

“TV Show Tracker” - A TV Show Recommendation System Project Proposal

**CS-GY 9223 Cloud Computing
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Project Name:

“TV Show Tracker” - A TV show Recommendation System

Project Overview:

Nowadays, watching TV Show is one of the most common ways to pass time, when someone wants to watch TV Shows, it is very time-consuming and unpleasant to spend a lot of time to choose which TV Show to watch. Therefore, our group designs an app, “TV Show Tracker”, to recommend a TV Show based on the user’s interests and locations. It uses IMDN API, TVDB API and Trakt API to collect data of TV Show and platforms have that TV show. When a user wants to watch a TV Show to relax, all he needs is to turn on this app, and it will recommend TV Show and the most appropriate platform play that TV show. Moreover, our website will also distinguish between the released and unreleased TV series. For the unreleased TV show, the user can create events on google calendar based on the release time of the TV show interested. When the event is coming, our website will push notifications to remind the user when and which platform to watch the TV Show.

Main Functions & Features:

1. User management:

- ***User login, log out***
- ***User Register***
 - ***Register with a cell-phone number***
 - ***Register with email***

2. Show the list of TV shows:

- ***TV series and website showing this TV shows***

- *Distinguish between released and unreleased TV shows*
- *For the coming TV shows, rank by number of days it's coming out*

3. Recommend TV show:

- *Recommend TV shows by the style of TV series the user clicked*
- *Recommend TV shows in website user often browse (or the website user set)*
- *Recommend TV show through tags*
- *Recommend through chatbot*

4. Quick Search Box:

- *User can search TV show with its name*

5. Personalized Alert :

- *For TV shows interested, user can add the release date to google calendar*
- *When an event is coming, remind the user when and where to watch*

5. Rating :

- *User can rate TV show*
- *User can rate TV show website/platform*

6. List platforms and TV shows in sort of rates and popularity :

- *Show rates and popularity of each platform*
- *Show rates and popularity by analysis of all platforms' rate and popularity*

Technology Stack

1. React

React is one of the most famous front end frameworks. The time of response is faster than other front end frameworks. Besides, it makes our web pages compatible with different web browsers even for IE8. It also divides one web page into several different components, which gives flexibility to the developer and reduces the difficulty of modification of different components at the same time. For the front end pages in our web application, we use React to implement all of the functions including user login, playing TV show list, booking seats and rating of TV shows.

2. Lambda

Lambda function is one of the services from AWS. It runs the code and gives the response to the events that we set up for our application. We use Lambda functions for several different events including changing the data inside of DynamoDB database,

invoking API gateway to get the response of HTTP request, etc. By using Lambda functions, it helps us automatically run the scripts and saves the energy for us because we don't have to worry about where and how the scripts run inside of AWS.

3. *DynamoDB*

DynamoDB is one of the AWS services that supports NoSQL database service. It has advantages including faster response, easy to extend, flexible index. In our web application, we use DynamoDB to connect with Lambda functions and to implement fast response for the front end inquire request. Besides, we use it to store the data from our system and from Trakt API data.

4. *API gateway*

API Gateway is a service that the developer could use to create, publish, maintain, monitor, and secure APIs. AWS API Gateway handles all the tasks involved in accepting and processing up to hundreds of thousands of concurrent API calls, including traffic management, authorization, and access control, monitoring, and API version management.

5. *ELK Stack*

ELK stack is the acronym of Elasticsearch, Logstash, and Kibana. Elasticsearch is a search and analytics engine which could be used to search all kinds of the document with near real-time. Logstash is a server-side data processing pipeline that ingests data from multiple sources simultaneously, transforms it, and then sends it to a “stash” like Elasticsearch. Kibana lets users visualize data with charts and graphs in Elasticsearch. Amazon Elasticsearch Service is a fully managed service that makes it easy for use for operating Elasticsearch at scale and supports for Elasticsearch APIs, built-in Kibana, and integration with Logstash

6. *S3*

Amazon Simple Storage Service (Amazon S3) is an object storage service that we will use to store the trailer and picture of the TV show.

7. *Recommendation Algorithm*

Association Rule-based Recommendation

Content-based Recommendation

Collaborative Filtering

8. *EMR*

EMR is one of the AWS services that supports Hadoop and Spark. It helps the users handle the big data functionality. It can also combine with some other services inside of AWS including EC2, S3 and Dynamodb. Inside of our application, we use EMR to deal

with the data from our TV series API. Then we use the recommendation algorithm to give the result back to our users.

9. EC2

EC2 is a web service that provides secure, resizable compute capacity in the cloud. It provides you with complete control of your computing resources and lets you run on Amazon's proven computing environment. In our application, we use EC2 as the container of EMR to run big data functionality. It is also a container of the data from our API.

10. Cloud Search

CloudSearch is a service in the AWS that makes it simple and cost-effective to set up and manage a search solution for the application. It can support 34 languages and popular search features like keyword search, highlight etc. Inside our application, we use Cloud Search for searching related TV series by entering the name or description of the TV series.

11. SageMaker

Amazon SageMaker is a fully managed, modular service that helps developers and data scientists to build, train, and deploy machine learning models at scale, which support labeling raw data with active learning and also offer highly accurate training datasets.

We will use this service to run our TV show recommendation, when the user have seen some TV show, or like some TV show. We will recommend them some TV show they may like.

12. AWS Elemental Media Package

MediaPackage is a just-in-time video packaging and origination service that runs in the AWS Cloud. With MediaPackage, you can deliver highly secure, scalable, and reliable video streams to a wide variety of playback devices and content delivery networks (CDNs).

In our project, this service will help us to show trailer in the frontend. As for the video content, we will fetch that when users try to look then store in the S3. In the first time, the waiting time maybe a little longer. But it is a simple way to save the storage space, since there is no way to store all trailer in our servers.

13. SES

Amazon SES is an email platform that provides an easy, cost-effective way for you to send and receive email using your own email addresses and domains. We will use this

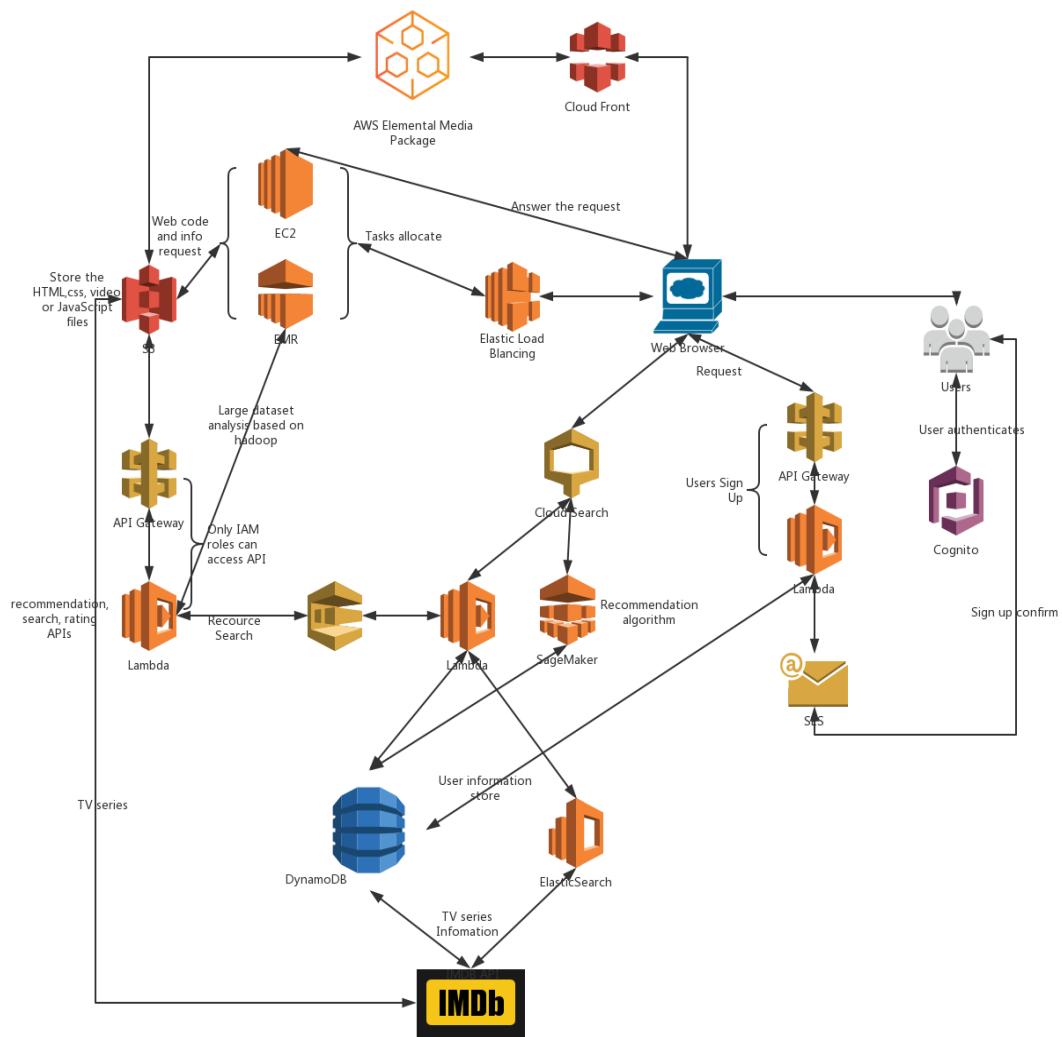
service to send the email notification or user verification email. For example, we could send some TV show recommendations or send today's TV schedule.

14. Cognito

Amazon Cognito provides authentication, authorization, and user management for your web and mobile apps. Your users can login directly with a username and password, or through a third party such as Facebook, Amazon, or Google.

With Cognito, we could easily handle user management and control our AWS service access. Also, we could record the users' activities for future recommendation.

Architecture diagram.



Implementation plan

Week 4: structure design

Week 5: search for appropriate API, study and use them to fetch data needed

Week 6~8: Infrastructure research and practice

Week 9: UI design and implementation

Week 10: Front-end and back-end integration

Week 11: test app

Data source API

1. IMDB API

To get the trailer of TV shows

The API gets data from sources like IMDb and returns results in JSON or XML format.

You can even search by IMDb ID to get similar results from the IMDb database. Check out the API endpoints to query different types of data including:

- lists of TV show titles
- TV show posters
- TV show episodes

2. TVDB API

To get the information on TV shows

- Episodes: Information about a specific episode
- Search: Search for a particular series
- Series: Information about a specific series
- Updates: Series that have been recently updated.

3. Trakt API

Use to get a recommendation list of TV shows, and rating of

- Get genres of the TV show, to recommend and search by genres
 - Get a list of all genres, including names and slugs.
- Get recommendations TV show
 - Personalized show recommendations for a user.
- Get Rating of a TV show
 - Returns rating (between 0 and 10) and distribution for a show.

4. Google calendar API:

Use to display, create and modify calendar events as well as work with many other calendar-related objects, such as calendars or access controls.

- Create Events
- Creating recurring events
- Synchronize Resources
- Push Notifications

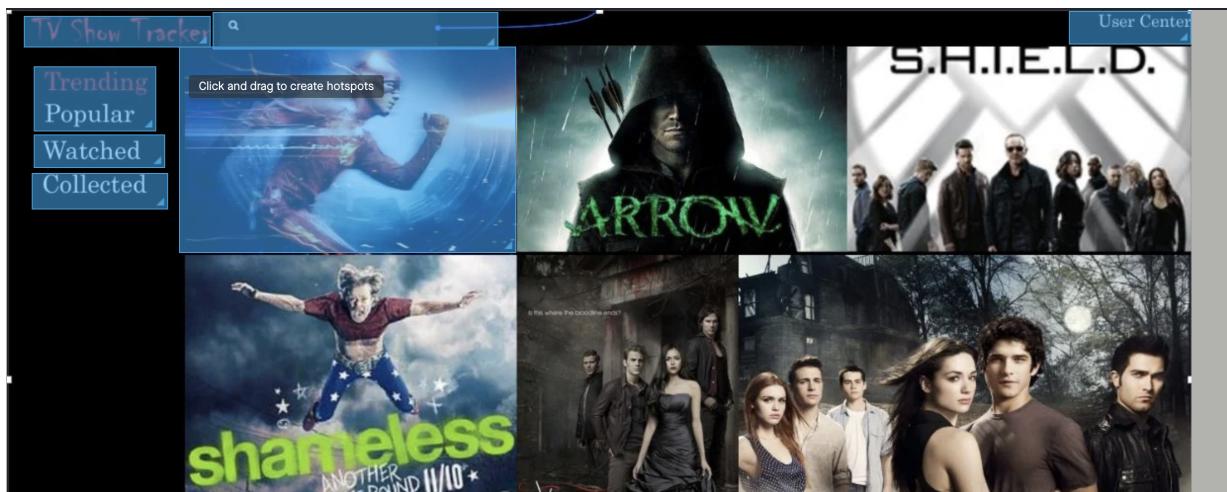
Invision Prototype

Here is Invision share URL:

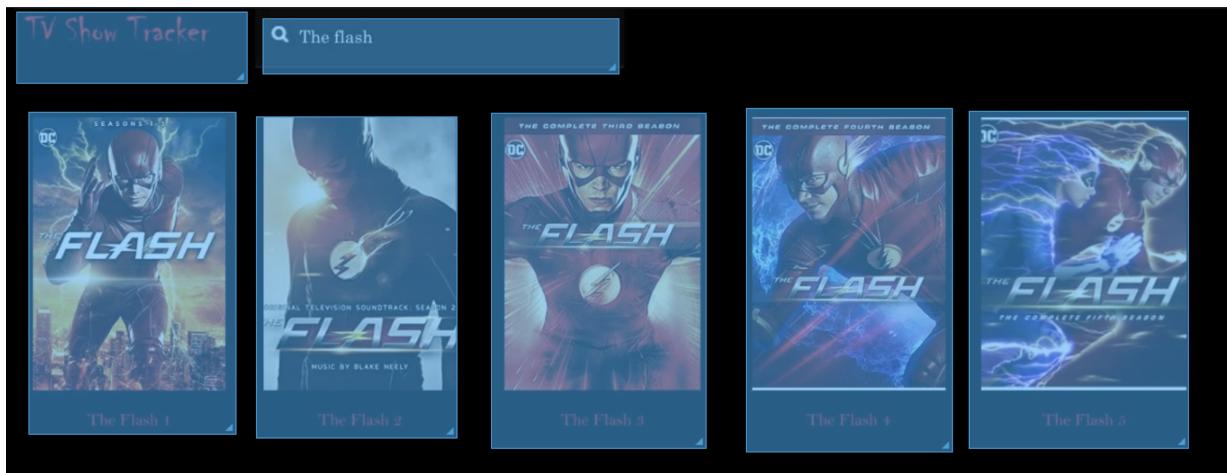
<https://movierecommendation.invisionapp.com/public/share/BKX1BM87J>

The pictures below show the location of hotspot of every pages.

Home page



Search Page



User profile

TV Show Tracker

User Center

TEST USER

Last Visited: 2019-11-01 15:32:10

History

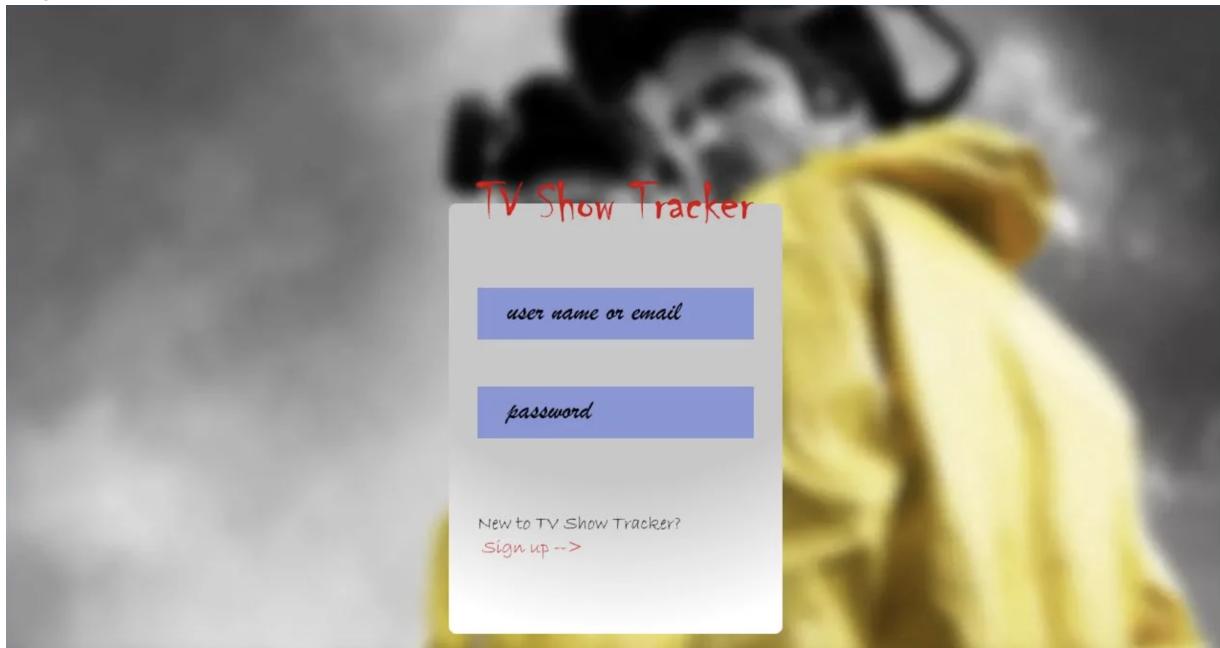
Special 2 Chronicles o...
Dec 7, 2019 4:19 PM

Special 3 Chronicles o...
Dec 7, 2019 4:19 PM

Special 4 Chronicles o...
Dec 7, 2019 4:19 PM

Collection

Login



TV Show Detail

TV Show Tracker  User Center



GO TO WATCH

The Flash : 2004

AIRS Tuesdays at 8:00 PM on The CW
PREMIERED October 7, 2014
RUNTIME 44 mins
TOTAL RUNTIME 3 days, 13 hours, 40 mins (122 episodes)
COUNTRY United States
LANGUAGE English
GENRES Drama, Fantasy, Science Fiction, Superhero

After being struck by lightning, Barry Allen wakes up from his coma to discover he's been given the power of super speed, becoming the Flash, fighting crime in Central City.

132 episodes

Artboard 1



1*01 Pilot
October 7, 2014 8:00 PM

CSI investigator Barry Allen awakens from a coma, nine months after he was hit by lightning, and discovers he has superhuman speed.

◀ ▶

API Gateway & lambda

| | | |
|---|--|---|
| <ul style="list-style-type: none"> ▼ /update-list <ul style="list-style-type: none"> OPTIONS POST ▼ /popular <ul style="list-style-type: none"> OPTIONS POST ▼ /recommend <ul style="list-style-type: none"> OPTIONS POST ▼ /-predict <ul style="list-style-type: none"> OPTIONS POST ▼ /search <ul style="list-style-type: none"> GET OPTIONS ▼ /user <ul style="list-style-type: none"> OPTIONS ▼ /login <ul style="list-style-type: none"> OPTIONS POST ▼ /register <ul style="list-style-type: none"> OPTIONS POST | <ul style="list-style-type: none"> ▼ /get-history <ul style="list-style-type: none"> OPTIONS POST ▼ /update-history <ul style="list-style-type: none"> OPTIONS POST ▼ /info <ul style="list-style-type: none"> OPTIONS ▼ /get-from-api <ul style="list-style-type: none"> OPTIONS POST ▼ /lists <ul style="list-style-type: none"> OPTIONS ▼ /create-list <ul style="list-style-type: none"> OPTIONS POST ▼ /delete-from-list <ul style="list-style-type: none"> OPTIONS POST ▼ /get-list <ul style="list-style-type: none"> OPTIONS ▼ /get-list-content <ul style="list-style-type: none"> OPTIONS POST ▼ /get-list-list <ul style="list-style-type: none"> OPTIONS POST | <ul style="list-style-type: none"> ▼ / <ul style="list-style-type: none"> ▼ /calendar <ul style="list-style-type: none"> OPTIONS POST ▼ /episodes <ul style="list-style-type: none"> OPTIONS ▼ /-get-episodes <ul style="list-style-type: none"> OPTIONS POST ▼ /get-episode-info <ul style="list-style-type: none"> OPTIONS POST ▼ /get-season <ul style="list-style-type: none"> OPTIONS POST ▼ /gern <ul style="list-style-type: none"> OPTIONS ▼ /get-genre-list <ul style="list-style-type: none"> OPTIONS ▼ /get-gern <ul style="list-style-type: none"> OPTIONS POST ▼ /history <ul style="list-style-type: none"> OPTIONS ▼ /delete-from-history <ul style="list-style-type: none"> OPTIONS POST |
|---|--|---|

Project-get-calendar

Get the coming tv show on each day of next week

{

```
{"statusCode": 200, "body": {"Monday": [[{"Kamen Rider", "2019-12-22T00:00:00.000Z", 3881032, 2016228, 30, 16}, {"Gegege no Kitarou", "2019-12-22T00:00:00.000Z", 3884242, 2016540, 1, 86}, {"Super Sentai", "2019-12-22T00:30:00.000Z", 3881028, 2016243, 43, 39}, {"Super Sentai", "2019-12-22T00:30:00.000Z", 3881214, 2016243, 43, 39}, {"Steven Universe Future", "2019-12-22T01:00:00.000Z", 3858315, 2009161, 1, 7}, {"Steven Universe Future", "2019-12-22T01:00:00.000Z", 3858316, 2009162, 1, 8}, {"Crikey! It's the Irwins", "2019-12-22T01:00:00.000Z", 3880177, 2016537, 2, 11}, {"Crikey! It's the Irwins", "2019-12-22T01:00:00.000Z", 3880178, 2016538, 2, 12}, {"ACTORS -Songs Connection-", "2019-12-22T01:30:00.000Z", 3834785, 1948121, 1, 12}, {"Destination Fear", "2019-12-22T03:00:00.000Z", 3836777, 2001293, 1, 9}, {"Saturday Night Live", "2019-12-22T04:30:00.000Z", 3813081, 1932642, 45, 10}, {"Super Dragon Ball Heroes", "2019-12-22T08:00:00.000Z", 3782084, 1512258, 1, 18}, {"Boruto: Naruto Next Generations", "2019-12-22T08:30:00.000Z", 3807806, 1993844, 1, 137}, {"Pocket Monsters", "2019-12-22T08:30:00.000Z", 3807806, 1993844, 1, 137}]}]
```

```
22T09:00:00.000Z", 3842326, 1994710, 1, 6], ["Special 7: Special Crime Investigation Unit", "2019-12-22T12:00:00.000Z", 3820401, 1947179, 1, 11],  
["Sword Dynasty", "2019-12-22T12:00:00.000Z", 3861594, 2007885, 1, 17],  
["Sword Dynasty", "2019-12-22T12:00:00.000Z", 3861595, 2007886, 1, 18],  
["Crash Landing on You", "2019-12-22T12:00:00.000Z", 3862332, 2015801, 1, 4],  
["Grand Maison Tokyo", "2019-12-22T12:00:00.000Z", 3867814, 1992558, 1, 10],  
["Queen: Love and War", "2019-12-22T12:30:00.000Z", 3864704, 2016478, 1, 4],  
["Rifle is Beautiful", "2019-12-22T14:00:00.000Z", 3834974, 1952144, 1, 10],  
["Indian Idol", "2019-12-22T14:30:00.000Z", 3882421, 1979131, 11, 22],  
["Vinland Saga", "2019-12-22T15:15:00.000Z", 3825004, 1947242, 1, 23],  
["\u015alad", "2019-12-22T19:00:00.000Z", 3870056, 2014276, 3, 10],  
["Countryfile", "2019-12-22T19:00:00.000Z", 3882581, 2020792, 31, 51], ["Jul i Blodfjell", "2019-12-22T19:15:00.000Z", 3770737, 1956024, 2, 22],  
["Keizersvrouwen", "2019-12-22T19:30:00.000Z", 3096850, 1968373, 1, 7], ["His Dark Materials", "2019-12-22T20:00:00.000Z", 3401462, 1974881, 1, 8], ["The Twelve", "2019-12-22T20:00:00.000Z", 3796569, 1954220, 1, 8], ["Harkum", "2019-12-22T20:45:00.000Z", 3774750, 1968197, 1, 10], ["A Christmas Carol", "2019-12-22T21:00:00.000Z", 3829007, 2023613, 1, 1], ["Midsomer Murders", "2019-12-22T21:00:00.000Z", 3844298, 2002455, 21, 4], ["Emergency Helicopter Medics", "2019-12-22T21:00:00.000Z", 3880190, 2015468, 3, 7], ["The Ranganation", "2019-12-22T21:00:00.000Z", 3880193, 2015469, 0, 1], ["Hidden", "2019-12-22T21:00:00.000Z", 3882930, 2015985, 2, 6], ["Naked News", "2019-12-22T22:00:00.000Z", 3557078, 1863243, 2019, 304], ["Black Sun", "2019-12-22T23:00:00.000Z", 3799617, 1980669, 2, 7], ["Wanna Taste?", "2019-12-22T23:30:00.000Z", 3882391, 2018593, 1, 30]]}}"
```

[Project-get-episodes](#)

Get the name and overview of episodes

```
{"name":"Sesame Street", "season_name":<TVSeason>: Sesame Street Season 50"}  
{"statusCode": 200, "body": {"message": ["Sesame Street S50E1 Big Bird Across America", "Sesame Street S50E2 The Great Sesame Street Cake Off", "Sesame Street S50E3 Pigs for Another Day", "Sesame Street S50E4 Getting Dressed, Not Stressed", "Sesame Street S50E5 A Dog and a Song!", "Sesame Street S50E6 Game Day on Sesame Street", "Sesame Street S50E7 Grouch University", "Sesame Street S50E8 A Recipe for Dance", "Sesame Street S50E9 Humpty Dumpty's Football Dream", "Sesame Street S50E10 Abby's Party Preparation", "Sesame Street S50E11 The Great Fruit Strike"]}}"
```

[Project-get-episode-info](#)

Get more information of episode, such as overview, link to watch and more detail, image of episode, and the date of first aired date

```
{"name":"Game of Thrones", "episode_name":>Game of Thrones S2E1 The North Remembers<}  
{"statusCode": 200, "body": {"message": "success achieved", "overview": "As Robb Stark and his northern army continue the war against the Lannisters, Tyrion arrives in King\u2019s Landing to counsel Joffrey and temper the young king\u2019s excesses. On the island of Dragonstone, Stannis Baratheon plots an invasion to claim his late brother\u2019s throne, allying himself with the"}}
```

fiery Melisandre, a strange priestess of a stranger god. Across the sea, Daenerys, her three young dragons, and the khalasar trek through the Red Waste in search of allies, or water. In the North, Bran presides over a threadbare Winterfell, while beyond the Wall, Jon Snow and the Night's Watch must shelter with a devious wildling.", "watch_exl": "<https://trakt.tv/shows/game-of-thrones/seasons/2/episodes/1?extended=full>", "images_ext": "<https://image.tmdb.org/t/p/w500/psRgsLrTrEKS0YGuPlH3BCfhzhh.jpg>", "first_aired_date": "2012-04-02 01:00:00", "rate": 8.1}}}"

Project-get-seasons

Get seasons of each show

```
{"name":"Sesame Street"}  
{"statusCode": 200, "body": {"seasons_name": ["Sesame Street Season 1",  
"Sesame Street Season 2", "Sesame Street Season 3", "Sesame Street Season 4",  
"Sesame Street Season 5", "Sesame Street Season 6", "Sesame Street Season 7",  
"Sesame Street Season 8", "Sesame Street Season 9", "Sesame Street Season  
10", "Sesame Street Season 11", "Sesame Street Season 12", "Sesame Street  
Season 13", "Sesame Street Season 14", "Sesame Street Season 15", "Sesame  
Street Season 16", "Sesame Street Season 17", "Sesame Street Season 18",  
"Sesame Street Season 19", "Sesame Street Season 20", "Sesame Street Season  
21", "Sesame Street Season 22", "Sesame Street Season 23", "Sesame Street  
Season 24", "Sesame Street Season 25", "Sesame Street Season 26", "Sesame  
Street Season 27", "Sesame Street Season 28", "Sesame Street Season 29",  
"Sesame Street Season 30", "Sesame Street Season 31", "Sesame Street Season  
32", "Sesame Street Season 33", "Sesame Street Season 34", "Sesame Street  
Season 35", "Sesame Street Season 36", "Sesame Street Season 37", "Sesame  
Street Season 38", "Sesame Street Season 39", "Sesame Street Season 40",  
"Sesame Street Season 41", "Sesame Street Season 42", "Sesame Street Season  
43", "Sesame Street Season 44", "Sesame Street Season 45", "Sesame Street  
Season 46", "Sesame Street Season 47", "Sesame Street Season 48", "Sesame  
Street Season 49", "Sesame Street Season 50"], "number_of_episodes": 35,  
"images": ["https://image.tmdb.org/t/p/w500/6tLr3ltWxZtIIho7mL4R0y2hHmw.jpg",  
https://image.tmdb.org/t/p/w500/sRBWMbmvoXTulaX60uzsjlHhIRu.jpg,  
https://image.tmdb.org/t/p/w500/pBze0kIolmWTXuqHj3wLoOrjBRi.jpg,  
https://image.tmdb.org/t/p/w500/cJFjMv4GCApwLhv4GQ3wSmrsaSO.jpg,  
https://image.tmdb.org/t/p/w500/e8suUuCVe9kuXlFk8S8hIBIdog9.jpg,  
https://image.tmdb.org/t/p/w500/z4DhwyTJca60FNjZcJwG7X2rSJ1.jpg,  
https://image.tmdb.org/t/p/w500/36YfEwJwwGUMff7cHTU75be5Gxo.jpg,  
https://image.tmdb.org/t/p/w500/mZyyccelU6lEXwT8ARUdHNbJSv4.jpg,  
https://image.tmdb.org/t/p/w500/1vu2DsZW6OkwjTrBjk00DFRzTg.jpg,  
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https://image.tmdb.org/t/p/w500/sP7hP6BIZMbc4Qls97LyE4nfKcu.jpg,  
https://image.tmdb.org/t/p/w500/pKLrSeYj1vFhmko18OyEWJkzZkq.jpg,  
https://image.tmdb.org/t/p/w500/gCecENWNPZpm0hypKYPKIST24wp.jpg,  
https://image.tmdb.org/t/p/w500/ee3NVlQhmYQUeWhuRUMTK8sTkrs.jpg,
```

```
"https://image.tmdb.org/t/p/w500/uVrEGnA60ATXwMEEwwlNehWXZLC.jpg",
"https://image.tmdb.org/t/p/w500/7pOrzwlI9hHwWXeMpatdIMYD6WL.jpg",
"https://image.tmdb.org/t/p/w500/90GiA8fS0SwvbyrLzySCZwBIMsj.jpg",
"https://image.tmdb.org/t/p/w500/iFmANER5i0UiFEoYdi5MHQQdAV2.jpg", "",
"https://image.tmdb.org/t/p/w500/7fdYhnc2aP1j7aMrPsUP5Eqv8e7.jpg",
"https://image.tmdb.org/t/p/w500/v61obPDbvzJers760eX3dH0eVbU.jpg",
"https://image.tmdb.org/t/p/w500/rBQ38stBcgXuFVF8KbUDwJ3YV1U.jpg",
"https://image.tmdb.org/t/p/w500/9RyT0172tmJNoCKVhTBSJG2Hnbb.jpg",
"https://image.tmdb.org/t/p/w500/9cs5T5RizUvGK4VFWB5GmA5RR9J.jpg",
"https://image.tmdb.org/t/p/w500/pqxQaERPssWnxSlmKmhtt02BtH9.jpg",
"https://image.tmdb.org/t/p/w500/q2Z4aCCHLR3hH1Rw63fU4qjoYWY.jpg"]}"
```

[Project-delete-from-history](#)

Delete the selected watch history in database

```
{"email":"abc@qq.com", "movie_name": "Game of Thrones", "season_num" : "2", "episode_num": "1"}
{"statusCode": 200, "body": {"message": "delete"}}
```

[Project-get-history](#)

Get all of the watched list of a certain user.

```
{"email":"abc@qq.com"}
{"statusCode": 200, "body": {"message": "success", "result": [[{"Game of Thrones", "2", "1", "2019-12-21", "https://image.tmdb.org/t/p/w500/psRgsLrTrEKS0YGuP1H3BCfhzhh.jpg"}]]}}
```

[Project-update-history](#)

When user watch a tv show, update this information to database.

```
{"email":"abc@qq.com", "movie_name": "Game of Thrones", "season": 2, "episodes": 1}
{"statusCode": 200, "body": {"message": "insert"}}
```

[Project-get-info](#)

Get information of a tv show, and then store it in the database. Information like cast, overview, rate, first air date, language and genre

```
{"name": "The Dead Files"}
{"statusCode": 200, "headers": {"Content-Type": "application/json", "Access-Control-Allow-Origin": "*"}, "body": {"response": "from db", "movie_name": ["The Dead Files"], "cast": ["Steve DiSchiavi, Amy Allan"], "images": ["https://image.tmdb.org/t/p/w500/44LifGcFC0n1vsuyU0rcNWc8Gx8.jpg"], "genres": ["documentary, mystery"], "overview": ["On The Dead Files, physical medium Amy Allan and retired NYPD homicide detective Steve Di Schiavi, combine their unique and often conflicting skills to solve unexplained paranormal phenomena in haunted locations across America."], "rate": ["8.1"], "first_air_date": ["2011-09-23"], "languages": ["en"]}}
```

Project-create-list

User can create their own collection.

```
{"email" : "abc@qq.com", "list_name" : "my love 2"}  
{  
    "statusCode" : 200,  
    "body" : {"message": "insert"}  
}
```

Project-delete-from-list

User can delete select episode of tv show in certain collection.

```
{"list_id":1576902047113,"movie_id":1399}
```

Project-get-list-content

User can get the tv shows in a certain collection he selected.

```
{"list_name":"my love 1", "email":"abc@qq.com"}  
{"statusCode": 200, "body": {"message": [1399, "Game of Thrones", "1", "2",  
"https://image.tmdb.org/t/p/w500/icjOgl5F9DhysOEo6Six2Qfwcu2.jpg"]}}"
```

Project-get-list

Get all list name and id of a user

```
{"email":"abc@qq.com"}  
{  
    "statusCode": 200,  
    "body" : {"message": [1576290866479, "my love", 1576291108017, "my love  
1", 1576900854978, "my love 2", 1576901432182, "my love 1", 1576901441253,  
"my love 1", 1576902047113, "my love 1"]}  
}
```

Project-update-list

Add a new episode to user's selected collection.

```
{"email":"abc@qq.com","list_name":"my love 1", "movie_name":"Game of Thrones","season":1,  
"episodes":2}  
{"statusCode": 200, "body": {"message": "insert"}}"
```

Project-get-popular

Get most popular 10 tv show.

```
{  
    "statusCode": 200, "body": {"message": ["Game of Thrones", "Breaking Bad",  
"The Walking Dead", "The Big Bang Theory", "Sherlock", "How I Met Your  
Mother", "Dexter", "Arrow", "Friends", "Stranger Things"]}}
```

