Project Plan

Purpose of Project

BYU OIT to assess how I approach large problems, how I learn to use unfamiliar frameworks, and general coding practices.

Time

4 hours

Requirements

Overall

* Simple web app to search movies (title) – return <=10 results
* Web page calls -> back-end web service calls -> TMDB API
* Back-end to filter / combine and return to web page.
* Web page to display simple / readable
* Front-end / back-end separate
* Front-end <- REST API -> Back-end

Back-End

* Requirements:
  + See document
* Recommendation:
  + See document
* Considerations for calling TMDB API are in notes

Front-End

* Requirements:
  + See document
* Recommendation:
  + See document

Deliverable

* Setup a single public GitHub repository with two folders: "webapp" and "webservice".
* Webapp – web page files
* Webservice – back-end files
* Readme file with instructions on

Initial Tasks - Note: Tasks were modified as project progressed

* Install all frameworks and get one piece of each running
* Pseudocode back end service call to TMDB API
* Pseudocode return filtered/combined results from back end to web service through REST API
* Pseudocode web page with simple search field
* Pseudocode web page call to back end through REST API
* Pseudocode web page simple/readable display

Desired Contribution

There is a current problem with the project that I will resolve as my main contribution. The TMDB will still return inappropriate results, even with "include\_adult" query param set to false. On the front-end, I will scan the end-users search terms for illegal words and pop up an alert if they searched for explicit content. When my back-end then calls the TMDB api for those results, I will filter out anything that is Rated-R or above or Not Rated. Eventually, I’d like to add to my search result details a link to reviews from <https://kids-in-mind.com> and <https://commonsensemedia.org> to enable the user to review the appropriateness of the content before watching the movie.

Plan Going Forward

Given more time, my first goal would be to build the application enough that it can be started and the Webpage can be displayed.  These are the next steps I would take:

* Finish Pseudo coding the front-end and back-end according to requirements and recommendations
  + In order to finish Pseudo code, I need to contact my friend for assistance with the embedded server. I also need to watch a video on API calls.
* Code a simple search field on the Webapp, not worrying about CSS yet
* Watch video on REST API and install / include it in the project
* Replace Pseudocode for Webapp call to Webservice with applicable call through the REST API.  Will send dummy data to start to the back-end
* Replace Pseudocode for Retrieval of results from TMDB API on the back-end with a simple return of a dummy string
* Replace Pseudocode of display in Webapp to display dummy result
* Collaborate with a friend heavily involved in Web Development to get a second eye on why Local Host will not load.  Once it can load, have it load up the Web Application and make sure it can search successfully.

After application is running, here are a few more steps that will be taken to keep working on the application:

* Learn how to make API call to TMDB API from the back-end
* Code the call and retrieve the results.  Since Webapp is not coded yet, send dummy data to the function in order to search TMDB.
* Code the filtering according to requirements, with the addition of removing R-rated and above, and Not-rated films
* Test that the call and filtering are successful by displaying the results in a console window

The completion of application will be handled in similar fashion, following the principle of breaking it down into small manageable steps and testing to make sure items are running smoothly before moving on.

Another principle that will be followed that was seen with this project is to move onto other tasks when getting stuck.