

CSE336 Internet Programming

Homework Assignment 1: Recipe

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. Write the following files:

- `index.html`, the first of two web pages (with an optional CSS style sheet file)
- `pie.html`, the second of two web pages
- `recipe.css`, the style sheet for `pie.html`

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 stylesheet with this page named `index.css` and submit it with your other files. Be creative!

The second (and more substantial) part of the assignment is to recreate a specific web page describing a recipe for lemon meringue pie, stored in a file named `pie.html`. Unlike `index.html`, this page is rigidly specified and must exactly match the appearance specified in this document.

Expected Appearance:

You must match in appearance the following pie web page (between but not including the thick black lines). The width of the screenshot below is based on a browser window width of 1024px; if your screen is a different size, the width of your page may not exactly match. Any line breaks 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":

Grandma's Lemon Meringue Pie



One 9-inch pie
30 Min - Prep time
10 Min - Cook time
40 Min - Total
8 Servings

INGREDIENTS

- ♦ 1 cup white sugar
- ♦ 2 tablespoons all-purpose flour
- ♦ 3 tablespoons cornstarch
- ♦ 1/4 teaspoon salt
- ♦ 1 1/2 cups water
- ♦ 2 lemons, juiced and zested
- ♦ 2 tablespoons butter
- ♦ 4 egg yolks, beaten
- ♦ 1 (9 inch) pie crust, baked
- ♦ 4 egg whites
- ♦ 6 tablespoons 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.
 - ♦ Whisk egg yolk mixture back into remaining 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 ...
 - ♦ Whip egg whites until foamy.
 - ♦ Add sugar 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.

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.

- Emilie S.

Q: What do you call an ape who loves pie?

A: A meringue-utan.

- Vickie K.

LINKS

[Search for other lemon meringue pie recipes](#)

[Home](#)



Appearance and Behavior Details:

All headings on the page should use a foreground color of (red=164, green=164, blue=0) or #A4A400 and a background color of (red=240, green=240, blue=240) or #F0F0F0. The font families for headings are Century Gothic, Futura, Verdana, or any sans-serif font available on the system. 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 (red=64, green=64, blue=64) or #404040 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 (red=164, green=164, blue=0) or #A4A400, matching the color of the page headings.

The names of the four major steps of the recipe directions (such as "Preheat Oven") are formatted in a strong font. The quotations from the users appear in an italic font as indented blocks with background color (red=255, green=255, blue=200) or #FFFFC8. The picture of the pie on the page and the W3C validator images at the bottom come from the following image files, respectively:

- <http://www.cs.washington.edu/education/courses/cse190m/09sp/homework/1/pie.jpg>
(use an absolute URL to link to this image; don't link to a relative URL on your hard drive)
- <http://www.w3.org/Icons/valid-xhtml11>
- <http://jigsaw.w3.org/css-validator/images/vcss>

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 stylesheet.

The bottom of the page has four links. The "Home" link should link to your `index.html` page. Use a relative URL and assume it is located on the same web site as `pie.html` in the same directory. The "Search for other lemon meringue pie recipes" text, the "W3C XHTML 1.1" button, and the "W3C CSS" button should link to the following web pages, respectively:

- <http://www.google.com/search?q=lemon+meringue+pie+recipe&start=10>
- <http://validator.w3.org/check/referer>
- <http://jigsaw.w3.org/css-validator/check/referer>

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

Extra Features:

In addition to the previous required features, you must also **complete at least two of the following additional requirements** in your pie page. 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 <http://www.cs.washington.edu/education/courses/cse190m/09sp/homework/1/silverware.jpg> (use absolute URLs to link to all images). 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") of http://www.cs.washington.edu/education/courses/cse190m/09sp/homework/1/pie_icon.gif (use absolute URLs to link to all images). Instructions for favicons are found in Chapter 3 of the textbook. The favicon will not work properly 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 image of http://www.cs.washington.edu/education/courses/cse190m/09sp/homework/1/pie_icon.gif (use absolute URLs to link to all images).
4. **Wide headings:** Widen all headings on the page by placing 0.2em of horizontal spacing between neighboring letters in all headings.
5. **Borderless image links:** Get rid of the yellow borders around the W3C images at the bottom of the page.
6. **Other:** Do you have an extra feature you'd like to add to your page that isn't listed here? Ask your instructor.

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, Google, or looking at a CSS property reference such as the following site:

- http://www.w3schools.com/css/css_reference.asp

Implementation:

Implement your `pie.html` web page using XHTML 1.1 as taught in class. For full credit, your page must successfully pass the [W3C XHTML 1.1 validator](#) with no errors (a green bar). (It is okay if the validator says your page is "tentatively" valid or has warnings, as long as you see the green "Valid" bar in the validator.) You should choose appropriate HTML tags to match the structure of the content being displayed on the page. Do not express stylistic information in the HTML page itself, such as inline styles or presentational HTML tags such as `b` or `font`. You may not use HTML tables in your pie recipe page.

You only need to worry about the appearance of your page in standards-compliant web browsers such as Firefox.

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.

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 section and a brief description of the assignment and the file's contents. You must properly use whitespace and indent your XHTML 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. For reference, our solution has 118 lines of HTML and 36 lines of CSS, though you do not need to match this exactly.

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 XHTML 1.1 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 (other than image files or `index.css`) from your `index.html` page.

Submit your assignment with all the files including both `.html` files and your `.css` style sheets. If your `index.html` page includes images linked using absolute URLs, you do not need to turn in those images.



This document's contents are © Copyright 2009 Marty Stepp / Jessica Miller and licensed under Creative Commons Attribution 2.5 License.