Test Summary

In this final assessment you will build a web application that searches through a list of games.

Test Files

Please download and extract Lab4.zip. Familiarize yourself with the provided JSON and script files as well as the HTML document. Notice that script file has the boiler plate fetch code to consume the JSON data and the HTML document has a placeholder span tag for output.

Test Challenges

Challenge 1

Your first challenge begins with a straight-forward search. When the user clicks on the Find button, search through the JSON file for the game name that was entered in the text box. If you find a match, output the release year and number of characters for the game; otherwise, output a "game not found" message.

Search for a game: Captain Toad: Treasure Tracker   [Find]
Release Year: 2014
Number of Characters: 6

Figure 1: a result when a game is found

Search for a game: Tetris   [Find]
Game not found in search

Figure 2: a result when a game is not found

Challenge 2

Now that you have simple output for the match condition, could you start to add complexity by outputting the stars rating via asterisks and a percent rating (where the percent is calculated via num stars/5) as follows:

Search for a game: Super Mario Bros. 3   [Find]
Release Year: 1990
Number of Characters: 7
Rating: *** = 60%

Figure 3: this game had a stars rating of 3

Higher marks will be given if you can dynamically output the corresponding stars icon from the /icons folder as follows (you do not have to output a percent rating):

Search for a game: Paper Mario: Color Splash [Find]

Game Details

Release Year: 2016
Number of Characters: 8

Challenge 3

If you can achieve challenges 1 and 2, add to your solution the capability of searching for a character within a game. You will need to add to the interface a textbox to permit data entry for a character name. Check to see if

that character is in the search game. Provide output for match/not match conditions. Here are some final comparison figures:

Lab Grading and Submission

Please compress and upload your final lab via the Lab 4 link by **Sunday, April the 9th before midnight**. Please note: lab labs cannot be accepted for this assessment.

The following grade rubric will be applied to your work:

- Functional style rules were implemented (10 Marks):
  - 100% of the lab – 10/10
  - *80% - 99% of the lab – 8/10*
  - *50% - 79% of the lab – 5/10*
  - *Less than 50% - 0/10*
- *Challenge 1 was achieved (4 marks)*
- *Challenge 2 was achieved (5 marks)*
- *Challenge 3 was achieved (6 marks)*