



Program 1: HTML and Cascading Style Sheets

Student Learning Objectives

- Demonstrate the ability to author valid XHTML 1.0 Strict Web pages
- Demonstrate the ability to author valid externally linked cascading style sheets (CSS)
- Demonstrate the ability to create accessible and semantically correct XHTML code
 - **All** style rules should be placed in CSS, not in XHTML

Introduction

This assignment tests your understanding of basic XHTML and CSS. You will create two XHTML web pages and a CSS file from content borrowed from the [World's Healthiest Food](#) web site. Note: Educational Fair Use guidelines permit this limited use of copyrighted material.

Create the following files in folder `U:\htdocs\programs\program1\`

- `program1.html`, the front *home* page for these two web pages (with an optional CSS style sheet file)
- `recipe.html`, the second of two web pages containing a recipe for 15-minute garbanzo bean salad
- `program1.css`, the external style sheet for both pages
 - You may use an additional, optional CSS style sheet for `program1.html`

program1.html

The first part of your task is to create a front page for this web site, stored in a file named `program1.html`. Your front page must contain a **navigation bar** which links to itself and to `recipe.html` file

- The file must also be at least 20 lines long and must contain at least 4 different XHTML elements in its body
- It must adhere to the [CS 250 coding standards](#) for HTML code, including header comment and metadata
- It may **not** significantly borrow content from your `recipe.html` or other pages. The intent is for you to create content, not copy and paste. Be creative and fun!
- Its overall look should be set by `program1.css`
 - If you like, you may use an additional optional CSS stylesheet with this page named `front.css` and submit it with your other files. Be creative and fun!

recipe.html

The second (and more substantial) part of the assignment is to create a specific web page describing a recipe for 15-minute garbanzo bean salad. Unlike `program1.html`, this content and style of this page is rigidly specified and must exactly match the appearance specified in this document.

The **text and images** for this page may be copied from the recipe posted at the *real* web site: [World's Healthiest Foods](#). Do **not** make the mistake of copying the HTML code.

Expected Appearance:

You must match in appearance the following screen snapshot. The width of the screen snapshot shown below is based on a browser window width of approximately 1024px; if your screen is a different size, the width of your page will not exactly match. All line breaks are done automatically by the browser, except ones that are clearly much narrower than the page width.

Screen Snapshots

`program1.html` screen snapshot is **not** included. While the content of the front *home* page is up to you, the XHTML code needs to be semantically and syntactically correct. Do not include any style information in the XHTML code. Be sure to include the top navigation bar and a link to the external css file `program1.css` for the overall style rules for the page.

`recipe.html` **screen snapshot**

World's Healthiest Foods

[Home](#)[Recipe](#)

15-Minute Greek Garbanzo Bean Salad

Rich in protein and dietary fiber, this fresh-tasting salad provides 11% of your Daily Value (DV) for protein and 26% DV for dietary fiber. It only takes minutes to prepare and gets tastier the longer it marinates. Make this quick and easy recipe a regular addition to your Healthiest Way of Eating.

15 minute Greek garbanzo bean salad



Prep and Cook Time: 15 minutes

Ingredients:

- 2 cups or 1 15 oz can garbanzo beans (without BPA), drained and rinsed
- 2/3 cup minced scallion
- 2 medium cloves garlic, pressed

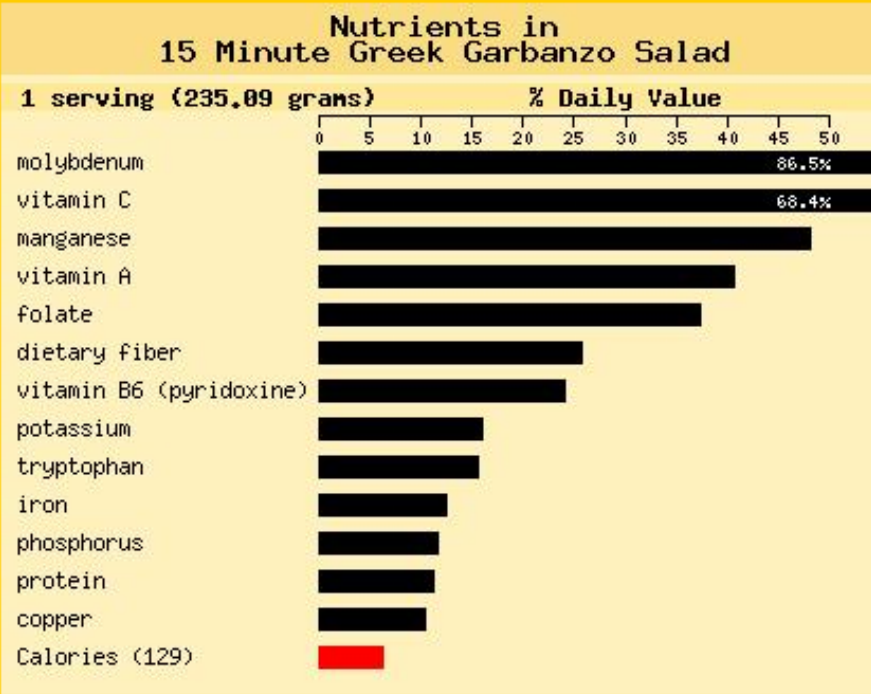
- 3 medium cloves garlic, pressed
- 1 medium ripe tomato, seeds removed and chopped
- 3 medium ribs celery, diced about 1/2-inch pieces
- 3 TBS fresh lemon juice
- 2 1/2 TBS chopped fresh mint (or 2 1/2 tsp dried mint)
- 3 TBS chopped fresh parsley (or 3 tsp dried parsley)
- extra virgin olive oil to taste
- 1 small head chopped romaine lettuce, outer leaves removed, and discarded
- salt & cracked black pepper to taste
- * optional: 1/4 cup feta cheese

Directions:

1. Mix all ingredients except lettuce and cheese in a bowl and season with salt and pepper to taste.
2. Serve on bed of chopped romaine lettuce and sprinkle with feta cheese, if desired.

Serves 4

Nutritional Profile



Introduction to Recipe Rating System Chart

In order to better help you identify recipes that feature a high concentration of nutrients for the calories they contain, we created a Recipe Rating System. This system allows us to highlight the recipes that are especially rich in particular nutrients. The following chart shows the nutrients for which 15-Minute Greek Garbanzo Bean Salad is either an excellent, very good, or good source (below the chart you will find a table that explains these qualifications). If a nutrient is not listed in the chart, it does not necessarily mean that the recipe doesn't contain it. It simply means that the nutrient is not provided in a sufficient amount or concentration to meet our rating criteria. (To view this recipe's in-depth nutritional profile that includes values for dozens of nutrients - not just the ones rated as excellent, very good, or good - please use the link below the chart.) To read this chart accurately, you'll need to glance back up to see the ingredients used in the recipe and the number of serving sizes provided by the recipe. Our nutrient ratings are based on a single serving. For example, if a recipe makes 4 servings, you would be receiving the nutrient amounts listed in the chart by eating 1/4th of the combined ingredients found in the recipe. Now, returning to the chart itself, you can look next to the nutrient name in order to find the nutrient amount it offers, the percent Daily Value (DV%) that this amount represents, the nutrient density that we calculated for this recipe and nutrient, and the rating we established in our rating system. For most of our nutrient ratings, we adopted the government standards for food labeling that are found in the U.S. Food and Drug Administration's "Reference Values for Nutrition Labeling." [Read more background information and details of our rating system.](#)

15 Minute Greek Garbanzo Salad				
1.00 serving, 235.09 grams, 129.25 calories				
Nutrient	Amount	%DV	Nutrient Density	World's Healthiest Foods Rating
molybdenum	64.87 mcg	86.5	12.0	excellent
vitamin C	41.04 mg	68.4	9.5	excellent
manganese	0.96 mg	48.0	6.7	very good
vitamin A	2027.48 IU	40.5	5.6	very good
folate	149.18 mcg	37.3	5.2	very good
dietary fiber	6.45 g	25.8	3.6	very good
vitamin B6 (pyridoxine)	0.48 mg	24.0	3.3	good
potassium	562.28 mg	16.1	2.2	good
tryptophan	0.05 g	15.6	2.2	good
iron	2.24 mg	12.4	1.7	good
phosphorus	117.45 mg	11.7	1.6	good


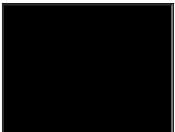





phosphorus	117.47 mg	11.7	1.6	good
protein	5.60 g	11.2	1.6	good
copper	0.21 mg	10.5	1.5	good

World's Healthiest Foods Rating Rules					
excellent	DV>=75%	OR	Density>=7.6	AND	DV>=10%
very good	DV>=50%	OR	Density>=3.4	AND	DV>=5%
good	DV>=25%	OR	Density>=1.5	AND	DV>=2.5%

In-Depth Nutritional Profile for [15-Minute Greek Garbanzo Bean Salad](#)

recipe.html Appearance Specifications:

The pages use the following color scheme:

						
#FFCC00 body background color	#000000 body font color	#CC9933 table background color	#FFFFFF table font color, table, th, td border color	#003366 table heading th background color	#F0F0F0 headings and table caption background color	#A4A400 heading and table caption font color

- The page's title text should be **World's Healthiest Foods: 15-Minute Greek Garbanzo Bean Salad**
- Body
 - The font families for the page text (in order of preference) are Georgia, Garamond, or any serif font available on the system at the default size
- Headings
 - All headings (h1, h2, etc) and table captions on the page should use a foreground color of #A4A400 and a background

color of #F0F0F0

- The font families for headings and table captions are Century Gothic, Futura, Verdana, or any sans-serif font available on the system
- The page's main headings (h1 and h2) should have their text aligned to the center of the page body
- Other headings on the page are left-aligned
- The table caption should appear with a bold font weight
- The navigation bar will follow the style guidelines of [lab 3](#)
- Tables
 - Tables should use a background color of #CC9933 and a text color of #FFFFFF (white).
 - Use a top margin of 20 pixels to add vertical spacing before each table
 - Table headings should use a background color of #003366, a font color of #FFFFFF (white), a 2 pixel solid white border line, and a padding on all sides of 5 pixels
 - Table headers and data cells should use a 2 pixel solid white border line and a padding on all sides of 5 pixels
- images - images may be downloaded and saved in your U:\ account directly from the World's Healthiest Foods site or downloaded from the links below:
 - [foodchart.jpg](#) and [greekgarbonzosalad.jpg](#)
 - Note: use a **relative address** for your `img` src attribute. Do **not** use an absolute address like U:\htdocs\...

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 top of the page has a navigation bar with two links. The "Home" link should link to your `program1.html` page, the recipe link should link to `recipe.html.html`. Use relative URLs and assume both pages are contained in the same folder.

Extra Features:

In addition to the previous required features, you must also **complete at least two of the following additional requirements** in your recipe page. These are features that have not been covered in lecture or lab; the idea is that you will have to learn how to complete these features on your own. As much as possible, you should implement these changes by modifying your CSS code rather than your HTML.

Here are **examples of extra features**:

In your HTML header comment, add another comment saying which extra features you have completed.

If you want to complete more than two of the extra features below, that is fine, but only two are required.

1. **Image float**: Use CSS to make one or both images float with the corresponding text displayed directly to the right or left of the image
2. **Background**: Use CSS to use a background image for both pages. The Background image should repeat in both directions across the page and should not move when the page is scrolled.
3. **bullets**: Use CSS to set the bulleted lists of items on the page to use an appropriate image for their bullet icon rather than the normal black circle.
4. **Widen headings letter spacing**: Use CSS to noticeably widen the letter spacing on all headings on the page.
5. **Other**: Do you have an extra feature you'd like to add to your page that isn't listed here? Check with your instructor and I'll let you know if it is okay to substitute for one of the above.

Grading Criteria:

Note: Program assignments are **individual assignments** and should represent your own work. You should **not** use pair programming on the program assignments. If you received help with this assignment, acknowledge this help (who helped and the nature of the help) in your file's header comment.

Implement **both HTML web pages** using XHTML 1.0 Strict as taught in class. For full credit, your pages must successfully pass the W3C XHTML 1.0 validator (SGML parser) with no errors or warnings. They should also be checked for accessibility using the FAE Rule Set with no issues identified. 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**.

Express all stylistic information on the page using **CSS** defined in **program1.css**. For full credit, your style sheet must successfully pass the W3C CSS validator with no errors or warnings. You only need to worry about the appearance of your page in Firefox. Your pages will not be tested using Microsoft Internet Explorer or other browsers.

Format your HTML and CSS nicely so that it is as readable as possible, following the [CS 250 coding standards](#). Place a comment header in each file containing your account, file, and honor code. Include metadata on both HTML pages.

To Receive Credit

- A [scoring rubric](#) for program 1 will be used for grading purposes.
 - Turn in the [scoring rubric](#) [PDF] at the **start of next Lab**
 - Keep track of and include the **total completion time** (rounded to closest half-hour) it took to complete the program assignment and include the time on the rubric
 - Write a score **0 . . 4** in the rubric's **self assessment column** representing your completion status
 - Make sure your work is stored in your CS 250 account in folder **U:\htdocs\programs\program1**

Program 1 is due at the start of lab on Monday. **No** late programming assignments will be accepted without prior approval.