Lab 8 Client-side web API (Part 1)

Given: Thursday, October 11, 2018
Deadline: Thursday, October 18, 2018

What you need to have done within lab hours

Problem 1 (3 points)

File Input: dom-example.html which you can download it from Google classroom course.
Save the copy of file dom-example.html as dom-example2.html
Web Output:
1. The image needs to change from the image of KKU to the image of the faculty of Engineering KKU and the attribute "alt" needs to change to "EN KKU"
2. The image needs to have the width the same as or almost the same as the white text in the black background.f
2. When clicking the image, then the browser is redirected to a new window that points to http://www.en.kku.ac.th
3. You must not modify any given HTML and CSS code. All that you need to do is to write the JavaScript code after element <section>.
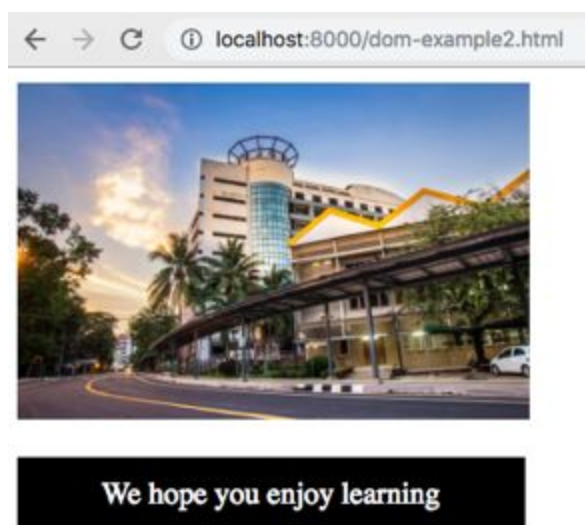

Figure 1: The output of dom-example2.html

Problem 2 (4 points)

We want to make a simple shopping list that allows you to dynamically add items to the list using a form input and button.   The file shopping-list.html is given in Google Classroom. You need to save a new file as shopping-list-sol.html and then only add JavaScript code such that it has these following behaviors. You cannot modify any given HTML and CSS code.

2.1 When you add an item to the input and press the button

- The item should appear in the list
- Each item should be given a button that can be pressed to delete that item off the list
- The input should be emptied and focus ready for you to enter another item
- The number of items is incremented, and there is the text displayed after the list about the total number of items

2.2 When you remove an item by pressing the Delete button

- The item disappears from the list
- The number of items is decremented, and there is the text displayed about the total number of items is updated accordingly.

2.3 The text displaying the total number of items is set as follows

- The list has <the number of items> item(s)
- If the number of items is less than or equal to 1, then there is no "s" after "item". Otherwise, if the number of items is greater than 1, then there is "s" after "item". Figure 2 (on the top-left) shows the web output when the user adds an item "coffee" in the input text. Figure 2 (on the top-right) shows the web output when the user adds another item "tea" in the input text. Figure 3 (on the bottom-left) shows the web output when the user deletes the item "tea" Figure 4 (on the bottom-right) shows the web output when the user deletes the item "coffee"
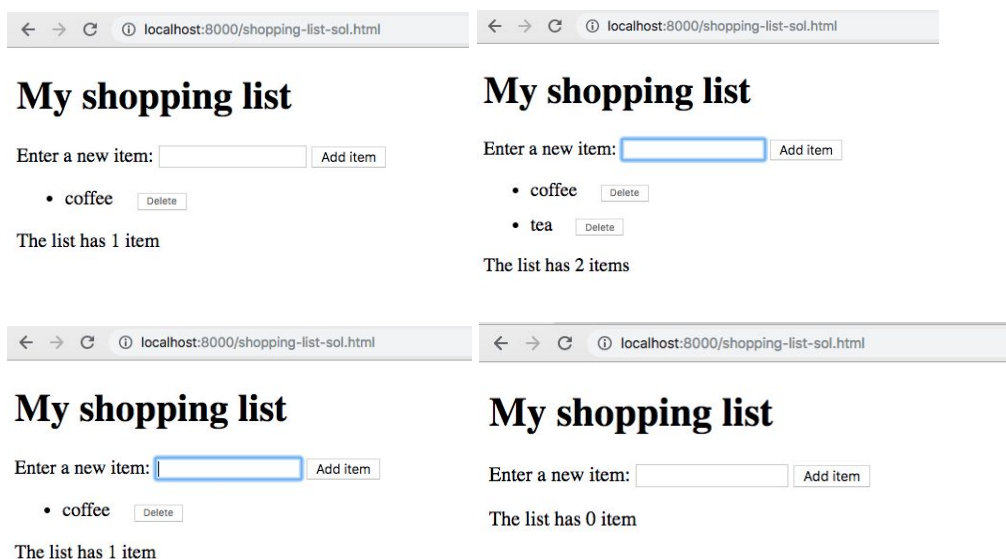

Figure 2: The interface and behavior of shopping-list-sol.html

What can be done as assignments

Problem 3 (3 points)

Develop the web app that displays the image of a university that the user selects as shown in Figure 3-5. Note that you will be given with the JSON file "unames.json" that you need to read in order to find the mapping between the selected university name and the university image file. Note that you need to implement and use at least these two functions
- function **mapUnivNameImage(uName)** that maps a given university name with an image file name that corresponds to the given university name
- function **displayImage(imgFile)** that displays an image with the width 400 and the scaled height
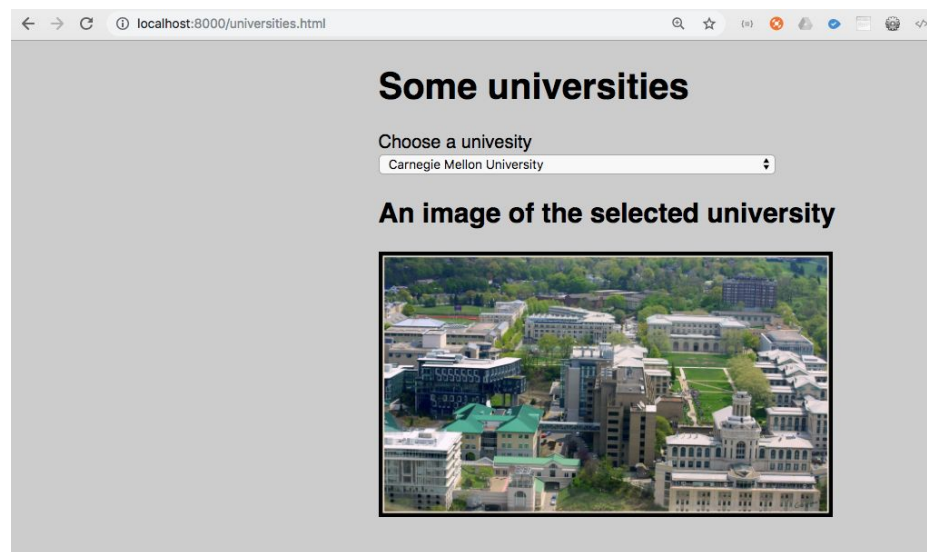

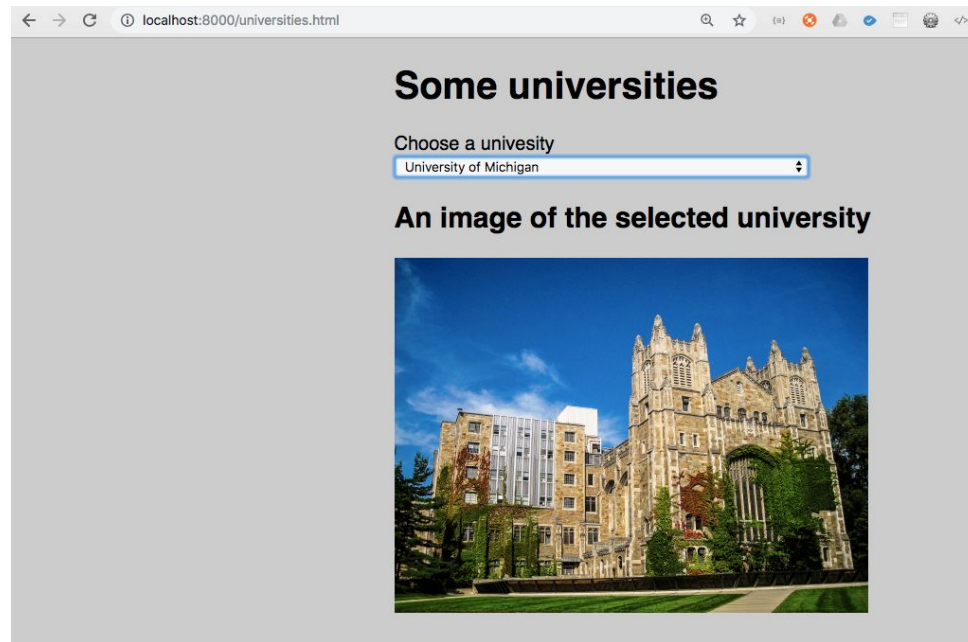Figure 3: The default selected university is Carnegie Mellon University
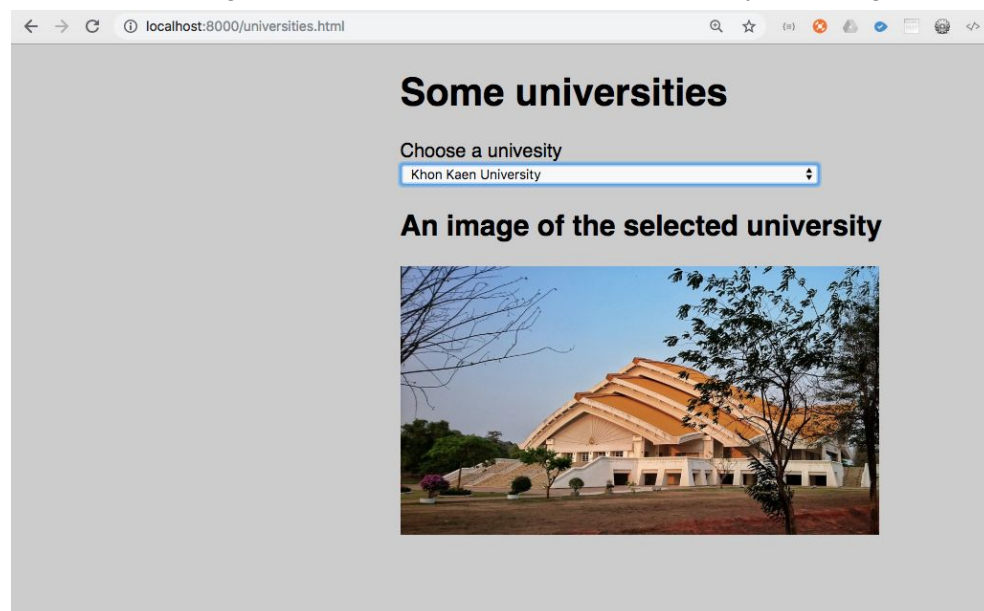
Figure 4: When the user selects "University of Michigan"

Figure 5: When the user selects "Khon Kaen University"