Assignment Week 1: Web Programming Part 1

Make sure that you have completed all material in the Week 1 on Brightspace before starting the assignment.

Make a copy in your own Google Drive, by clicking **File > Make a Copy**.

Part 1: Complete Assigned Khan Lessons Web Programming

For each of the Khan exercises that you were assigned, paste in a screenshot showing the full Khan window showing your code in the left pane, the results rendered in the right pane, and the congratulations message for getting the final step of that challenge.

   A. [Write A Poem](#)

```
...
</p>
</body>
```


   B. [You can learn text tags](#)

We've made this webpage with the words to 'You can learn anything', a video that Khan Academy made. Using both the **<strong>** and **<em>** tags that you just learned, mark up this text to show what you think should be emphasized and highlighted.

`<strong>...</strong>`

`<em>...</em>`

```
10          Adding, reading, writing, riding a bike.
    Nobody's good at anything at first.<br>
11          There was a time when Einstein couldn't
    count to 10.<br>
12          And Shakespeare had to learn his ABCs just
    like the rest of us.<br>
13          Thankfully, we are born to learn.<br>
14          Slowly. Surely. You stumble, slip, crawl,
    fall and fail and fall.<br>
15          Frustrating. Confusing. Trying. Struggling
    .<br>
16          Until one day, you walk.<br>
17          One foot in front of the other. One idea on
    top of the next.<br>
18          Each wrong answer making your brain a
    little bit stronger.<br>
19          Failing is just another word for growing.
    And you keep going.<br>
20          This. is. learning.<br>
21          It's not that you don't get it. <br>
22          You just don't get it, <em>yet</em>.
23          Because the most beautiful, complex
    concepts in the whole universe<br>
24          are built on basic ideas that anyone,
```

certainly can't do algebra.
Adding, reading, writing, riding a bike. Nobody's good at anything at first.
There was a time when Einstein couldn't count to 10.
And Shakespeare had to learn his ABCs just like the rest of us.
Thankfully, we are born to learn.
Slowly. Surely. You stumble, slip, crawl, fall and fail and fall.
Frustrating. Confusing. Trying. Struggling.
Until one day, you walk.
One foot in front of the other. One idea on top of the next.
Each wrong answer making your brain a little bit stronger.
Failing is just another word for growing. And you keep going.
This. is. learning.
It's not that you don't get it.
You just don't get it, *yet*. Because the most beautiful, complex concepts in the whole universe
are built on basic ideas that anyone, any
Whoever you are, wherever you are.

You only have to know **one** thing:
You can learn anything.

All steps complete!

C. Your Wishlist

```
1  <!DOCTYPE HTML>
2  <html>
3      <head>
4          <title>Challenge: Wishlist</title>
5          <meta charset="utf-8">
6      </head>
7      <body>
8      <ol>
9          <li>Sleep</li>
10         <li>A Vacation</li>
11         <li>World Peace</li>
12         <li>More Sleep</li>
13
14     </ol>
15
16
17
18     </body>
19 </html>
```

1. Sleep
2. A Vacation
3. World Peace
4. More Sleep

Congratulations!
You earned 1050 points!

D. Challenge: A picture perfect trip

```
 8          <h1>The perfect trip</h1>
 9
10          <p>I would see scenes like...</p>
11          <img src ="https://cdn.kastatic.org/third_pa
rty/javascript-khansrc/live-editor/build/images
/seasonal/fireworks-in-sky.png" alt = "A scene of
fireworks in a harbor" width = "150">
12          <p>And animals like...</p>
13          <img src ="https://cdn.kastatic.org/third_pa
rty/javascript-khansrc/live-editor/build/images
/animals/horse.png" alt = "A picture of a horse"
width = "150">
14
15
16          |
17
18          <p>And eat food like...</p>
19          <img src ="https://cdn.kastatic.org/third_pa
rty/javascript-khansrc/live-editor/build/images/food
/chocolates.png" alt ="A picture of chocolate" width
="150">
20          |
21     </body>
22     </html>
23
```

And animals like...

And eat food like...

Way to go!
Keep it up!

E. [Challenge Links For Learning](#)

```
 1     <!DOCTYPE html>
 2     <html>
 3        <head>
 4            <meta charset="utf-8">
 5            <title>Challenge: Links for learning</title>
 6        </head>
 7        <body>
 8
 9            <h1>Links for learning</h1>
10
11            <ul>
12                <li><a href = "http://www.wikipedia.org"
>Wikipedia</a></li>
13                <li><a href = "http://www.khanacademy
.org">Khan Academy</a></li>
14                <li><a href = "http://www.uri.edu">URI</a
></li>
15            </ul>
16
17        <a href ="http://www.coursera.org">  <img src
="https://www.kasandbox.org/programming-images/cute
/Heart.png"></a>
18
19        </body>
20     </html>
```

Links for learning

- [Wikipedia](#)
- [Khan Academy](#)
- [URI](#)

You figured it out!

Undo   Start over   Step 2/2   **Finish challenge**

F. [Dinner Table](#)

This is a webpage to show the dinner menu for a restaurant. We've created the initial table with three columns for the meal, ingredients, and price. Now, add three rows of data to the table, one row for each meal.

```
<tbody>
  <_>
    <_>...</_>
    <_>...</_>
    <_>...</_>
  </_>
</tbody>
```

```
16              <th>Price</th>
17          </tr>
18      </thead>
19      <tbody>
20          <tr>
21              <td>Breakfast</td>
22              <td>Eggs, Bacon, Coffee</td>
23              <td>$9.99</td>
24          </tr>
25          <tr>
26              <td>Lunch</td>
27              <td>Tuna Melt and Fries</td>
28              <td>$12.99</td>
29          </tr>
30          <tr>
31              <td>Dinner</td>
32              <td>Chicken Parmigiana with
    Linguini</td>
33              <td>$19.99</td>
34          </tr>
35      </tbody>
36      </table>
37
38      </body>
39  </html>
```

Our dinner menu

Meal	Ingredients	Price
Breakfast	Eggs, Bacon, Coffee	$9.99
Lunch	Tuna Melt and Fries	$12.99
Dinner	Chicken Parmigiana with Linguini	$19.99

You figured it out!

Part 2: Web Programming Knowledge

A) In your own words, describe what a web browser is. What protocol does it use to communicate with web servers?

A program that displays web sites on your device using html, css and often javascript. It uses HTTP to communicate with web servers.

B) What is a cookie used for? State at least one real-world example of how it can be used by a web server.

A cookie is a small file stored on your computer to provide a web server information if you go to the web site later. It might be used so the site remembers you and you don't have to login again.

C) Describe each of the following HTML tags:

- <h1>, <h2>, … <h6>: Heading tags from smaller to larger fonts.
- <p>: Paragraph tag for text.
-
: Break tag to create a line break in text.
- <em>: Emphasis tag. Adds emphasis to text.
- <strong>: Strong tag. Bolds text to make it more important.
- : Ordered list. Creates a list with numbered items.
- : Unordered list. Creates a list with bulleted unnumbered items.

- : List tag. Creates an item in a list.
- <img>: Image tag to display an image.
- <a>: Anchor tag. Used to create a hyperlink.

D) What attributes should a <img> tag have?

A src tag to provide a link to the image file. An alt tag to describe the image for accessibility.

E) What attributes should an anchor (<a>) tag have? What does this tag do when clicked?

An href tag to provide the url that the tag links to. Can have a target tag as well.

F) Describe each of the following HTML tags:

- <table>: Table tag that creates a table for displaying data.
- <tr>: Table row tag. Creates a table row.
- <td>: Table data tag. Creates an individual data element in a table.

Part 3: Program Draft Portfolio Website

Use HTML to program a draft portfolio website portfolio hosted on GitHub Pages. In the next assignment you will personalize it and stylize it. Here is an example portfolio web site like you will do in the next assignment:

- Home page
- My Javascripts page
- About Me page

The web sites you make in this current assignment will be similar to these, but more basic. We show you the above final products so you know what you will have after this current assignment and the next assignment.

A. Make the following changes to your **index.html** default web page. This will be your website's Home page.

B. **Title.** Give the document a title (title appears in the browser tab, not on the web page).

C. **Banner.** Add a banner image. Download this banner image (right click and save it), then upload it to your web server.

Use this banner in this assignment. You will make your own banner in the next assignment. .

D. **Navigation Buttons.** Add a table below the banner that contains button images Each button should be in its own table cell. You will link these buttons to their respective web pages later in this assignment. Download these button images and upload them to your web server. (Right click on each image > Select "save image as")

Use these buttons in this assignment. You will make your own buttons in the next assignment.

E. **Headline.** Add a headline (e.g. Welcome to my Page!) using a heading tag.

F. **Paragraph.** Write one or more paragraphs describing the website.

G. **Create Additional Web Pages.** The additional web pages must each contain a title, the banner, the navigation buttons, a headline, and a descriptive paragraph. ***HINT:** Copy the code from your index.html page and modify it to create the additional pages.

Create an additional web page for each of the following:

- **Javascripts.** This is where you will insert links to your Javascript programs. Leave this page blank except for the required items (title, banner, navigation, etc.). Save this page as *javascripts.html*.
- **About Me.** This page will contain information about you. Leave this page mostly blank except for the required items. Save this page as *about.html*.

H. **Hyperlink the Navigation Buttons.** Now that you have created all three web pages that will make up your website, go back to make the Navigation Buttons (i.e. Home, Javascript, and About Me) hyperlinks to their respective web pages. For example, the home.png button should be a hyperlink to the index.html page. The javascripts.png button should be a hyperlink to the javascripts.html page, and so on.

Paste the URL to your website (e.g., https://vfyawolfe.github.io/vfaywolfe) in the box below:

https://joehicksuri.github.io/

Part 4: Notes Document

Paste the URL to your URI Google Drive notes document in the box below:

https://docs.google.com/document/d/19Jb2SpnZO1WhIhtgnwLnjShWILuKF43kJm1YVBl53D
U/edit?usp=sharing

Make sure that the share settings for your notes document is set to *Anyone with The Link* (can view) so that the graders can view it.

Academic Integrity

Assignments are to be the result of your individual efforts, unless you are told otherwise. It is easy to copy material on the computer; such copying constitutes plagiarism. We employ software to check for code plagiarism and the teaching staff actively evaluates student work to determine if it has occurred. See the University Manual for more information about the potential consequences of cheating. https://web.uri.edu/manual/chapter-8/chapter-8-2/."

For programming: While you may discuss general solutions and algorithms with classmates and/or AI. You are **not** allowed to:

- Share code with other students
- Look at any other student's code
- Use code provided to you by anyone else
- Use code that you find on the Internet.
- Use code generated for you (e.g. by AI). You may ask AI questions about algorithms and ways to approach programming this assignment, but you may **not** have AI generate code for you, paste code into AI, nor copy/paste code out of AI.
- Use programming constructs not taught in class without prior approval by the teaching staff.

If you use code that you did not write specifically for an assignment, you must have the permission of the teaching staff, and you must include in comments in the code where the code came from, and describe how the code works.

If AI was used to generate code with permission of the teaching staff, you must provide a screenshot of the interaction with the AI tool including the prompts you used and the code generated.

 If you ever have a question about what is acceptable when working on a programming assignment, please contact the teaching staff.