damaged film was restored as the negative was rehydrated, repaired and scanned in 4K resolution. See more »",

"goofs": "Although the film is set in early 20th Century rural India (a time in which public health campaigns presumably did not exist), when Apu and Durga are shown hiding in the fields waiting to catch a glimpse of the train, a vaccination mark is clearly visible on the right arm of Uma Das Gupta, who portrays Durga. See more »",

"country": "No Country Origin Found",

"language": "No Language Found",

"budget": "No Budget Detail Found",

"gross": "No Gross Record Found",

"cumulative": "No Cumulative Record Found",

"created\_at": "2020-08-22T10:56:50.520837Z",

"updated\_at": "2020-08-22T10:56:50.520899Z"

},

]

**Single Movie Fetch [GET]**

[http://13.233.106.236:8000/api/v1/movie/movie\_list/224/](http://127.0.0.1:8000/api/v1/movie/movie_list/224/)

What to pass =>

Nothing

What to expect =>

{

"status": true,

"data": {

"id": 224,

"title": "Gol Maal",

"movieId": "tt0079221",

"release\_date": 1979,

"star\_cast": "Amol Palekar, Bindiya Goswami, Deven Verma |",

"rating": 8.5,

"votes": "8.6 based on 17,329 user ratings",

"links": "/title/tt0079221/",

"trailer": "https://www.imdb.com//video/imdb/vi1489026841?playlistId=tt0079221",

"summary": "Ramprasad is a recent college graduate who finds a job with a finicky man, Bhavani Shankar, who believes that a man without a mustache is a man without a character. Bhavani Shankar is also against any of his employees indulging in recreation of any kind. When Ramprasad is caught by his boss at a hockey match, he has to invent a twin brother, the clean-shaven Laxman Prasad, to save his job. When Bhavani's daughter falls in love with the clean-shaven Laxman Prasad, and insists on marrying him, and Bhavani insists she should marry Ramprasad, things take a whacky turn. A fake mother and a hilarious chase are other enjoyable features involved in this comedy.",

"img\_source": "https://m.media-amazon.com/images/M/MV5BMjA4OTczODgxNF5BMl5BanBnXkFtZTgwMDAzMTU2NDE@.\_V1\_UY67\_CR2,0,45,67\_AL\_.jpg",

"taglines": "No Tagline Found",

"certificate": "No Certificate Found",

"trivia": "The Name of Bhavani Shankar's (Utpal Dutt's Bungalow) in the movie is Bindiya. Bindiya Gowsami, plays the role of Bhavani Shankar's daughter, Urmila in the movie.You can see that in the scene, where Amol Palekar gets caught and Bhavani Shankar is taking his car out of the gate to chase him See more »",

"goofs": "No Goofs Found",

"country": "No Country Origin Found",

"language": "No Language Found",

"budget": "No Budget Detail Found",

"gross": "No Gross Record Found",

"cumulative": "No Cumulative Record Found",

"created\_at": "2020-08-22T10:56:49.328312Z",

"updated\_at": "2020-08-22T10:56:49.328368Z"

}

}

**Marking movie to watch or watched list [POST]**

[http://13.233.106.236:8000/api/v1/movie/watch\_or\_watched/](http://127.0.0.1:8000/api/v1/movie/watch_or_watched/)

Action => [‘watch\_list’, ‘watched\_list’]

What to pass =>

{

‘movie’: 224,

‘action’: ‘watch\_list’

}

Expect =:>

{

"status": true,

"message": "Movie added to watch/watched list"

}

**Updating the mark as a watch or watched list [PUT]**

[http://13.233.106.236:8000/api/v1/movie/watch\_or\_watched/](http://127.0.0.1:8000/api/v1/movie/watch_or_watched/)

Action => [‘watch\_list’, ‘watched\_list’]

What to pass =>

{

‘movie’: 224,

‘action’: ‘watched\_list’

}

Expect =:>

{

"status": true,

"message": "Movie updated to watch/watched list."

}

**Deleting the Marked Movies[DELETE]**

[http://13.233.106.236:8000/api/v1/movie/watch\_or\_watched/](http://127.0.0.1:8000/api/v1/movie/watch_or_watched/)

Action => [‘watch\_list’, ‘watched\_list’]

What to pass =>

{

‘movie’: 224,

‘action’: ‘watched\_list’

}

Expect =:>

{

"status": true,

"message": "Movie deleted from watch/watched list."

}

**TO See you Watch List [GET]**

[http://13.233.106.236:8000/api/v1/movie/my\_watch\_list/](http://127.0.0.1:8000/api/v1/movie/my_watch_list/)

What to pass =>

Nothing

Expect =>

{

"status": true,

"data": [

{

"movie": {

"id": 224,

"title": "Gol Maal",

"movieId": "tt0079221",

"release\_date": 1979,

"star\_cast": "Amol Palekar, Bindiya Goswami, Deven Verma |",

"rating": 8.5,

"votes": "8.6 based on 17,329 user ratings",

"links": "/title/tt0079221/",

"trailer": "https://www.imdb.com//video/imdb/vi1489026841?playlistId=tt0079221",

"summary": "Ramprasad is a recent college graduate who finds a job with a finicky man, Bhavani Shankar, who believes that a man without a mustache is a man without a character. Bhavani Shankar is also against any of his employees indulging in recreation of any kind. When Ramprasad is caught by his boss at a hockey match, he has to invent a twin brother, the clean-shaven Laxman Prasad, to save his job. When Bhavani's daughter falls in love with the clean-shaven Laxman Prasad, and insists on marrying him, and Bhavani insists she should marry Ramprasad, things take a whacky turn. A fake mother and a hilarious chase are other enjoyable features involved in this comedy.",

"img\_source": "https://m.media-amazon.com/images/M/MV5BMjA4OTczODgxNF5BMl5BanBnXkFtZTgwMDAzMTU2NDE@.\_V1\_UY67\_CR2,0,45,67\_AL\_.jpg",

"taglines": "No Tagline Found",

"certificate": "No Certificate Found",

"trivia": "The Name of Bhavani Shankar's (Utpal Dutt's Bungalow) in the movie is Bindiya. Bindiya Gowsami, plays the role of Bhavani Shankar's daughter, Urmila in the movie.You can see that in the scene, where Amol Palekar gets caught and Bhavani Shankar is taking his car out of the gate to chase him See more »",

"goofs": "No Goofs Found",

"country": "No Country Origin Found",

"language": "No Language Found",

"budget": "No Budget Detail Found",

"gross": "No Gross Record Found",

"cumulative": "No Cumulative Record Found",

"created\_at": "2020-08-22T10:56:49.328312Z",

"updated\_at": "2020-08-22T10:56:49.328368Z"

},

"action": "watch\_list"

}

]

}

**TO See you Watched List [GET]**

[http://13.233.106.236:8000/api/v1/movie/my\_watched\_list/](http://127.0.0.1:8000/api/v1/movie/my_watch_list/)

What to pass =>

Nothing

Expect =>

{

"status": true,

"data": [

{

"movie": {

"id": 224,

"title": "Gol Maal",

"movieId": "tt0079221",

"release\_date": 1979,

"star\_cast": "Amol Palekar, Bindiya Goswami, Deven Verma |",

"rating": 8.5,

"votes": "8.6 based on 17,329 user ratings",

"links": "/title/tt0079221/",

"trailer": "https://www.imdb.com//video/imdb/vi1489026841?playlistId=tt0079221",

"summary": "Ramprasad is a recent college graduate who finds a job with a finicky man, Bhavani Shankar, who believes that a man without a mustache is a man without a character. Bhavani Shankar is also against any of his employees indulging in recreation of any kind. When Ramprasad is caught by his boss at a hockey match, he has to invent a twin brother, the clean-shaven Laxman Prasad, to save his job. When Bhavani's daughter falls in love with the clean-shaven Laxman Prasad, and insists on marrying him, and Bhavani insists she should marry Ramprasad, things take a whacky turn. A fake mother and a hilarious chase are other enjoyable features involved in this comedy.",

"img\_source": "https://m.media-amazon.com/images/M/MV5BMjA4OTczODgxNF5BMl5BanBnXkFtZTgwMDAzMTU2NDE@.\_V1\_UY67\_CR2,0,45,67\_AL\_.jpg",

"taglines": "No Tagline Found",

"certificate": "No Certificate Found",

"trivia": "The Name of Bhavani Shankar's (Utpal Dutt's Bungalow) in the movie is Bindiya. Bindiya Gowsami, plays the role of Bhavani Shankar's daughter, Urmila in the movie.You can see that in the scene, where Amol Palekar gets caught and Bhavani Shankar is taking his car out of the gate to chase him See more »",

"goofs": "No Goofs Found",

"country": "No Country Origin Found",

"language": "No Language Found",

"budget": "No Budget Detail Found",

"gross": "No Gross Record Found",

"cumulative": "No Cumulative Record Found",

"created\_at": "2020-08-22T10:56:49.328312Z",

"updated\_at": "2020-08-22T10:56:49.328368Z"

},

"action": "watch\_list"

}

]

}