## A note about maintenance:

In this unit, we are completing Parts 1, 2, and 3 of the My Web Elements project. In a later unit, we will have more parts to this project. It's very important to follow all of the directions and complete all of Parts 1, 2, and 3 successfully. You will NOT be given completed Parts 1, 2, and 3 when we start Part 4 later. Professional web developers must anticipate *maintenance* work; that is, we must be prepared to revisit code we have already written and update it later. We might add new content, re-arrange the organization, fix bugs, or other changes. In the professional world no one will have premade solutions for your projects; rather, you will have to work with the code you already wrote. It's best to do well with it the first time around!

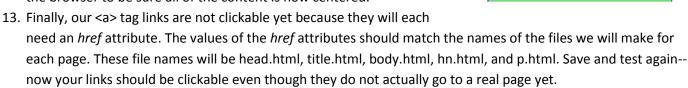
## Part 1: File Management & Home Page

- 1. Examine the files for this project. The "non-site-files" include this document and designs that you will match. Since we are focusing on HTML, a CSS file has been given to you that will apply basic styles for the project.
- 2. There are no HTML files yet, so it's time to create one. Often we start with the home page of a site, which should have "index.html" as its file name. Open your HTML template file in your code editor, and save a new copy of it in the "my-web-elements" project folder, at the same folder level as the CSS file.
- 3. Now we need to edit the "index.html" file to match the requirements of this new project. First, find the <title> tag and replace its content with the words "My Web Elements".
- 4. Then find the <meta> tags. The <meta> tag which has the value "description" in its *name* attribute needs the value of its *content* attribute replaced with "A place to list and describe HTML Elements", and the <meta> tag which has the value "keywords" in its *name* attribute needs the value of its *content* attribute replaced with "html, learning, elements, examples"
- 5. We will only need the basic style sheet provided, so you can remove the <link> tag with the *media* attribute. The other <link> tag needs the value of its *href* attribute replaced with "sitestyles.css" to match the name of the CSS file holding our styles.
- 6. Save and test in the browser. Your browser's title bar should have the words "My Web Elements" basic styles like background colors should be applied. If your site does not look like "Figure 1" go back now and see if you can find your mistake. Ask for help if you need it before moving on to the next step.



- 7. Now it is time to replace the <body> element's content. You can simply delete the <h1> and tag that we used as placeholders in the template file. Our code structure will be a bit different, so the placeholders might just get in the way.
- 8. In the project's "non-site-files" you will find one called "design-1-index-annotated.png" which shows the tags that you need put inside of the <body> element to add the correct content to the page. Open that file to refer to as you work on the index.html file code.
- 9. The first two tags you'll need are the <header> tag with an <h1> tag inside of it. This is given as an example in the right margin of the annotation file. Add this code inside of the <body> tag. Then proceed to add the rest of the tags as shown in the annotation file. Be sure to properly nest the elements outlined in blue *inside* the elements outlined in red.

- 10. Save and test in the browser. If your site does not look like "Figure 2" go back now and see if you can find your mistake. Ask for help if you need it before moving on to the next step.
- 11. Edit the footer's contents to use your name and today's date.
- 12. According to the design files, the homepage is special because ALL of its content is centered, not just the header and footer. To achieve this, the CSS file is looking for a specific piece of code. In your <body> tag, add the attribute *id* with "homepage" as the value. Then save and test in the browser to be sure all of the content is now centered.



14. Spend a bit of time reviewing your code from Part 1. Later on you will need to edit this code to make improvements, so it's important that you can read it clearly now. Pay extra attention to your indentation and line breaks, so that it is very obvious which elements are nested inside of other elements.

## Part 2: More Pages

- 1. In Part 1, you completed the home page. In Part 2 we will begin with step-by-step instructions for the page about the <head> tag, and then you will complete the other four pages yourself. Start by opening index.html in your browser and your code editor. Use the "Save As..." feature to name a new copy "head.html" and then test by clicking the "HEAD" link on your homepage. Since we simply saved a copy, this page looks just like the home page. If you got a blank page or other error, stop now and fix the problem before moving on to the next step.
- All of the information inside the <head> tag will stay the same. However, we need to remove the special code that applied centered styling to the homepage. In your <body> tag, remove the id="homepage" attribute-value pair. Save and test to see that the paragraphs are no longer centered.
- 3. Remove the two paragraphs that are **not** in the header or footer. They will just get in the way.
- 4. The only difference for the header and footer is that we now need a "Back" link in the header. In the project's "non-site-files" you will find one called "design-2-head-annotated.png" which shows the exact HTML code you need to implement this tag.
- 5. Keep the design file open for your reference as you add the rest of the HTML tags to complete this page. Save and test frequently.
- 6. Make sure your page is completely finished before you move on to the next page. The remaining pages do not have annotated designs. You will have to look at their designs and make good decisions about which tags will produce the correct markup. It should be very consistent with what you had to do for the page about the <head> tag. It may be helpful to practice annotating the designs before you write any more code. Remember, the file names for the pages need to match the values of the *href* attributes on the home page.
- 7. When you are finished with each page, take a moment to review your code to be sure you will be able to read and update it later. Pay extra attention to your indentation and line breaks, so that it is very obvious which elements are nested inside of other elements.

## Part 3: Cleanup

1. Finish up any details that are still missing. Test your home page to make sure all of the links go to the appropriate pages of the site.



- Use the Tidy Tool at <a href="http://infohound.net/tidy/">http://infohound.net/tidy/</a> to apply good whitespace in your code. If you already have good line breaks and indentation, you may choose to keep the whitespace you already used. The important thing is that you will be able to easily read your code for editing in the future.
- 3. Use the W3 Validator at <a href="https://validator.w3.org/">https://validator.w3.org/</a> to be sure your HTML code is error free on all pages. Fix any errors that the validator finds.
- 4. Ask a classmate to test your site. Sometimes an extra pair of eyes can find details that we miss because we worked so closely with the code. Help each other to be sure that you have successfully completed the project.
- 5. Submit your finished project.