

## CS230 - Web Information Processing

### Assignment 7

Assignment Release Date:	02-05-2022
Submission Due Date:	06-05-2022
Feedback Due Date (estimated):	22-05-2022 (for assignments that make Due Date)
Support Laboratories	Lab 12 (One Week)
Total Mark:	5%

*This Assignment is worth 5% of the Web Information Processing CA Component.*

This is an open-book, graded assignment. You may use online resources for reference purposes only to help with the assignment. Please cite all references as comments in your submissions. You cannot directly reuse HTML/CSS/JS **solution code** from online sources. **You must not engage with another student, in person or electronically (phone, social media, etc.) to secure assistance with this assignment. If you do so you will receive an automatic fail (0%).** We will perform similarity checks on submitted assignments to check for collaborative efforts. A reasonable attempt at this assignment will gain you 5% of your continual assignment marks.

#### Assignment 07 - Consuming a RESTful APS using a Single Page Application (SPA)

You are required to develop a solution that **implements a Single Page Application (SPA) that consumes the RESTful API** for your previously generated (Assignment 6) online mobile phone store

Your SPA should provide interface components that demonstrate the CRUD functionality for Creating, Searching (Retrieving), Updating, and Deleting *customer*, *item*, and *order* information accessed using the RESTful API and interface components in the SPA.

You are required to develop a HTML/CSS/JS “front-end” (for the RESTful API) in this assignment. You can re-use the API routes developed in Assignment 6 and previously tested using Postman or Insomnia. Styling (using CSS) may be minimal, but must be present in your code.

#### Assignment 07 - Requirements

You should include appropriate routes for the each of REST activities for the different entities using the lecture material presented in Lectures 19 and 20.

You are required to develop a NodeJS application that implements the functionality outlined above using ExpressJS, and with the following additional constraints (note that constraints related to your database setup may be carried forward from earlier assignments without change).

You may use any framework, or none, in your solution, e.g. jQuery, AngularJS, but your submitted solution must be a single page application (SPA). You may, of course, store User Interface components in separate JS files, and styling in separate CSS files.

### **Assignment 07 - Development Notes**

Please adhere to the following development constraints:

1. You must comment your code, clearly indicating, how your code implements the solution described above in the "Assignment 06 - Requirements" section.
2. You must clearly indicate which framework you are using, together with the version, as comments in your SPA code.

Please note that there are many sample (HTML/CSS/JS) solutions for implementing similar solutions (REST) functionality available online. While it is fine to consult these, and accompanying articles, for references, you may not re-use code from these projects. Please cite your reference sources in your codebase. We will search and identify online coding solutions to similar problems for the purposes of checking against submitted solutions in instances where we have concerns about code originality.

### **IMPORTANT SUBMISSION DETAILS**

**Before submitting your assignment students should check that their solution works in Chrome and/or Firefox. Please indicate the Browser, Operating System (Linux/Windows/MacOS) and Browser version used for testing (as a comment in your submitted code). If you use an online IDE please clearly specify the IDE and provide a link where possible.**

All work must be submitted via Moodle (see "Assignments" section for submission). Work submitted via other means will not be accepted unless you have prior arrangements with the Head Demonstrator (Behnam Faghih). All work **MUST** be submitted by the due-date deadline. Late submissions will not be accepted.

*The assignment submission is a zip file named "assignment-07-xxxxxxxx.zip" (where "xxxxxxxx" is your student id) containing solution files, e.g. named "assignment-07.js", "assignment-07.html", etc. together with any other resources used in the assignment solution. Please include a dump of the data from your database (as a text file) names "assignment-06.txt". Please ensure that all external files use relative directory referencing, rather than hard-coding the files' location. And ensure that you include your subdirectory files. Do **not** include the back-end, or the node-modules directory in your submission.*