ASSIGNMENT 1

Due Tuesday, January 15 by start of class

Provide your responses in a separate document and upload to Blackboard

1. Investigate the following HTML and complete the following tasks:
    A) **Validate the markup.** Identify (list) all errors in the HTML and rewrite the HTML with correct syntax.
    B) **Identify all elements.** Using a pen either on paper or with a digital annotation tool, draw a rectangle around all elements in the HTML, demonstrating correct nesting.
    C) **Determine default styles.** For each of your identified elements from part 1B, determine if it will display as block or inline.

```
<doctype html>
<head>
        <title>A simple HTML webpage<title>
</head>
<body>
        <meta charset="UTF-8">
        <div>
                <p class=paragraph basic>
                This is a paragraph with some <i><b>bold and italic text</i></b>
                <p>
                This is another paragraph
                </p class="paragraph">
        </div>
        <div>
                <img src="picture.jpg width="300px" height="400" />
                <ul>
                        <li>Item 1
                        <li>Item 2</li>
                        <li><a>Northeastern.edu</li></a>
                </ul>
</body>
</html>
```

2. Markup the following recipe (next page) using standard HTML tags. Practice good syntax (e.g., good use of readable indentation and whitespace), and **utilize at least each of the following a minimum of one time** (you may use more:

   div, h* (h1, or h2, etc), p, ul, ol, li, b, i

Chocolate Cake

Recipe from *King Arthur Flour*

https://www.kingarthurflour.com/recipes/chocolate-cake-recipe

This chocolate cake has more of a milk chocolate, rather than dark chocolate flavor, making it perfect for kids. It's simple to put together, and bakes up into a moist but easy-to-slice cake. It's perfect for layers or cupcakes, or served right from a 9" x 13" pan. For a snack cake version, add a cup of mini chocolate chips to the batter. For a more grown-up taste, add a teaspoon of espresso powder. We've tested this cake with natural unsweetened cocoa, and with Dutch-process; both work well. The Dutch-process cake will be darker in color and slightly less sweet.

Our guarantee: This cake will be tender and moist. It makes a good layer cake, cupcakes, or eat-out-of-the-pan cake, with a fine crumb that you can pick up with the back of your fork.

Ingredients

- 2 1/4 cups King Arthur Unbleached All-Purpose Flour
- 1 1/2 teaspoons baking powder
- 1/2 teaspoon baking soda
- 1/2 teaspoon salt
- 3/4 cup unsweetened cocoa, natural or Dutch-process cocoa
- 1 3/4 cups granulated sugar
- 8 tablespoons (1/2 cup) unsalted butter, very soft
- 1/3 cup vegetable oil
- 2 teaspoons vanilla extract
- 1 cup milk
- 1/2 cup coffee or water
- 4 large eggs

Instructions

1. Preheat the oven to 350°F. Lightly grease and flour your choice of pan(s): one 9" x 13" pan, two 9" round pans, three 8" round pans, or the wells of two muffin tins. You can also line the muffin tins with papers, and spray the insides of the papers.

2. Place a strainer over a large mixing bowl. Measure in the flour, baking powder, baking soda, salt, cocoa, and sugar. Sift/shake the dry ingredients through the strainer into a mixing bowl, to eliminate any lumps.

3. Add the butter and mix at low speed for 1 minute. With the mixer running, add the oil and continue mixing until the mixture looks like sand.

4. Combine the vanilla with the milk and coffee or water, and add all at once. Mix for 1 minute at low speed, stop and scrape the sides and bottom of the bowl, then mix for 30 seconds more.

5. Add the eggs one at a time, beating well at medium-high speed between additions.

6. Scrape the sides and bottom of the mixing bowl, and mix for 1 minute more. The batter will be thin.

7. Transfer the batter to the prepared pan of your choice. For layers, divide the batter among the pans. Smooth out the tops of the layers with an offset spatula or the back of a tablespoon. For cupcakes, scoop by the heaping 1/4 cup into the prepared muffin tins.

8. Bake for 34 minutes for a 9" x 13" pan; 28 to 30 minutes for 9" layers; 24 to 26 minutes for 8" layers, or 21 to 23 minutes for cupcakes.

9. The cake is done when the top springs back when very lightly touched in the center, and the edges just begin to pull away from the edge of the pan. A toothpick inserted in the center will come out clean.

10. Remove the cake from the oven and place on a rack to cool before removing it from the pan.

Tips from our bakers

- The butter in this recipe needs to be very soft. You can soften butter by placing the sticks, still in their wrappers, in a bowl of warm (not hot) water for 10 minutes. If you can leave a dent in the butter with a gentle touch, it's ready to use.

- The volume of this batter is 5 3/4 cups. The weight of the batter is 3 pounds, 1 ounce. If you're weighing out layers, put 1 pound, 8 1/2 ounces in each 9" layer, or 1 pound in each 8" layer.

3. Find an example of an HTML page, preferably a news article of your choice, and look at its source code in the browser. For your example, do each of the following:

A) Describe how the document is structured

B) Write out the document outline as a tree or bulleted list, indicating all elements in the HTML

C) Describe whether or not the HTML as given is semantically valid. If it is not, provide some suggestions on how it could be improved.

4. Select **two words** on the vocabulary list that do not yet have definitions. Write your words and definitions here and fill them out in the vocabulary spreadsheet:
https://docs.google.com/spreadsheets/d/1UbSpGaGfTyCf_QzDMUwJqBNMkKYbIoMtXpmuR-lbglo/edit?usp=sharing