Homework #1: Recipe

CSCI 342, Fall 2017

September 28, 2017

Description: This assignment 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
- index.css, an optional style file for index.html.
- 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 zipped together into a file named csci342hw01.zip and uploaded to canvas before the deadline, and must match the guidelines in this document. Make sure you zip *just the files* and not the folder containing the files. This is so I can run a script to unzip everything and run some tests without my interaction.

Due date: Friday, October 20, midnight.

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 also be at least 20 lines long and 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! We may show some students' pages in class.

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 in the Figure 1.

Based on browser, operating system, and other factors, your page may not exactly match fonts and colors, but they should approximate them. The width of your page will also alter the line breaks, which 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 leftaligned 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 horizontally for each of the three lines.
- 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 is from the file pie.jpg provided on the homework website.

- 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 should link to http://www.google.com/search?q=lemon+meringue+pie+recipe&start=10
- The "W3C HTML5" button, and "W3C CSS" button should link to the validation web pages as explained here: https://validator.w3.org/docs/help.html#manual. Note: these links will not work when you open the html file in a browser, but should work when the pages are served by a web server. Since we're not using servers yet, don't worry about this, just copy and paste the suggested code from the above website. To validate your pages without serving them, use the file upload or copy and paste method of the validation service.
- 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. The screenshot in this document was taken on Linux using Chrome, which may differ from the appearance on your system.

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. These are features that may have not been covered in detail in lecture; you will have to explore online resources 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.

- 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.
- 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.
- 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-icon.gif
- Wide headings: Place 0.25em horizontal spacing between neighboring letters in all headings on the page.
- **Tight heading background:** Make it so that the gray background behind the headings on the page is only behind the text itself, not stretched across the entire width of the page. (Looks nice with extra feature #1.)
- Other: Do you have an extra feature you'd like to add to your page that isn't listed here? Ask me and I'll let you know if it is okay to substitute for one of the above.

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.

Implementation and Grading:

- For full credit, your pie.html page must pass the W3C HTML5 validator with no errors (a green bar). (Your page is fine as long as you see the green bar and text "Document checking completed. No errors or warnings to show.")
- 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.
- Do not overuse HTML class and id attributes to target elements for styling. 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, the course name and number, 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 or begin any block element past the 100th character on a 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. Beyond that it can contain any non-obscene content you like, even content that uses material we have not yet learned in lecture.
- Please do not link to external resources from your index.html page, other than the image files and the resources specified in the requirements, above.

- Submit your assignment online on canvas.
- Zip together all files, including images, so that the website is complete upon unzipping. Do not zip the folder: after unzipping the files should be in the same folder as the zip file.
- Include any extra images you used in the zip file.
- If you used any absolute links to resources, you do not have to include local copies of them.
- Part of your grade will come from correctly zipping and successfully uploading your solution to canvas.

Acknowledgements: This assignment is adapted from one that is: Copyright ©Marty Stepp / Jessica Miller, licensed under Creative Commons Attribution 2.5 License. All rights reserved.

<u>Grandma's Lemon Meringue Pie</u> One 9-inch pie 30 Min - Prep time 10 Min - Cook time 40 Min - Total 8 Servings **INGREDIENTS** 1 cup white sugar 2 thap all-purpose flour 3 thap comstarch 11/4 tap salt 1 1/2 cups water 2 temos, juiced and zested 2 thap butter 4 eag yolks, beaten 1 (9 inch) pie crust, baked 4 eag whites 6 thap white sugar DIRECTIONS 1. Preheat Oven: Preheat oven to 350 degrees F (175 degrees C). 2. Make Lemon Filling: In a medium saucepan ... • Whisk together 1 cup sugar, flour, cornstarch, and salt. • Stir in water, lemon juice and lemon zest. • Cook over medium-high heat, stirring frequently, until mixture comes to a boil. • Stir in butter. • Place egg yolks in a small bowl and gradually whisk in 1/2 cup of hot sugar mixture. • Place egg yolks in a small bowl and gradually whisk in 1/2 cup of hot sugar mixture. • Bring to a boil and continue to cook while stirring constantly until thick. • Remove from heat. • Pour filling into baked pastry shell. 3. Make Meringue: In a large glass or metal bowl ... • Whise dayag gradually, and continue to whip until stiff peaks form. • Spread meringue over pie, sealing the edges at the crust. 4. Bake: Bake in preheated oven for 10 minutes, or until meringue is golden brown. This is our favorite recipe here at Granny's Pies. It has been enjoyed by pie fans for many years. It's Granny's favorite! We hope you'll find that this recipe is delicious and also easy to follow; it's a piece of eake pie! USER COMMENTS This is a very fun recipe to follow, because Grandma makes it sweet and simple. This pie is thickened with cornstarch and flour in addition to egg yolks, and contains no milk. Q: What do you call an ape who loves pie? A: A meringue-utan. - Vickie K. This site can really engage my interest. Follow the recipe above and make it so! This pie is number one. LINKS Search for other lemon meringue pie recipes Home Copyright © 2012 Granny's Pies A Granny's Pies Production All rights reserved W3C HTML W3C css

Figure 1: Desired appearance of $\mathtt{pie.html}$. Small differences depending on browser/system/etc. are acceptable. This was made using Chrome on Linux.