

Flick Blender

Team 3

Increment 3 Report

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Introduction

<https://github.com/billjcapps/CS5551Team3/wiki>

Project Objectives and Features

Successful television shows often spawn additional shows and movies. While fans are delighted to see more from their favorite characters, it is easy for a person to become confused about the order each episode should be seen in. Many fans have created websites to help instruct other fans how to watch their show, but these sites often only cover a single franchise. For an individual attempting to create a list himself or herself, it can be a very tedious and time-consuming task. Our project solves this problem by using information from the internet to automatically create a list of episodes in the correct order for viewing.

As mentioned above, there are some websites that solve this problem for an extremely limited scope. Other websites, such as www.IMDB.com [1], provide information about shows without letting combine the information from other shows that are related. There are also several application programming interfaces (APIs) that give access to the same information as the websites. Our project would be unique by letting users create a viewing checklist using any combination of shows and movies that they want.

The objective is to allow people to spend their time enjoying their favorite television programs instead of frustratingly attempting to determine what episode to watch. The application should also include additional information about the shows and individual episodes to prevent the user from having to go to additional locations to find facts such as a cast list or episode synopsis. Finally, the application should be interactive, allowing the user to find information and make changes to the episode list.

The primary feature of the application is to merge television shows and movies together using the date they were released for viewing. Other features will allow the user to modify this sort order using the order the episodes appear on DVD or manually alteration. Additional information is available through APIs. This information could include cast, synopsis, reviews, and what streaming services offer the episode. The list will also let the user mark which episodes have been seen so that the user always knows what to watch next. It may also notify the user of new episodes that will be aired within the next few days.

We are considering also adding some social features to the application. One feature would be allowing the user to see what his or her friends have watched. Another option would be to automatically (at the user's discretion) post viewed episode on Facebook or Twitter. We may also include the ability for the user to provide his or her own ratings or reviews of watched videos.

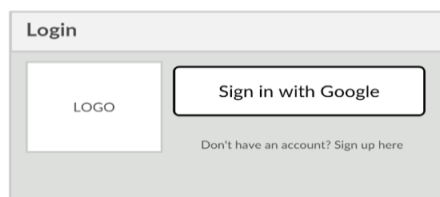
This application would fulfill a need and provide useful features to the user. Like most of applications of this type, it would be supported by advertisement revenue or donations if put into production.

Existing Services

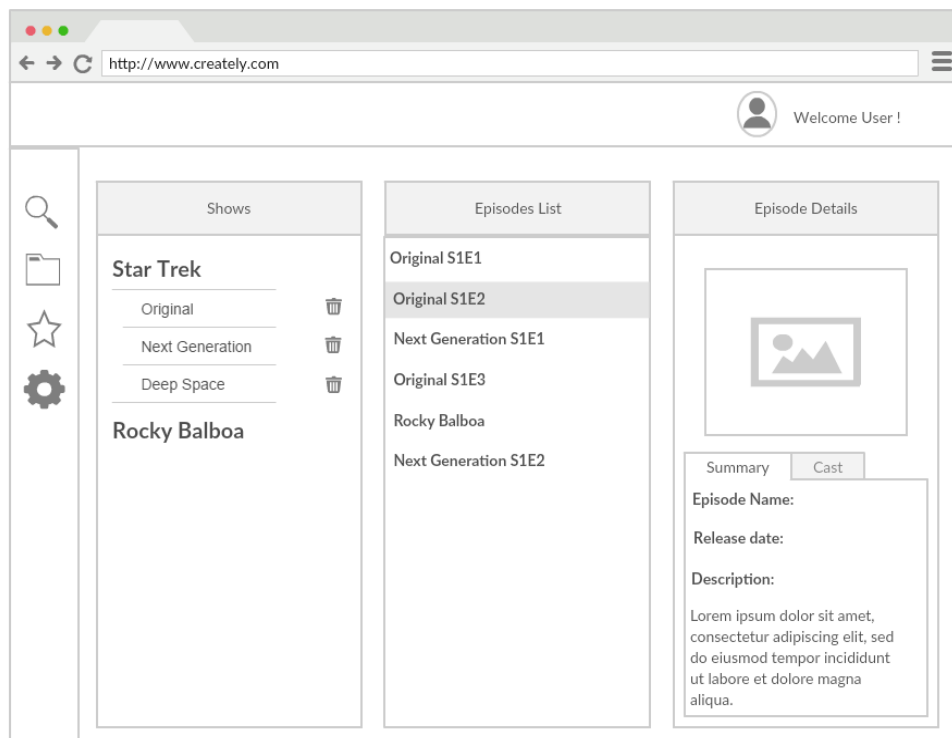
- Google oauth
 - Used to authenticate the user into the system
- TheMovieDB.org API
 - Used to access information about TV shows and movies
- Bootstrap
 - Used to format site and provide advanced CSS functionality

Detail Design of Features


Login page




Home Page



Search Modal

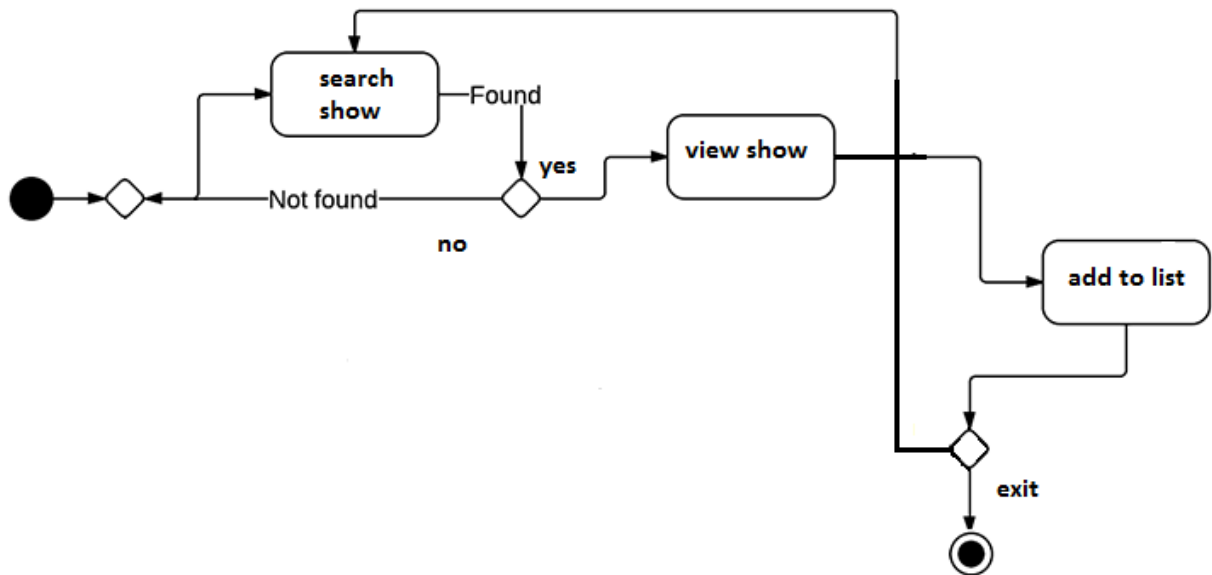


Result 1

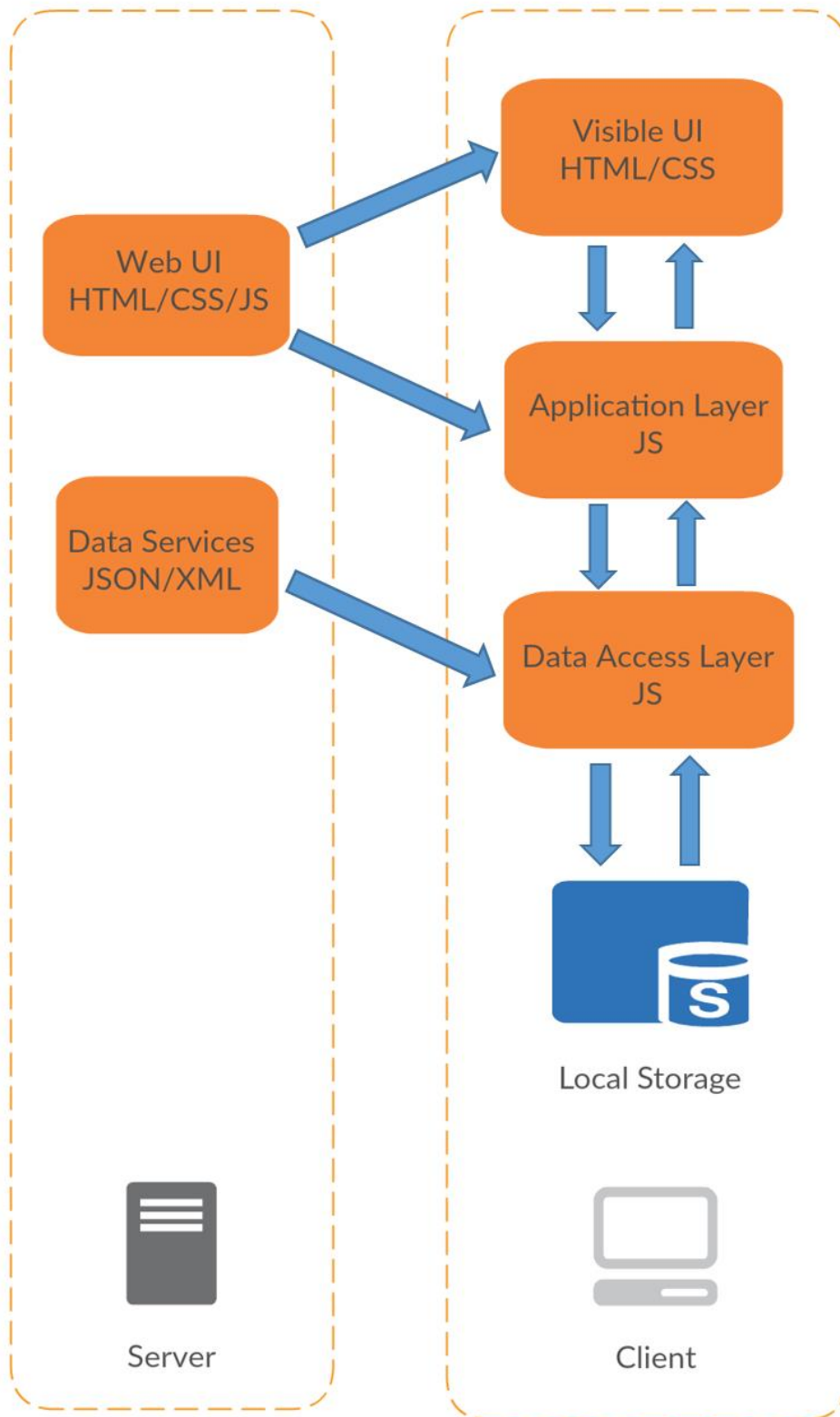
Result 2 

Result 3

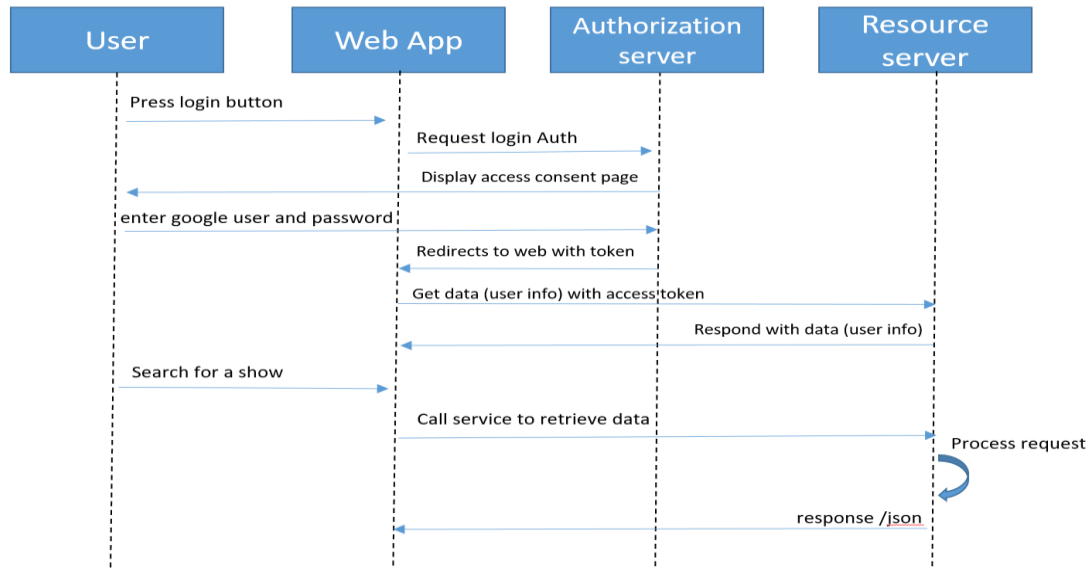
Activity Diagram



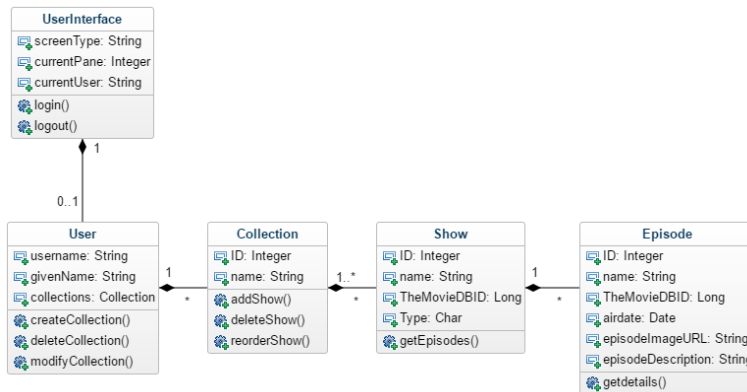
Architecture



Sequence Diagram



Class Diagram



User stories

- Critical
 - As a user, I can create a collection of movies and television shows
 - As a user, I can add and delete from my collections
 - As a user, I can view a list of episodes automatically sorted by airdate
 - As a user, I can manually change the order of episodes
 - As a user, I can see detailed information about an episode
 - As a user, I can mark episodes that I have viewed

- **Optional**

- As a user, I can share my collections with friends
- As a user, I can submit ratings and reviews of shows and episodes
- As a user, I can get suggestions of items to add to my collection
- As a user, I can get notifications about upcoming episodes

Testing

#	Title	Description	Expected Outcome	Result
1	User with Google account	A user authenticates using Google credentials	The user should be taken to the home page	Pass
2	User without Google account	A user attempts authentication but does not have Google credentials	The user should be denied access to the system	Pass
3	Create franchise collection	A user clicks the create franchise button	The user is prompted to give a franchise name and the new franchise appears in the first pane	Pass
4	Add movie	A user clicks the add series button	The user searches for a movie, the selected movie appears in the franchise and in the second pane	Pass
5	Add show	A user clicks the add series button	The user searches for a show, the selected show appears in the franchise and all episodes appear in the second pane	Pass
6	Rename collection	The user clicks the edit collection button	The user is prompted to give a new name for the collection, the new name appears in the first pane replacing the old name	Fail
7	Delete movie	The user selects the delete button next to a movie	The user is prompted for confirmation; if the user cancels then the user is returned to the main page, if the user accepts then the movie is removed from the collection and the second pane, then the user returns to the main page	Fail

8	Delete show	The user selects the delete button next to a show	The user is prompted for confirmation; if the user cancels then the user is returned to the main page, if the user accepts then the movie is removed from the collection and the second pane, then the user returns to the main page	Fail
9	Change order of episodes	The user clicks the episode order button	The episode moves up or down the list depending on if the up or down button was pressed, if the episode is the first episode and the user pressed the up button then nothing happens, if the episode is the last episode and the user pressed the down button then nothing happens	Fail
10	View episode details	The user clicks on an episode title	The third pane is populated with the episode's image, title, number, description, and review	Partial
11	Sign out	The user clicks the sign out button	The user is logged out of the application and returned to the sign-in screen	Pass
12	Export collection	The user clicks the export button	The user is prompted for a location and name for the collection file, a file is generated with the collection information	Fail
13	Import collection	The user clicks the import button	The user is prompted to select a collection file, the collection in that file is populated in the first pane and episodes contained in that collection are populated in the second pane	Fail
14	Review show	The user clicks the review show button	The user is prompted to give a rating (1 to 5) for the show and provide a	Fail

			brief statement, the rating and statement are sent to TheMovieDB.	
15	Review episode	The user clicks the review episode button	The user is prompted to give a rating (1 to 5) for the episode and provide a brief statement, the rating and statement are sent to TheMovieDB.	Fail
16	Mark episode as watched	The user selects the checkbox next to an episode that is marked as unwatched	The checkbox changes to checked and the episode title is struck-through	Fail
17	Mark episode as unwatched	The user selects the checkbox next to an episode that is marked as watched	The checkbox changes to unchecked and the episode title is not struck-through	Fail
18	Get suggestions	The user clicks the get suggestion button	The application displays 10 shows that are similar to the current collection, there is an add show option next to each show	Fail
19	Create notification	The user selects the new episode notification checkbox next to a show that is not flagged for notifications	The checkbox changes to checked, if the user logs in within 72 hours of a new episode airing, a notification message will display	Fail
20	Cancel notification	The user selects the new episode notification checkbox next to a show that is flagged for notifications	The checkbox changes to unchecked, no notification is given even if a new episode is going to air soon	Fail

***Additional unit tests can be found in the source code on GitHub**

Implementation/Deployment

Technologies used:

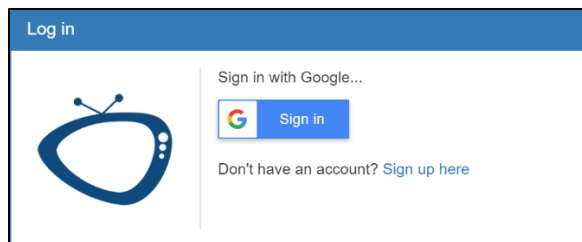
- HTML5
- REST
- Bootstrap
- CSS
- JavaScript
- Angular.js

Features list

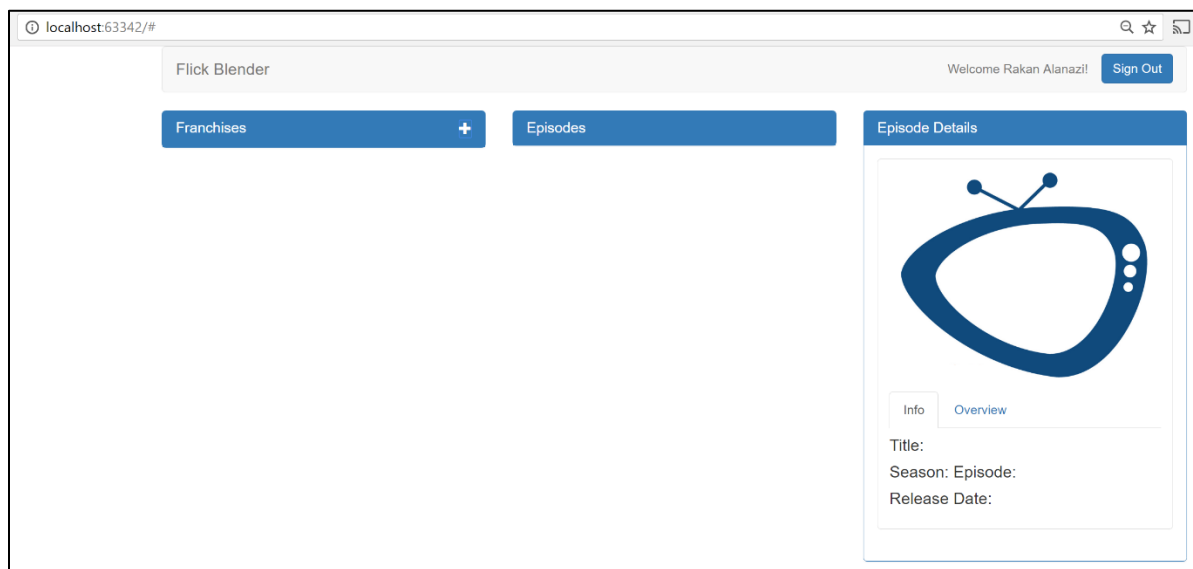
We have done this increment:

- the interface to manage the lists previously designed
- modal for searching for series/movies
- modal for adding a franchise
- a basic server in NodeJS to host the application
- data structures to hold the data that is manipulated
 - JavaScript object oriented programming
 - Angular services to host the data
- retrieve all the episodes for a series from API
- sort episode list by air date
 - AJAX would make it inefficient to retrieve in order
 - uses JavaScript Array.sort()
- primary feature of blending the series episode lists
 - custom algorithm similar to the merge of merge sort

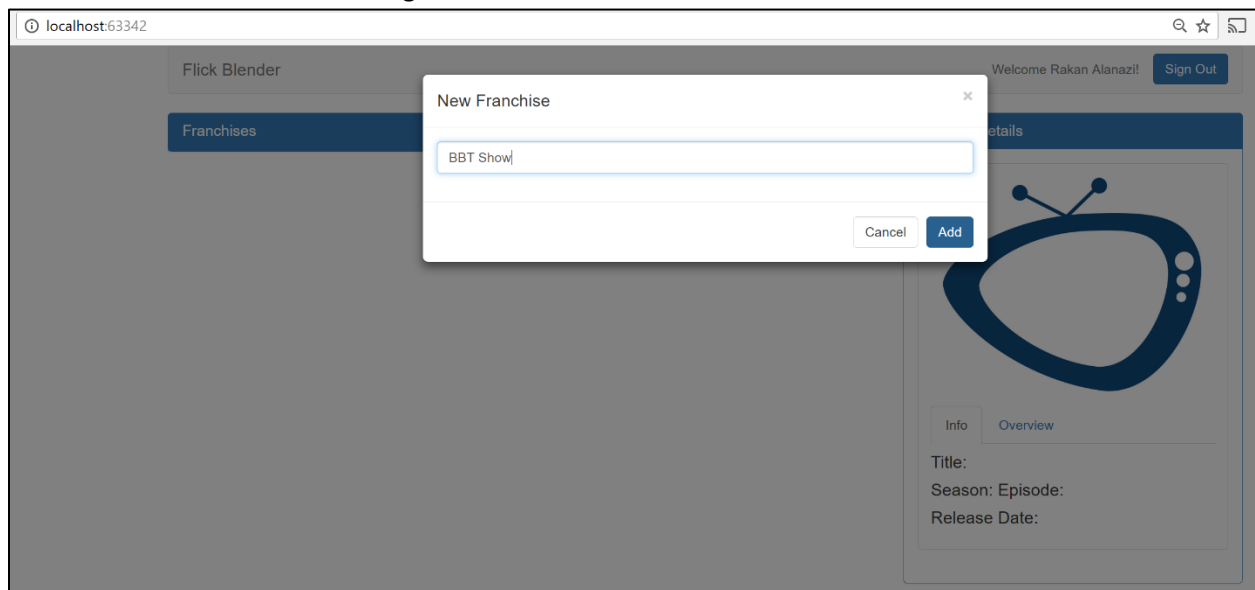
The user is first presented with a login page:



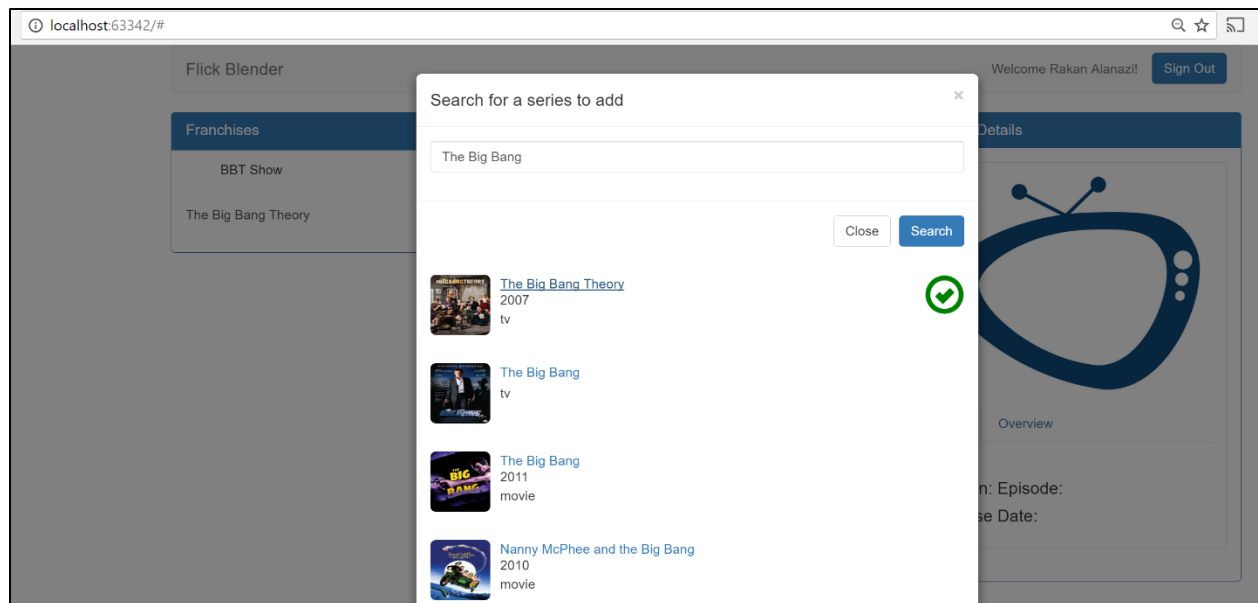
The user is then presented with the main page of the application. All functionality for the application will occur on this page.



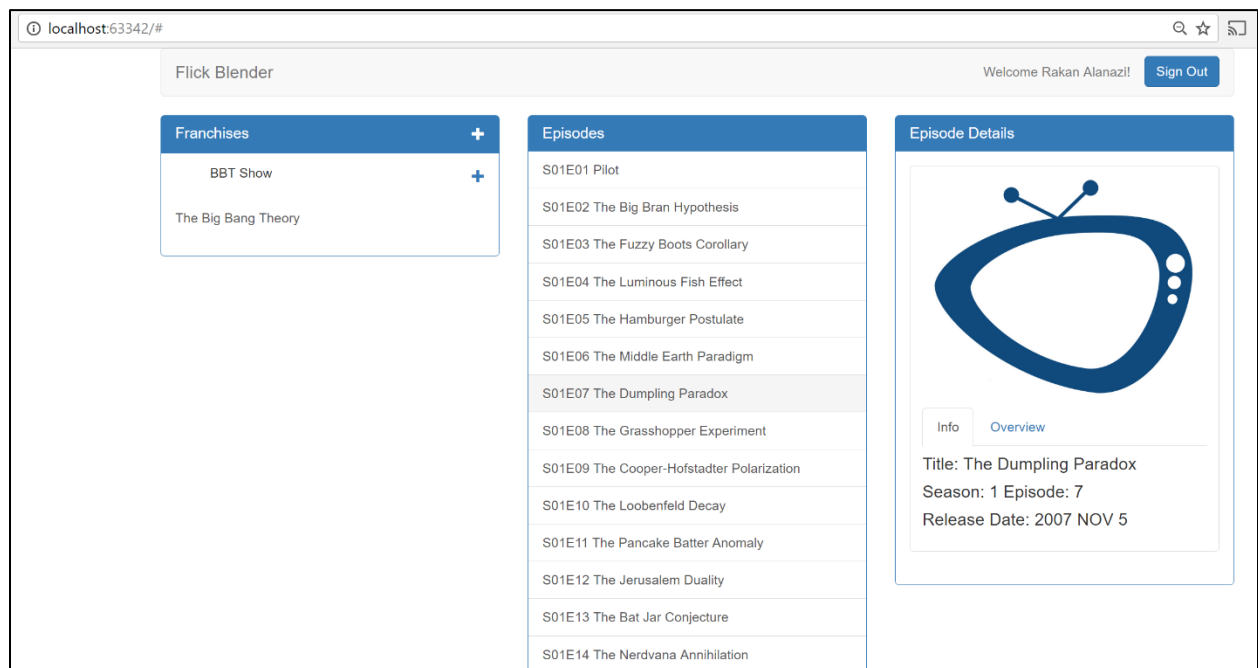
User can add a franchise to manage his shows



The user will use a search modal to add his favorite shows that he wants to manage.



After selecting the show a green sign will be shown next to the show.



After clicking on the show, a list of episodes for that show will appear in episodes' panel. The user can click on any episode to get information about the episode.

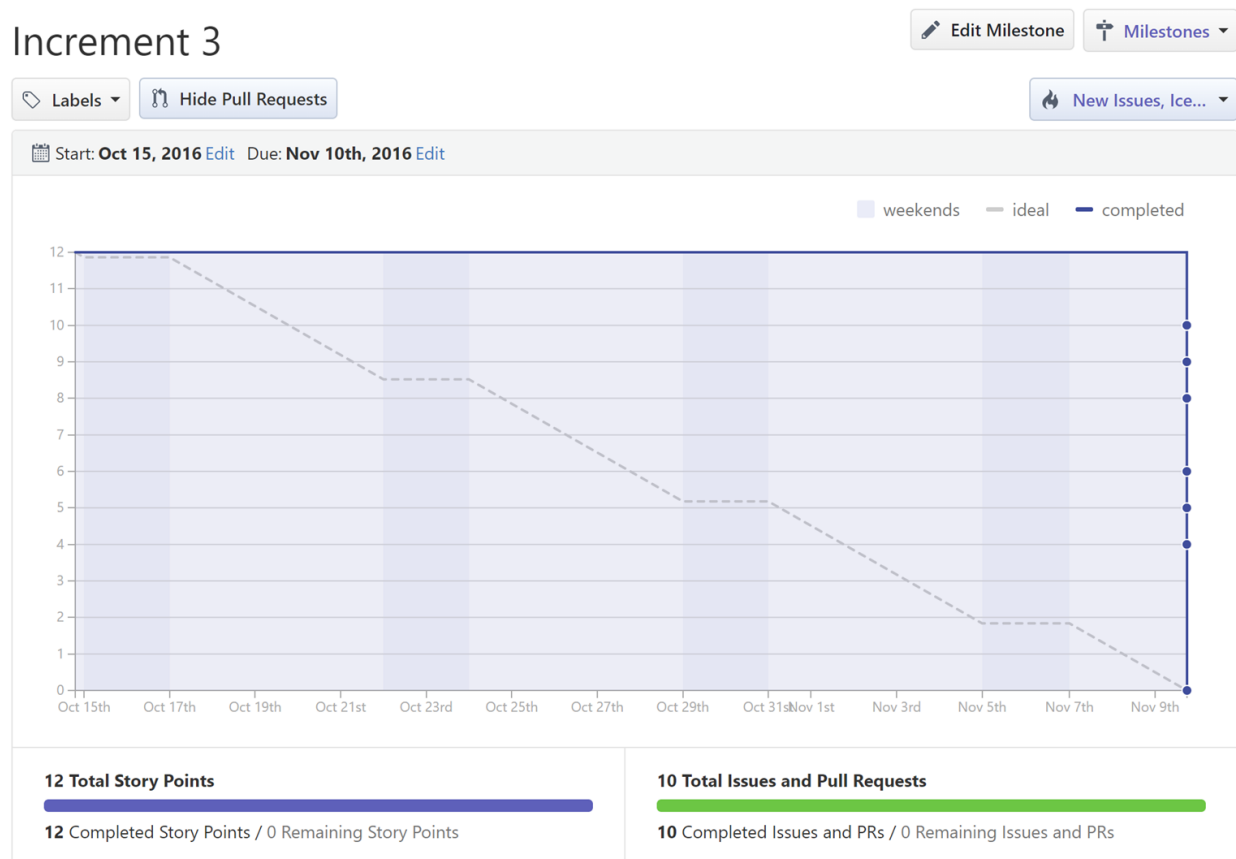
Project Management

- Rakan (33%)
 - Assisted with documentation
 - Created application framework
 - Researched possible technologies
 - Attended team meetings
 - Around 10 hours
 - Future tasks:
 - Add collection display and buttons
 - Add episode display and buttons
 - Add detailed display and buttons
- Bill (33%)
 - Got API key for Google oAuth
 - Got API key for TheMovieDB
 - Created reports
 - Created classes to access TheMovieDB
 - Created classes to store data
 - Attended team meetings and reserved space
 - Around 10 hours
 - Future tasks:
 - Make data classes accessible to the rest of the application
 - Make collection information permanent (local storage)
 - Create data structure to contain episodes
- Doug (33%)
 - Created authentication modal
 - Researched possible technologies
 - Created unit tests
 - Attended team meetings
 - Around 30 hours

- Data Structures
- Functionality of main UI and features
- Create add movie/show modal
- Create collection naming modal
- Future tasks:
 - Create suggestions modal
 - Data Storage

Burndown Chart

Increment 3



Bibliography

- 1.IMDB - <http://www.imdb.com/>
- 2.Episode Guides Android Application -
<https://play.google.com/store/apps/details?id=com.lordmarty.epguides>
- 3.TVMaze.com - <http://www.tvmaze.com/>
- 4.Yahoo! Answers - <https://answers.yahoo.com/question/index?qid=20090713153353AAw4mTd>
- 5.GateWorld - <http://www.gateworld.net/news/2009/05/stargate-recommended-viewing-order/>
- 6.Arvin Johansson Arbab - <http://arvtard.com/stargate-sg-1-and-atlantis-viewing-order-python-code>
- 7.StackExchange - <http://scifi.stackexchange.com/questions/4877/what-order-should-i-watch-the-various-stargate-television-series-in>
- 8.Tumblr - <http://nowwearealltom.tumblr.com/whovieworder>
- 9.Rothwell - <http://rothwell.im/etc/doctor-who/>
- 10.Blogspot - <http://wibblywobbly-timeywimeystuff.blogspot.com/2012/12/doctor-who-torchwood-viewing-order.html>
- 11.Daniel Goleman - <http://www.danielgoleman.info/>