CMPT 241 Web Programming
Project 1: Recipe (HTML & CSS)

(Adapted from Web Programming Step by Step, 2nd Edition)

Due Date: Friday, February 26, 2021

This project tests your understanding of basic HTML and CSS. You will create several files related to a recipe web site for a fictional pie company named Granny's Pies. Turn in the following files:

- index.html, the first of two web pages (with an optional CSS style sheet file); *appearance is up to you*
- pie.html, the second of two web pages; *must match a particular specified appearance*
- recipe.css, the style sheet for pie.html

For full credit, your files must be uploaded to the web and must match the guidelines in this document.

Index Page:

The first part of your task is to create a front page for this web site, stored in a file named index.html. Your front page must contain a link to pie.html. The file must contain at least 4 different HTML elements in its body. It also may not significantly borrow content from your pie.html. Otherwise, this front page can have any appearance you like. If you like, you may use an optional CSS file with this page named index.css and submit it with your other files. Be creative!

Pie Recipe Page:

The second part is to recreate a specific web page of a recipe for lemon meringue pie, stored in a file named pie.html. Unlike index.html, this page must exactly match the appearance specified in this document.

You must match in appearance the pie web page shown on the **next page** of this document. Any line breaks shown are done automatically by the browser, except ones that are clearly much narrower than the page width, such as the line "One 9-inch pie":

Provided Output Text:

You **don't need to type in all of the text** of the pie web page, only the HTML tags. There is a **provided text file** on the course web site that you can copy and paste into your text editor to get started. Then you can add the appropriate HTML tags to the file and save it as your .html page.

Appearance and Behavior Details:

The pie web page's title text should be **Grandma's Lemon Meringue Pie** .

All **headings** on the page should use a foreground color of #A4A400 (red=164, green=164, blue=0) and a background color of #F0F0F0 (red=240, green=240, blue=240). The font families for headings are: Lucida Sans Unicode, Helvetica, Arial, or any sans-serif font available on the system (in that order). The page's main heading is aligned to the center of the page body, and uses a 22pt bold font. Other headings on the page are left-aligned and appear in an 18pt normal font. All headings should be underlined.

The overall page's **body** should have a white background. Text in the body should have a foreground color of #404040 (red=64, green=64, blue=64) and use an 11pt font. The **font** families for page text are Georgia, Garamond, or any serif font available on the system. Any links on the page should use the color #A4A400 (red=164, green=164, blue=0), matching the color of the page headings.

In the Ingredients list, the underlined words "tbsp" and "tsp" are **abbreviations** for "tablespoons" and "teaspoon" respectively. When the user hovers the mouse over these abbreviations, the full word should appear as a tooltip.

At the end of the Directions, the **deleted word** "cake" with a strike-out line through it is replaced by the word "pie".

After the Links section there is a short **copyright notice** that appears as a section of **pre-formatted text** in a monospace font. The text is spaced such that the last letter lines up on horizontally for each of the three lines.

Appearance and Behavior Details (continued):

The names of the four major steps of the **recipe directions** (such as "Preheat Oven") are strongly emphasized. The **quotations** from the users appear in an italic font as indented blocks with background color #FFFFA8 (red=255, green=255, blue=168). Some words in the last quote are bolded for emphasis.

The picture of the pie and the W3C validator **images** at the bottom come from the following images, respectively:

- pie.jpg
- w3c-html.png
- w3c-css.png

The page bottom has four **links**. The "Home" link should go to your index.html page. Use a relative URL and assume it is located on the same site and directory as pie.html. The "Search for other lemon meringue pie recipes" text, "W3C HTML5" button, and "W3C CSS" button should link to the following web pages, respectively:

- http://www.google.com/search?q=lemon+meringue+pie+recipe&start=10
- https://validator.w3.org/check?uri= followed by the public URL of your HTML page
- http://jigsaw.w3.org/css-validator/validator?uri= followed by the public URL of your HTML page

For example, if the page's URL is https://turing.manhattan.edu/~tina.tian/example.html, the links to validate the HTML and CSS code would be as follows.

- https://validator.w3.org/check?uri=https://turing.manhattan.edu/~tina.tian/example.html
- http://jigsaw.w3.org/css-validator/validator?uri=https://turing.manhattan.edu/~tina.tian/example.html

All other decisions about styling on the page are left to the web browser. Any styles mentioned previously that are the same as browser defaults do not have to be explicitly included in your CSS style sheet.

Extra Features:

In addition to the previous required features, you must also complete at least **two (2) of the following** additional requirements in your pie page. Some features may have not been covered in detail in lecture; you will have to explore your resources such as your textbook, lecture slides, or online references to learn how to complete these features. If you want to complete more than two of the extra features below, that is fine, but only two are required.

1. **Background:** Set the overall page to use a background image of: silverware.jpg
   The image should repeat in both directions across the page and should not move when the page is scrolled.
2. **Favicon:** Set the page to have a "favorites icon" ("favicon"). Use: pie-icon.gif
   The icon may not work in Internet Explorer; you may ignore this.
3. **Pie bullet:** Set all bulleted lists of items on the page to use an image for their bullet icon rather than the normal black circle. Use the following image: pie-bullet.png
4. **Wide headings:** Place 0.25em horizontal spacing between neighboring letters in all headings on the page.

Near the top of your HTML file, **put a comment** saying which extra features you have completed.

As much as possible, you should implement these changes by modifying your CSS code rather than your HTML. Some of the CSS properties necessary will not have been covered in class, so you must learn them yourself. Try using the textbook or Google. There are some good HTML and CSS references such as the following sites:

- https://www.w3schools.com/html/
- https://www.w3schools.com/css/

A screenshot of the expected output for the extra features is available on the course web site.

Implementation and Grading:

For full credit, your pie.html page must pass the W3C HTML5 **validator** with no errors (a green bar). Choose appropriate HTML tags to match the structure of the content on the page. Do not express style information in HTML with inline styles or presentational HTML tags such as `b` or `font`. You may not use any HTML tables in your pie.html page.

You only need to worry about your page's appearance in standards-compliant browsers such as Firefox or Chrome. You will not be tested in Microsoft Internet Explorer or other browsers that do not comply to web standards.

Express all stylistic information on the page using **CSS** defined in recipe.css. For full credit, your style sheet must successfully pass the W3C CSS validator. Part of your grade comes from expressing your CSS concisely and without unnecessary or **redundant** styles. For example, if the page uses the same color or font family for multiple elements on the page, you must group those elements into a single CSS rule, so that it would be possible to change the page's color/font by modifying a single place in the CSS file. Outside of extra features, do not use HTML or CSS constructs that have not been discussed in lecture or the slides, through Chapters 2-3 of the textbook.

Do not overuse HTML `class` and `id` attributes in your HTML unnecessarily. If there is already a suitable tag for representing a given piece of content, favor the use of that tag rather than a less appropriate tag with a `class` or `id` attached for styling purposes.

Format your HTML and CSS nicely so that it is as readable as possible, similarly to the examples shown in class. Also place a comment header in each file containing your name and a brief description of the assignment and the file's contents. You must properly use whitespace and indent your HTML and CSS code following examples shown in class. To keep line lengths manageable, do not place more than one block element on the same line.

The majority of the points for this assignment will be for the pie.html and its recipe.css files. The index.html will also be graded, but it will be worth fewer points. The main stylistic constraint on your index.html file is that it should pass the W3C HTML5 and CSS validators.

Submit your assignment in Moodle (lms.manhattan.edu). Turn in both .html files and your .css style sheets. You do not need to turn in the provided images. If your index.html page includes images linked using absolute URLs, you do not need to turn in those images.

Part of your grade will also come from successfully uploading your files to the web. You should place your files into your public web space in a subdirectory named project1, so that it is possible to navigate to your page in the browser.