Assignment 11 - Chapter 6 - APIs

Due Jan 18 by 11:59pm   **Points** 27   **Submitting** a text entry box
Available until Jan 20 at 11:59pm

This assignment was locked Jan 20 at 11:59pm.

Create a new directory called Assignment-11

Create a simple high/low guessing game and the API to support it.

- Modify the random Number app so that it uses the express static middleware and also uses the bodyparser.json middleware.
- Create the following API code in app.js
  - Get Random Number between range
    - /api/v1/random/:min/:max
    - jsonOut:
      - {"result":"YOUR RANDOM NUMBER"}
      - or if errror
        - status=404
        - {"result":"msg"}
  - Get Random Number between 0 and Max
    - /api/v1/random/:max
    - jsonOut:
      - {"random":"YOUR RANDOM NUMBER"}
      - or if error
        - status=404
        - {"result":"msg"}
  - Set Game Max in server. The server will let the user play high low and this call sets the maximum range for the game.
    - /api/v1/game
    - method: post
    - json_in:
      - {"max":"number"}
    - jsonOut:
      - if ok
        - {"result": "OK" }
      - if error
        - status=404
        - result="Error"
  - Test Number against number in Server
    - /api/v1/game/:number

- method: get
- jsonOut
  - {"result": "HIGH" or "LOW", or "MATCH"}
  - if bad input
    - status=404
    - result="ERROR"
- Create an index.html to play the game
  - Use very simple html. My html file is at the end of these instructions.
- Create game.js that uses jquery to make calls to the API
- Make sure your package.json has all the required modules
- Run this server on port 3011

Make sure all your code is in git

Submit:

- a clickable link to git
- a clickable link to your server

Video Discussion Assignment and Solution

HTML file

<!doctype html>
<!--
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Assignment 11
CSE 270
Winter 2019
-->

```html
<html lang="en-us">
<head>
<title>Game</title>
<script
src="https://code.jquery.com/jquery-3.3.1.min.js"
integrity="sha256-FgpCb/KJQlLNfOu91ta32o/NMZxltwRo8QtmkMRdAu8="
crossorigin="anonymous"></script>
<script src='game.js'></script>

</head>
<body>
<div>
<h1>Guessing game</h1>
<h2 id='result'></h2>
<form id='game'>
Guess: <input type='text' id='guess'>
</form>
</div>
<div>
<h2>Set guessing game range</h2>
<form id='setMax'>
Max: <input type='text' id='max'>
<br>
<input type='submit'>
</form>
</div>

</body>
</html>
```

Some Rubric (12)

Criteria	Ratings		Pts
Code in git and called Assignment-11	**2.0 pts** **Full Marks**	**0.0 pts** **No Marks**	2.0 pts
/api/v1/random/:min/:max works	**5.0 pts** **Full Marks**	**0.0 pts** **No Marks**	5.0 pts
/api/v1/random/:max works	**5.0 pts** **Full Marks**	**0.0 pts** **No Marks**	5.0 pts
Set Game Max in server works	**5.0 pts** **Full Marks**	**0.0 pts** **No Marks**	5.0 pts
test Number against number in Server works	**5.0 pts** **Full Marks**	**0.0 pts** **No Marks**	5.0 pts
HTML plays	**5.0 pts** **Full Marks**	**0.0 pts** **No Marks**	5.0 pts
			Total Points: 27.0