

ANIVIS

THE MISSING ANIME CATEGORIZER

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BACKGROUND

- There is a lack of good recommendation apps for Animes.
- The Anime databases are huge and it is hard to filter out the information.
- There is a need to categorize and present the Animes in users friendly fashion.

PROJECT OBJECTIVES

- Create a visualization that empowers the user to find the animes he/her is interested.
- The visualization has to be user friendly
- Based on the user's search, find similar Animes the user might be interested in.
- Show useful information about the Anime such as genre, rating and theme.

TECHNOLOGY USED - D3 - DATA DRIVEN DOCUMENTS

D3 features

- Loads the data in different formats (csv, json, etc)
- Binds data to elements within the document.
- Transforms those elements by interpreting each element's bound datum.
- Transitioning elements between states in response to user input.

TECHNOLOGY USED - NPM

npm stands for Node Package Manager.

A package is just a directory with one or more files in it.

NPM features

- Make easy to install packages
- Update the installed packages
- Make easy to uninstall packages

npm install d3

npm update

npm uninstall d3

TECHNOLOGY USED - WEBPACK AND BABEL

Babel

It is a transpiler for JavaScript.

Turn ES6 into code that runs in your browser.

Built in support for React's JSX extensions.

Webpack

It takes modules with dependencies and generates static assets representing these modules.

Code Splitting that allows to load parts of the application on demand.

TECHNOLOGY USED - REACT

React is a JavaScript library for creating user interfaces by Facebook and Instagram.

React is all about building reusable components. In fact, with React the only thing you do is build components.

Reach components implement a **render()** method that takes input data and returns what to display.

With Reach we can create stateful components that are updated when the data changes.

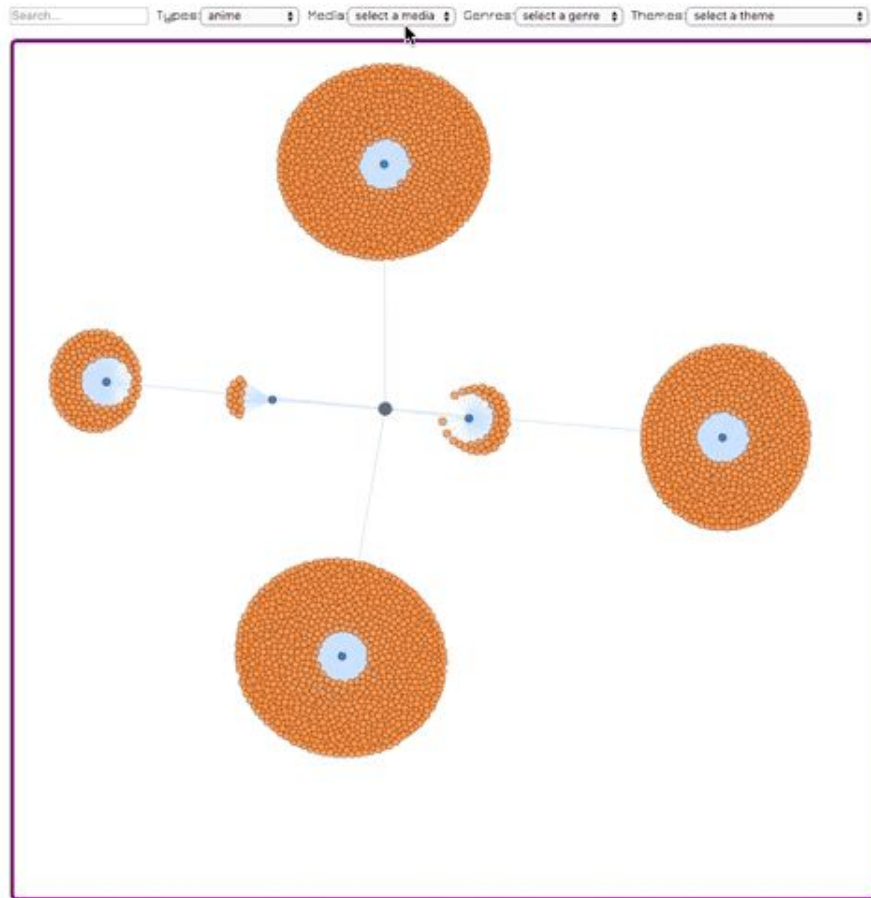
D3 + REACT

- Lifecycle Methods

| | Initialization | Update |
|--------------|---|---|
| D3 | Initialization of svgs and other elements | svg.data(...).enter(...) svg.exit(...).remove(...) |
| React | componentWillMount | componentDidUpdate |

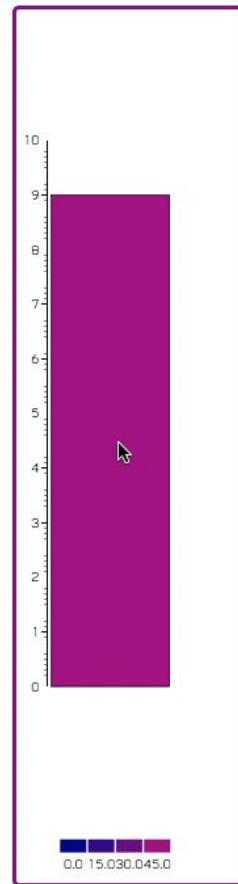
FORCE LAYOUT ANIMATION

- Filter by Types, Media Genre and/or Themes
- Click to display details for specific Anime
- Shift+click to show detail for a single anime



RANKING VIEW

- View Anime Rank Distribution
- Break down ranks
- Change View based on filter



DETAIL VIEW

- View details like Summary, Similar Animes
- Change view based on Ranking distribution
- Color coded, Higher rank darker color

Suggestions:

Simoun, Gao the Animation, Selector Infected Wixoss, Sengoku Collection, Simoun, Gao the Animation, El Cazador de la Bruja, Selector Infected Wixoss, Selector Spread Wixoss, Sengoku Collection, Chevalier D'Eon, Tiger Mask, Mushi-Uta, Burn-Up Scramble, Sugar Sugar Rune, Fairy Tail, Ambition of Oda Nobuna, Sugar Sugar Rune, Strike Witches 2, Fairy Tail, Ambition of Oda Nobuna, Gundam Reconquista in G, Sugar Sugar Rune, Chaika - The Coffin Princess Avenging Battle, Hetalia World Series, Gundam Reconquista in G

Mystic Archives of Dantalian 7.5438



Summary:

Hugh Anthony Olsward inherits an old mansion and a personal library from his grandfather. In the basement of the mansion, he meets a mysterious girl-Dalian. She is a Dantalian and a gateway to "Dantalian's bookshelf", which stores the prohibited books of the demons.

Suggestions:

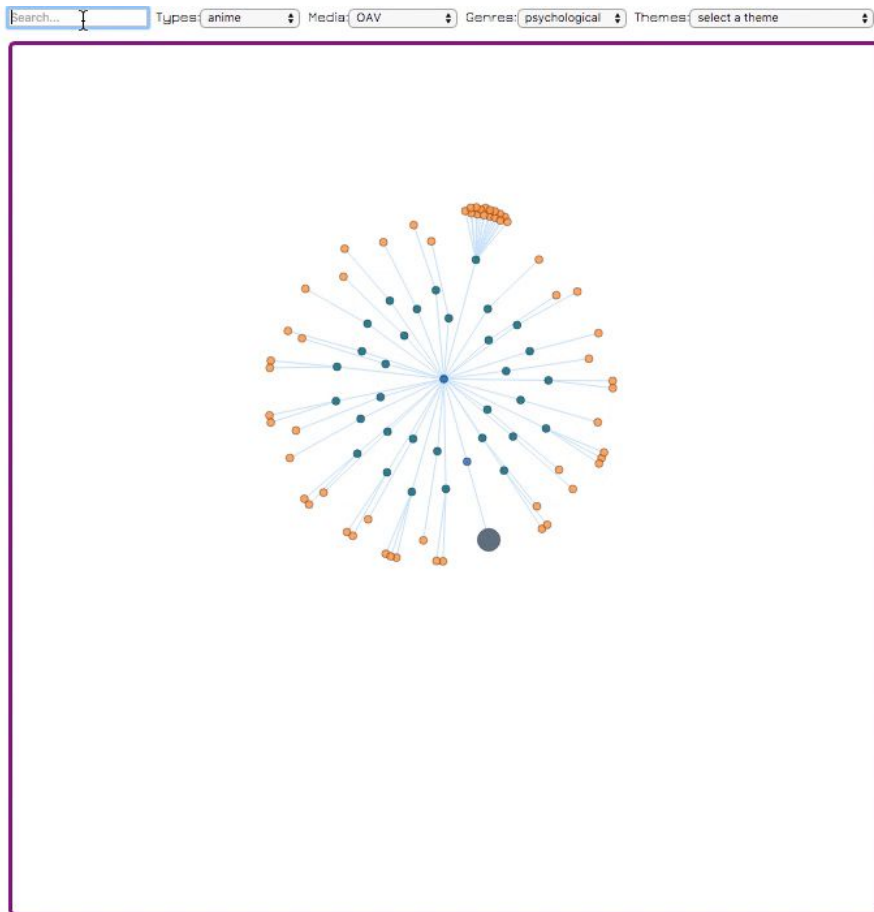
Mushi-Uta, Tiger Mask, Tactics, Tactics, Zatch Bell

Rozen Maiden 7.5388



SIMILARITY VIEW

- Search for an anime
- Show similar animes as children
- Color interpolation for similarity
- Update while typing

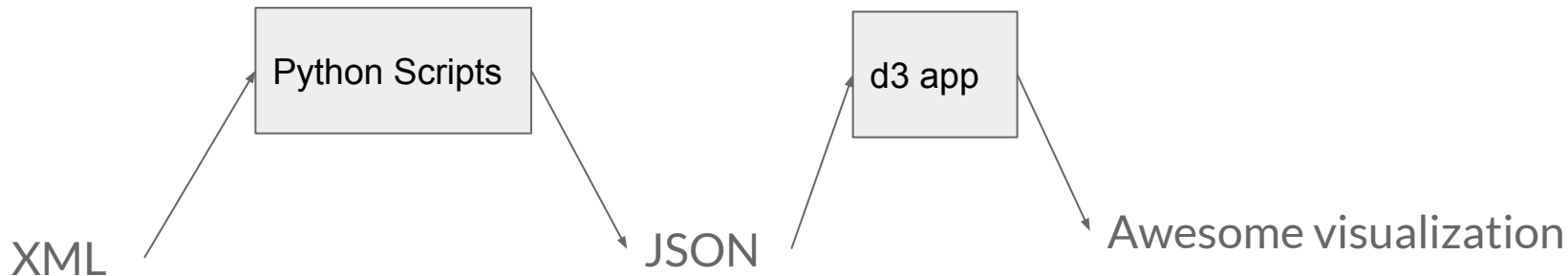


DATA SOURCES

- We are getting the data from Anime News Network (<http://cdn.animenewsnetwork.com/>)
- ANN is a news source that focuses on Japanese Animate (anime) and Japanese Comics (manga).
- Ann is the #1 English language source for anime and manga news on the Internet.

DATA PROCESSING

- The data provided by Anime News Network is in XML.
- It was necessary to transform the XML into JSON format due it is easy to manipulate in JavaScript.
- The process was the following:



cdn.animenewsnetwork.com/encyclopedia/api.xml?anime=13251

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```

<anime id="13251" gid="3403226504" type="TV" name="Muv-Luv Alternative: Total Eclipse" precision="TV" generated-on="2016-04-25T23:46:06Z">
  <related-prev rel="related to" id="13221">
    <related-next id="17670" rel="prequel"/>
  <info gid="1875931291" type="Picture" src="http://cdn.animenewsnetwork.com/thumbnails/fit200x200/encyc/A13251-1875931291.1329790709.jpg" width="200" height="146">
    
    
  </info>
  <info gid="1280270426" type="Main title" lang="EN">Muv-Luv Alternative: Total Eclipse</info>
  <info gid="183456598" type="Alternative title" lang="EN">Total Eclipse</info>
  <info gid="2120857401" type="Alternative title" lang="JA">マブラヴ オルタネイティヴ トータル・イクリプス</info>
  <info gid="291448089" type="Genres">action</info>
  <info gid="2206457418" type="Genres">drama</info>
  <info gid="2590993322" type="Genres">horror</info>
  <info gid="2314480201" type="Genres">romance</info>
  <info gid="1820496008" type="Genres">science fiction</info>
  <info gid="733700418" type="Genres">thriller</info>
  <info gid="2477578120" type="Themes">aliens</info>
  <info gid="1822792944" type="Themes">Alternate history</info>
  <info gid="2672003206" type="Themes">fanservice</info>
  <info gid="1927569422" type="Themes">gore</info>
  <info gid="2169957033" type="Themes">mecha</info>
  <info gid="1829623425" type="Themes">war</info>
  <info gid="7501471719" type="Objectionable content">MA</info>
  <info gid="522570562" type="Plot Summary">
    In 1973, an invasion of aliens known as BETA landed on Earth and began driving human civilization into nearly collapse. Facing an enormous mass of enemy force, mankind developed large humanoid arms called as Tactical Surface Fighters and then fought a long and bloody war through out the world. However, all those efforts could slow down but could not stop BETA, and mankind is forced to abandon majority of the Earth's landmass. For 30 years, mankind is bogged down in an endless war against BETA without any hopes of victory. Yui Takamura, a TSF pilot of the Imperial Royal Guards of Japan, is given responsibility to develop the next TSF unit and set off to Alaska. Meanwhile, Yuya Bridges, a TSF pilot of the U.S. Army, is heading to the same destination.
  </info>
  <info gid="1638183774" type="Running time">half hour</info>
  <info gid="3424699126" type="Number of episodes">24</info>
  <info gid="2187049290" type="Vintage">2012-07-01</info>
  <info gid="2457980719" type="Vintage">2012-07-01 to 2012-12-16</info>
  <info gid="2231830927" type="Opening Theme">Go to the top by Kumi Koda</info>
  <info gid="2131058893" type="Ending Theme">#2: "Doubt the World" by Kuribayashi Minami</info>
  <info gid="1921733974" type="Ending Theme">
    #1: "signs-Saku Tsukikichi Yorû" (signs - 朔月 -夜-) by Minami Kuribayashi
  </info>
  <info gid="2585374778" type="Ending Theme">#2: "Revise the World" by ayami</info>
  <info gid="30706060617" type="Ending Theme">#2: "Snow Maiden" by Aki Misato (ep 17)</info>
  <info gid="1526437778" type="Insert song">"Apocalypse of Destiny" by ayami (ep 5)</info>
  <info gid="2007329052" type="Insert song">"NO PLACE LIKE A STAGE" by GRAMOPHONE (ep 3)</info>
  <info gid="1552894033" type="Insert song">"Snow Maiden" by Aki Misato (ep 24)</info>
  <info gid="1221039306" type="Insert song">"True 4 Eyes" by Minami Kuribayashi (ep 4)</info>
  <info gid="1026095871" type="Official website">http://muv-luv-te.anime.com/>TVアニメ「トータル・イクリプス」ON TV in this Summer</info>
  <ratings nb votes="410" weighted score="6.7102" bayesian score="6.73328"/>
  <episode num="1">
    <title gid="3116357973" lang="EN">The Imperial Capital Burns - Part One</title>
  </episode>
  <episode num="2">
    <title gid="1462045734" lang="EN">The Imperial Capital Burns - Part Two</title>
  </episode>
  <episode num="3">
    <title gid="913708704" lang="EN">Verdant Yukon</title>
  </episode>
  <episode num="4">
    <title gid="1407289510" lang="EN">A Flock of Hazy Moons</title>
  </episode>
  <episode num="5">
    <title gid="1709613500" lang="EN">The Right Stuff</title>
  </episode>
</anime>

```

TRANSFORMED DATA - GENERAL ANIME INFO

```
{
  "name": "anime",
  "isRoot": "yes",
  "children": [
    {
      "isMedia": "yes",
      "name": "TV",
      "children": [
        {
          "isGenre": "yes",
          "name": "drama",
          "children": [
            {
              "isTheme": "yes",
              "name": "Alternate history",
              "children": [
                {
                  "isMovie": "yes",
                  "name": "Muv-Luv Alternative: Total Eclipse"
                }
              ]
            }
          ]
        }
      ]
    }
  ]
}
```

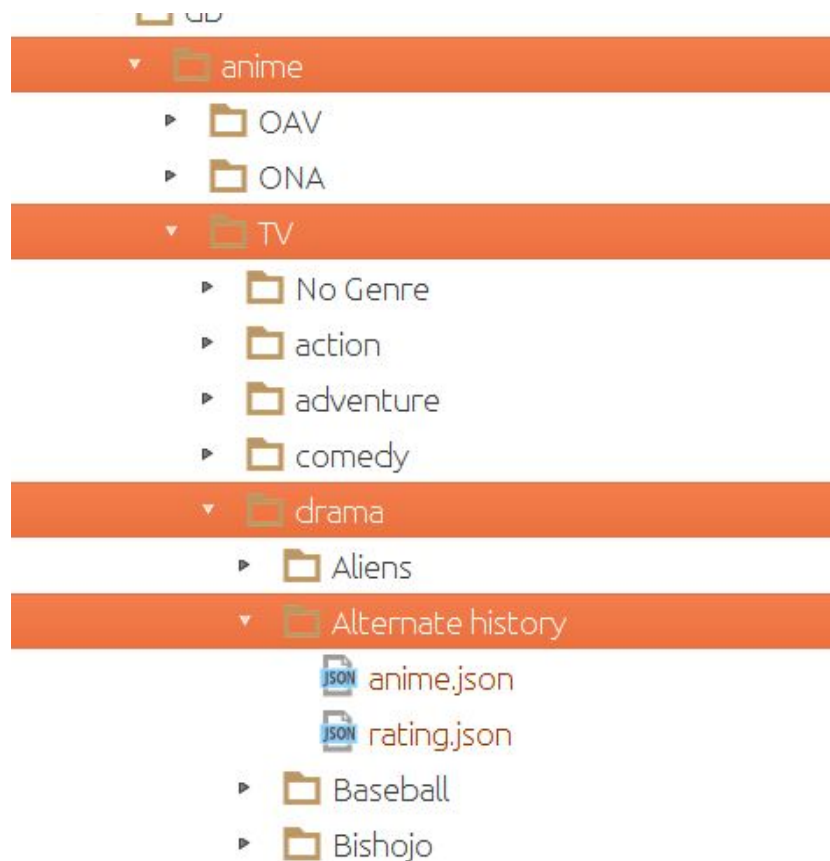

TRANSFORMED DATA - RATING ANIME INFO

```
{  
  "ratings": [  
    {  
      "ratings": "6.7192",  
      "anime": {  
        "name": "Muv-Luv Alternative: Total Eclipse"  
      }  
    }  
  ]  
}
```

TRANSFORMED DATA - ANIME INFO

```
{
  "Muv-Luv Alternative: Total Eclipse": {
    "rating": "6.7192",
    "pic": [
      "http://cdn.animenewsnetwork.com/thumbnails/fit200x200/encyc/A13251-1875931291.1329790709.jpg"
    ],
    "similar": [
      {
        "similar": 2,
        "name": "G-On Riders"
      },
      {
        "similar": 2,
        "name": "Qwaser of Stigmata II"
      },
      {
        "similar": 1,
        "name": "Koi Suru Tenshi Angelique: Kagayaki no Ashita"
      },
      {
        "similar": 3,
        "name": "Blood-C"
      },
      {
        "similar": 3,
        "name": "Dragonar Academy"
      }
    ],
    "summary": "In 1973, an invasion of aliens known as BETA landed on Earth and began driving human civilizati"
  }
}
```

ANIVIS DATABASE



DEMO

CHALLENGES

- Data Formatting.
- Data querying (built Folder Structure).
- D3 integration with React.
- Setting up environment.
- Use force layout properly.

THANK YOU

GITHUB: [HTTPS://GITHUB.COM/HANJOES/ANIVIS](https://github.com/hanjoes/anivis)