Mod_2-Assignment
Enhancing your Web Page
& Write Script Programming

Note: Students are supposed to do all the exercises in the Module 1 prior to try this Assignment.

Purpose:
The goal of this assignment is to help you to apply knowledge of computing to design and implement Internet-based programming using current techniques, skills, tools that affect in your future career, and better communications via interface.

Skills: This assignment will help you to practice the following skills by applying tools that you learn in this course, such as HTMLs, Scripts, IDEs, etc., to enhance your existing Webpage.
- Use cascading style sheets to create style standards for a web site.
- Create a navigational framework that matches the content and genre of the site.
- Analyze JavaScripts source codes by using IDE, such as Visual Studio or Pychram
- Explain separation of concerns as it applies to the design and implementation of a web site
- Describe the issues involved in developing a web interface.
- Summarize the need and issues involved in web site implementation and integration
- Design and implement a web interface

Knowledge: This assignment will also help you to become familiar with the following important content knowledge in this disciple are as follow:
- Analyze the requirements for and create and implement the principles of web page development.
- Demonstrate knowledge of DOM objects that interacts with server-based programs
- Use simple features of DHTML.
- Create and use cascading style sheets (CSS)
- Create and use JavaScript programs
- Demonstrate the ability to communicate effectively.

Tasks:
1) **Develop JavaScript programming** that allows the user to enter strings into a variable number of input widgets. As a string is entered by the user its length is automatically displayed next to the input widget.
2) **Enhance your Webpage** Index.html (your Webpage) using SSH , by design **Buttons** that provide to control the interface to another page and to provide some functionality.

Minimum requirements that must be satisfied are as follows:
1. Scripts Programming
   https://www.w3schools.com/js/js_examples.asp
   - o Use the above Weblink, W3c schools Sample programs and **Write Scripts as follow by adding detail comments** *(Use IDE such as* **pycharm or Visual Studio**)

   Three Strings Programs are as follow:
   1. **Write a function called squareNumber** that will take one argument (a number), square that number, and return the result. It should also log a string like "The result of squaring the number 3 is 9."

   2. **Create a function called fixStart**. It should take a single argument, a string, and return a version where all occurrences of its first character have been replaced with '*', except for the first character itself. You can assume that the string is at least one character long. For example: fixStart('babble'): 'ba**le'

3. **Create a function called notBad** that takes a single argument, a string.
   - It should find the first appearance of the substring 'not' and 'bad'.
   - If the 'bad' follows the 'not', then it should replace the whole 'not'...'bad' substring with 'good' and return the result.
   - If it doesn't find 'not' and 'bad' in the right sequence (or at all), just return the original sentence.
     o For example:
       ▪ notBad('This dinner is not that bad!'): 'This dinner is good!'
       ▪ notBad('This movie is not so bad!'): 'This movie is good!'
       ▪ notBad('This dinner is bad!'): 'This dinner is bad!'

2. Enhance your Webpage Index.html (your Webpage) using SSH

- **Use your Mod_1 Assignment and create <u>Button to another page that include the following functions below by using Script programming.</u>**
- Clicking "Add Cell" button will add another input widget.
- Clicking "Remove Cell" button will remove an input widget, always leaving at least one input widget.
- Clicking "Sort" button will cause the visible strings to be sorted.
- Make a button named 'Assignment 3' on your web page (Assignment 1), and let clicking the button display the result of this assignment.
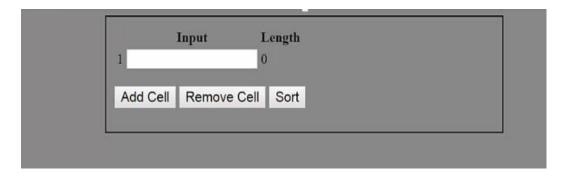
<u>Criteria for Success:</u>

Please see criteria below for your finish product as you are working on the tasks.

Please apply the specification and apply your creativities on tasks listed below in your Webpage and Scripts if applicable.
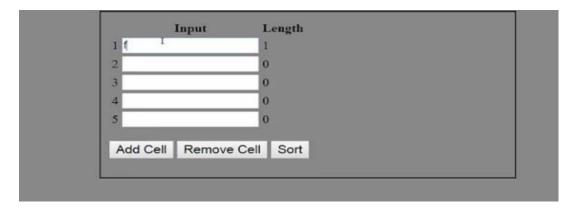
A desirable webpage can be with the
- Colors that doesn't overwhelm the texts, other web links, viewer, etc.,
- Fonts sizes needs to be readable;
- Pictures can be aligned and very similar;
- Web links needs to accessible and visible;
- Your MS Word .doc report needs to have proper title for each screenshots and sources code in BOLD and/or tables, etc.
- Remember, your creativity is open-ended.

- **An HTML** file should include the following features
  o Some texts (Anything you like)
  o Put the buttons in the table started near the bottom of the page
  o Hint: You may use nested multiple 'div's to represent the borders, backgrounds, and font colors.
  o Example: Your 2nd page can be like Three Button (Cell) ordering different textbook Such as OS, Accounting, Psychology, etc.

- **A CSS** file should include the following features
  - **Implement a CSS file** to let the web page look like the screen shots below
  - Set font-size of buttons as xx-large
  - Define 5 styles for foreground buttons and 5 styles for background buttons. For example, class selector 'colorA' will set the text color to color 'A'.
  - Then, apply styles to the buttons.
  - You don't have to use the same colors in the screen shots. However, borders and positions should be similar as the screen shots below
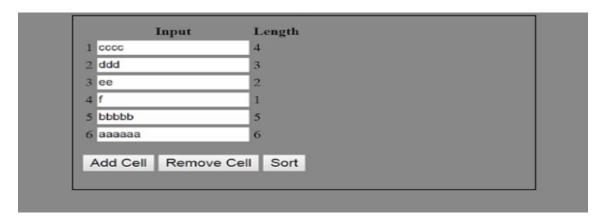
- **A Javascript** file should include the following features
  - **Assign events to the buttons** so as to apply a style to the texts or the background when a button is clicked. For example, if the Foreground button 'A' is clicked, texts should be changed to 'blue'. If the Background button 'A' is clicked, the text background (yellow area) should be changed to 'blue'
  - Repeat the 'a' to assign events for every buttons
1. Make a button named 'Assignment 2' on your web page (Assignment 1), and let clicking the button display the result of this assignment.
2. Basic screen with simple styling
   i. Provide styling that will approximately center the visible components. Also, change the default color for the background.
3. Add cell/Remove cell
   i. As a convenience to the user, the application will remember the string entered into a widget even after the widget is removed.
   ii. If the widget is added back again, then the saved value will be displayed in the widget.
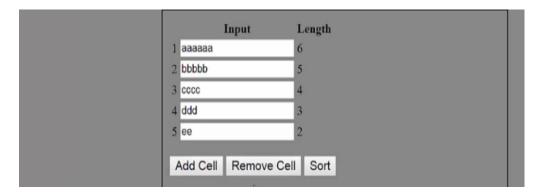

4. Typing and Length
   A. Every time a user types a key, it checks and shows the length of a string in each widget on the next (in a real-time manner).

5. Sorting
    A. Be careful, the saved strings do not participate in a sort operation if not visible.
    B. You can use array sort () method.

	Input	Length
1	aaaaaa	6
2	bbbbb	5
3	cccc	4
4	ddd	3
5	ee	2

Add Cell   Remove Cell   Sort

Deliverables:

After completion, students must submit the following deliverables through D2L Mod_2 assignment drop box by the deadline:
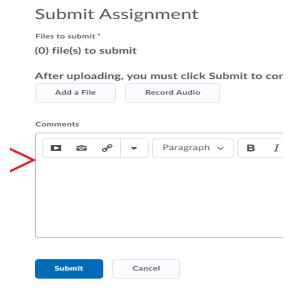
1) **Scripts Programs Submission**
    a. Please provide Three (3) Script programs .py or .vb, with detail comments in separate files.
2) **Provide Weblinks Button called "Assignment_2" on your Webpage.**

Assignments

- This webpage is the first assignment
- Assignment 2
- Assignment 3
- Assignment 4
- Assignment 5

**Here is a Sample Webpage**: **http://studentweb.kennesaw.edu/~nbarbee1/**

3) **Provide your URL** (_**Webpage address on the Mod_2 Assignment Dropbox Comments area**_); http://studentweb.kennesaw.edu/~ksunetID/

Submit Assignment

Files to submit *
(0) file(s) to submit

After uploading, you must click Submit to cor

Add a File   Record Audio

Comments

Paragraph ⌄   B   I

Submit   Cancel

4) **Report Submission using MS Word .doc**
   Your Source CODEs ("html", ".css", and ".js") must be submitted **within your report** using MS Word .doc, so that I can compile and run it in my environment using MS Word .doc.
   <u>**Each program source code by given Title to each program.**</u>

5) **Submit a compressed folder .Zip** *(Include Report, Three Script Programs files.)*