

Project Purpose

Create a website that incorporates the Yahoo Fantasy Football API in order to display power rankings information for a league.

Background/Motivation

I've made a spreadsheet for these calculations before, but it requires manually entering data and isn't very flexible for leagues of various sizes or various season lengths.

Platform

Website

Programming Languages

Node.js, Express.js, React

Stylistic Conventions

Standard JavaScript style

SDK

Visual Studio Code

Tools/Interfaces

Google Chrome

Target Audience

Fantasy Football enthusiasts

Features

- View the Power Rankings for any given week
- View a graph of the Power Rankings for a season
- View more detailed data that shows how the Power Rankings are calculated
- Switch between leagues and seasons

Scope of Project

Limited to what data the Yahoo Fantasy Football API can provide. Will likely only incorporate team points for each week.

Week 1

Requirement 1

Implement OAuth for Yahoo Fantasy Sports API

2.5 Points Criteria

OAuth set up with a working web flow

2 Points Criteria

OAuth implemented well enough to provide authentication to API

1 Point Criteria

OAuth partially implemented

Requirement 2

Retrieve relevant data for a given season from the Fantasy Sports API

2.5 Points Criteria

Implement the ability to retrieve data for all teams for any arbitrary season

2 Points Criteria

Implement the ability to retrieve data for all teams for a specific season

1 Point Criteria

Implement the ability to retrieve some data

Requirement 3

Create a wrapper API for my website to retrieve data from

2.5 Points Criteria

Wrapper API is implemented in a clever way

2 Points Criteria

Wrapper API is implemented with all relevant methods

1 Point Criteria

Wrapper API has some relevant methods

Requirement 4

Pull in some data from wrapper API into basic website

2.5 Points Criteria

Data is pulled in and manipulated in some way

2 Points Criteria

All relevant data is pulled in from the API

1 Point Criteria

Some data is pulled in

Requirement 5

Implement automated tests for data retrieval from wrapper API

2.5 Points Criteria

Tests implemented in a clever way

2 Points Criteria

Tests implemented for all API calls

1 Point Criteria

Tests implemented for some API calls

Week 2

Requirement 1

Implement the Power Rankings formula

2.5 Points Criteria

Formula includes more complexity than the original spreadsheet

2 Points Criteria

Formula includes everything that the original spreadsheet had

1 Point Criteria

Formula includes some of what the original spreadsheet had

Requirement 2

Display the Power Rankings for one week of the league

2.5 Points Criteria

Power Rankings are displayed in a visually appealing way

2 Points Criteria

Power Rankings are displayed well enough to see all relevant information

1 Point Criteria

Only some of the information is visible

Requirement 3

Add a way to switch between weeks of the Power Rankings

2.5 Points Criteria

Switching between weeks is intuitive and smoothly updates data with an animation

2 Points Criteria

Switching between weeks properly updates the data

1 Point Criteria

Switching between weeks does not update the data properly, but does work somewhat

Requirement 4

Add a way to switch between seasons of the Power Rankings

2.5 Points Criteria

Switching between seasons is intuitive and smoothly updates the data with an animation

2 Points Criteria

Switching between seasons properly updates the data

1 Point Criteria

Switching between seasons does not update the data properly, but does work somewhat

Requirement 5

Add automated tests for the power rankings formula

2.5 Points Criteria

Tests are extensive and cover various different league settings

2 Points Criteria

Tests cover the basic properties of the formula

1 Point Criteria

Tests only cover some aspects of the formula

Week 3

Requirement 1

Improve visuals of the power rankings display

2.5 Points Criteria

Display should be very visually appealing and fit in well with the UI

2 Points Criteria

Display is as appealing as the original spreadsheet

1 Point Criteria

Display is less appealing than the original spreadsheet

Requirement 2

Create data display for all teams and weeks

2.5 Points Criteria

Data display is elegant and interactive

2 Points Criteria

Data display includes all relevant point totals

1 Point Criteria

Data display only includes some of the relevant information

Requirement 3

Improve navigation of the site

2.5 Points Criteria

Navigation works smoothly and includes animations

2 Points Criteria

Navigation works well enough to switch between the data and the graph

1 Point Criteria

Navigation only partially works, but has some issues

Requirement 4

Create graph display of the power rankings

2.5 Points Criteria

Graph is extremely visually appealing and allows customization/filtering

2 Points Criteria

Graph is as visually appealing as the original spreadsheet's graph

1 Point Criteria

Graph is less visually appealing than the original spreadsheet

Requirement 5

Write tests for the front end of the website

2.5 Points Criteria

Extensive automated tests for navigating the site as well as a long manual test plan

2 Points Criteria

Some automated tests along with an extensive manual test plan

1 Point Criteria

Only manual test plan

Week 4

Requirement 1

Improve visuals and functionality of the data page

2.5 Points Criteria

Data page is very interactive and includes animations

2 Points Criteria

Data page is interactive and allows filtering

1 Point Criteria

Data page has some interactivity

Requirement 2

Create a view for a more detailed display of the data for a team

2.5 Points Criteria

View is extremely appealing and shows how calculations were performed in a simple way

2 Points Criteria

More detailed data is shown for the team, but it is not very extensive

1 Point Criteria

Some extra data is shown

Requirement 3

Create a view for showing the standings for the league for each week

2.5 Points Criteria

Standings are visually appealing while clearly differentiating from the power rankings view

2 Points Criteria

Standings are visually appealing but similar to the power rankings view

1 Point Criteria

Standings are not very appealing

Requirement 4

Add support for some different league settings

2.5 Points Criteria

Formula takes into account many different settings and makes proper adjustments

2 Points Criteria

Formula takes into account all of the more popular settings

1 Point Criteria

Formula takes into account some settings

Requirement 5

Update tests for front end to include new views

2.5 Points Criteria

Extensive automated tests along with a long manual test plan

2 Points Criteria

Some automated tests along with a long manual test plan

1 Point Criteria

Only a manual test plan