CSC 436: Web Applications
Homework 1
DUE DATE: Sep 20, 2022 5:30 PM

Before You Begin

The hw1 folder contains a Node project; the package.json file currently only contains one dependency, Jest. Jest is a JavaScript testing framework which will be used to validate your solutions for Part 2 of this assignment. You'll be adding the Bootstrap package in Part 1 to install Bootstrap's CSS and JavaScript files.

Part 1: HTML Using Bootstrap

Goal:

Create a simple HTML personal biography page using Bootstrap.

Your bio page does not need to be complex and you can re-use the text from your introductory discussion post. You can also make it more complex if you desire to do so. The page should make use of some Bootstrap CSS styling.

Feel free to leverage bootstrap [examples](#).

Prerequisite Steps:
1. Change directory (cd) to the directory containing the hw1 package.json
2. Add Bootstrap as a project dependency: **npm install bootstrap –save**
3. The **node_modules/bootstrap/dist/css/** directory now contains the **bootstrap.css** file you need to [include in your HTML file](#). The **node_modules/bootstrap/dist/js/** directory now contains the **bootstrap.js** file you need to [include in your HTML file](#).

The following specific docs are a good starting point if you'd like to reference the documentation: [Containers](#), [Grid](#), [Columns](#), [Forms](#), and [Navbar](#). You may also find the [examples](#) helpful.

See Part 2 on the following page.

Part 2: JavaScript Exercises

Goal: Update the code in hw1.js to provide solutions for the exercises.

Steps:

1. Change directory (cd) to the directory containing the hw1 package.json
2. Execute the command **npm install** to ensure the Jest dependency is installed.
3. Open hw1.js and update the code to complete the requirements outlined in the comments.
4. As you update the code and save your changes, execute the command **npm test** to execute the hw1.test.js test suite to validate your changes.
5. Once all the tests are passing, **npm test** output will appear similar to:

```
p@ps-MacBook-Pro hw1 % npm test

> y@1.0.0 test
> jest

 PASS  ./hw1.test.js
  ✓ add 1+2 to equal 3 (1 ms)
  ✓ instantiate Circle class
  ✓ validate Circle calcArea method
  ✓ instantiate Student class (1 ms)
  ✓ instantiate Product class
  ✓ calls Product.inStock() method, passing a
  ✓ calls Product.halfOff() method, passing a
  ✓ calls Product.printProducts() method, pass

Test Suites: 1 passed, 1 total
Tests:       8 passed, 8 total
Snapshots:   0 total
Time:        0.159 s, estimated 1 s
Ran all test suites.
```

Submission

1. Initialize a Git repository in your project directory.

2. Create a commit and push it to a new repository on Github.

3. Submit your repository link to the "Lab 1 - HTML and Javascript Exercises" D2L dropbox.

Late Submission

Late submissions will be accepted up to two weeks after the original due date. There will be a 10% grade deduction per week late.