UWI

INFO2602 – Lab 2
Introduction to Bootstrap & JS

Section 1 –JS

Complete the tasks below in a file called util.js. You should write your own test code to ensure that the functions created work.

1. Write a function called “reverseString” that will accept a string and **returns** the reverse of the characters of the string entered as a parameter. For e.g. the string “hello world” will produce “dlrow olleh”.

2. Write a function called “getCurrDate” that will return the current date. The function will accept a single parameter called type that will determine the format of the date returned. If type is specified as “unix” return the unix-timestamp of the current time else, it will return the Date object. NB type is a optional parameter, users can call “getCurrDate(‘unix’)” or “getCurrDate()”

3. Write a function called “randomGuesser” that will return true if an integer between 1 and 10 accepted via a parameter matches a random number generated. Will return false otherwise.

4. Write a function called “generatePersonObject” that will build an array-based database of person objects. The function will accept four parameters; the array of persons, the first name, the last name and the sex, for e.g. “generatePersonObject(persons, ‘John’, ‘Doe’, ‘Male’)”. The function will create an object literal with the keys “firstname”, “lastname” and “key” and add the object to the array persons passed as a parameter.

Section 2 – JS & HTML

This section will utilize the utility functions created in section 1 to develop services/features that users can interact with via an HTML document. This added functionality will be defined in the main.js file.

Create an HTML file called “index.html”. Within the HTML file, link the util.js and a main.js files. The util.js file should be included before the main.js file. Complete the following specifications in the index.html and main.js files.

1. In the index.html file, add a div with the id “guessing_game”. This div will contain a paragraph (identified with “result”) and a button (identified with “start_game”) with the text “Start Guess”

2. In the main.js file, write the function called “guessingGame” that will:
    a. Prompt the user for a number
    b. Utilize the randomGuesser function created in Q1.3
    c. Display the result within the result paragraph

3. Write the JS code to dynamically add functionality to run the guessingGame function when the start_game button is selected. You should use the addEventListener method of the button element accessed via the id.

4. In the index.html file, add another div with the id “person_database”. The div will contain a form that has three input field (id=’firstname’, id=’lastname’, id=’sex’) and button (type=’submit’).

5. In the main.js file, write the function “retreiveAndStore” that will retrieve the values from the form, and store in an array using the generatePersonObject array created in Q1.4.

6. Write a function called “displayRecords” that will visualize the contents of the persons array as an html table.

Section 3 – Bootstrap

Add to the HTML file index.html, the bootstrap (v4.x) library and the jQuery (v3.x) library via a CDN (no need to download files) found at: https://www.bootstrapcdn.com/ and http://code.jquery.com/. Note that the jQuery library should be added before(above) the bootstrap library.

1. Convert all buttons to be primary buttons based on the documentation: https://getbootstrap.com/docs/4.0/components/buttons/

2. Change the document to have two equal columns where the “guessing_game” section is on the left and the “person_database” is on the right. https://getbootstrap.com/docs/4.0/layout/grid/

3. Within the right (person_database) section, futher sub-divide into the form and table in separate and equal columns

4. Update the visual appeal of the table: https://getbootstrap.com/docs/4.0/content/tables/

5. Update the visual layout of the form: https://getbootstrap.com/docs/4.0/components/forms/