

Assignment 1: Introduction to HTML

The purpose of this assignment is to provide a gentle introduction to the basics of creating a web page using HTML code. Your final product will be a simple web page with a photograph, a few links, and some information about you, including your hobbies! *If you have privacy concerns about sharing your real info, please feel free to use fake info instead.*

If you're reading this, it means you've successfully downloaded the starter files from D2L! You'll notice that the starter files contain a file called **screenshot.png**. If you open this image file, you'll see an example of what your page will look like when you're done. However, you'll fill in your own information instead of using the information from Tomoko's version, so there will be some differences.

Please note that a list of resources has been included at the bottom of this document; these may be helpful as you work through the assignment.

Task 1: Setup

Create a new folder called **a1-firstname-lastname**, with your own first and last name.

Open Visual Studio Code and drag this folder into the window to open. Then create a new file inside this folder called **index.html**. In the file, type **!** (exclamation mark) and then press the **tab** key. This will automatically produce the code for a bare-bones HTML page. Now all we have to do is add some content!

Task 2: Some Basics

To start coding our page, we're going to do the following:

- Fill in the **<title> </title>** tags on your page with the text **"About Me"**. Note that this text will not actually show up on your page. *Where does it show up?* Do some research to find some reasons why it's a good idea to fill in the **<title>** element.
- Create the heading of the page using **<h1> </h1>** tags. We always use these tags for the most important heading on a page. The text should be **"About Me: Firstname"** except it should be your actual first name.
- Create a secondary heading using **<h2> </h2>** tags. We use these tags to mark up a heading that is subordinate to the primary **<h1>** heading in the hierarchy of the page. The text should be **"At a Glance"**.
- Create an unordered list using a **** element. Each item in the list should be a random fact about yourself, and should be marked up using **** elements. Note that we're creating HTML elements inside of other elements here. Also, don't forget to match each start tag with an end tag, like this: **<tag>** and **</tag>**
- Remember that you can add **comments** to your HTML code by placing text in between special comment tags, like this:

<!-- this text will be ignored by the web browser! it's meant to write notes to yourself

and other developers who may work on this code. Use it to annotate your code with helpful hints. -->

- Now add another **<h2>** heading with the text **"Introduction."** (why are we using an h2 tag for this? Why not h3 or h1?) Use the paragraph element, with **<p>** **</p>** tags, to create a short, two or three sentence introduction for yourself.
 - When writing your introduction, highlight important words (such as your name) using the **** element. You'll notice that this will cause the word to become bold, but remember that the purpose of the tag is *not* to make things bold. It's to mark them as important words. Later, we'll find that we have control over how they look, and the bold styling is simply the browser's default behavior.
 - Also, try to add emphasis to a word or two by using the **** element. Again, you'll see that this changes the styling as a side effect (making the word italicized), but that's *not* its purpose!

Adding emphasis indicates that we're intensifying the meaning of a word. If you're not sure what I mean by this, see **screenshot.png** for an example of how Tomoko has used it. (you'll also notice that I used it in the previous few paragraphs of this document.)

Task 3: My Hobby

- Next, create a new **<h2>** heading with the text **"My Hobbies"**
- Your task is to choose two of your hobbies and add a short description for each using the same format as the page in **screenshot.png**.
- A few hints:
 - Notice that each hobby has its own heading. You must choose the correct heading tag to mark this up. The hint is that these headings will be below "My Hobbies" in the hierarchy of the document.
 - Each hobby has two subsections below it. Figure out which tag to use to mark up these section headings.
 - In the "Why I Like" section for each hobby, write a few sentences explaining why you like this hobby and how you started it. Then, introduce a quotation from Wikipedia or some other site related to this hobby. Include a hyperlink to the original source using an **<a>** tag. (Or "anchor" tag.)
 - Your opening anchor tag is going to need an **href** attribute to indicate the URL of the page it's linking to, like this:

 - The quotation itself should be marked up using a **<blockquote>** element. This element is used to indicate that the enclosed text is not your own words and ideas but has been taken from some source.
 - Your **<blockquote>** tag should also include a **cite** attribute with its value set to the URL of the source, like this:

<blockquote cite="http://your-source.com/where-you-got-the-text">

- The quoted text within the <blockquote> element should be surrounded by curly typographers quotes. (these are a bit more stylized than the boring "straight" quotes that one is able to type by default in most text editors.)

To create the curly double quotes, you can do either of two things:

- Do a Google search for how to type the quotes using your keyboard, or:
 - Use an HTML entity, which is a code for embedding certain special characters and symbols. You can find a list of entities here: https://www.w3.org/wiki/Common_HTML_entities_used_for_typography
 - Note that it's very important to always provide the source of any quoted text you're using. Not only that, but if you're simply using *ideas* from another source, even if you're paraphrasing them in your own words, you must still cite the source, including a link.
- The **List of Recommendations** should be marked up using an **ordered list**, which automatically numbers each element. *Figure out how to do this.*

Task 4: Image and Copyright Info

- Use an tag to add an image to your site. To do this:
 - Find a free-to-use image at this site:
 - <https://www.pexels.com/>
Find any image you like. Be sure to download the smallest version of the image. (why do you think this makes a difference?)
 - Note that it's important to only use images and other media that are either **public domain** (meaning no one owns them) or have been released with a **Creative Commons** license or some other license that allows free use. Usually, these licenses will have simple conditions such as providing attribution and a link to the source. Seems fair!
 - Download the image and place it in your assignment folder. Use the file name of the image in the **src** attribute for your element. (Don't forget to include the file extension in the file name, which is sometimes hidden by the operating system. It will usually be something like **.jpg** or **.jpeg**.)
 - Don't forget to also include an **alt** attribute in your element with a short description of the image. *Why do we need to do this? Do some research to find out.*
 - Note that your description should not include words that are obvious from the context, like "picture of" or "image of".
 - Add one line of text (using a paragraph tag) acknowledging the photographer with a link to the page from which you downloaded it. (This must be a link to the exact page. A link to the homepage of Pexels will not be sufficient.)
- One last thing to add is some copyright info at the bottom of the page indicating that this work belongs to you and no one else is allowed to use it. (This would be true even if you didn't have this info at the bottom. When no copyright info is present, one must assume a work is *not* free to use.)

- Using angle brackets < and > in a copyright notice isn't really necessary, but we're doing it anyway to demonstrate that < and > are special, reserved characters in HTML used for writing tags. So, to add them to the text of your page, you'll have to use HTML entities, as I mentioned earlier. The copyright © symbol can either be typed (using a special keyboard shortcut that you can find using Google) or placed using an entity.

Check Your Work:

A few things to look out for on your page before submitting:

- Make sure the page looks right when you view it in the browser. Do a quick visual inspection and compare it to **screenshot.png** to make sure nothing is off. (It's okay if it looks a bit different though, since you'll be using your own information.)
- Check your code for the following:
 - All tags are closed (except image tags, which don't need to be closed.)
 - All content elements are marked up using HTML tags. (avoid having loose, untagged text within the body of your document, if possible.)
 - Make sure that when an element has a starting tag inside another element, its ending tag is also inside that element;
 - Make sure that your anchor tags contain the link text that is supposed to be visible on the page. (an easy thing to forget!)
 - Make sure you have proper comments within your code explaining what everything does.
- Once you've visually inspected the code and its output in the browser, one last thing you can do to make sure it doesn't contain any errors is **validate** it using the official **W3C validation service**. Basically, this is a service to make sure your code conforms to official standards. Figure out how to do this here: <https://validator.w3.org/>
 - You may notice that your page looks fine in the browser even though it contains errors. *Why do you think this is? Why is it necessary to fix the errors even if the page looks fine?*
 - My recommendation for fixing errors flagged by the validator is to start at the top and work your way down, revalidating after each fix. Sometimes fixing the errors that appear earlier in the file will resolve subsequent error messages.

Checklist:

- Appropriate headings used for document information hierarchy
- Paragraph tags used appropriately
- and tags used appropriately
- <blockquote> tag with cite attribute
- Hyperlinks to all external sources
- Unordered and ordered lists
- Image with correct size (small) and alt attribute
- Entities used to mark up special characters

Hand In

For all the Lab Exercises in this course, you need to do both of the following:

1. **Show your work to the instructor** before the end of the class to get the mark.
2. **Hand in the work on D2L (Learning Hub)** following the instruction below before the deadline.

Check to make sure your project folder is called **a1-firstname-lastname** (with your own first and last name) and that it contains all necessary files to view your assignment.

Create a **Zip** archive from this folder; a **Zip** archive is a single compressed file that packages all necessary assignments files and makes it easy to transfer them. If you're not sure how to do this, please consult the following guides:

- Windows: <https://support.microsoft.com/en-ca/help/14200/windows-compress-uncompress-zip-files>
- Mac: <https://support.apple.com/en-ca/guide/mac-help/mchlp2528/mac>

Please do not hand in your work using some other archive format, such as **7z** or **rar**; **zip** is preferred. By following the above procedure closely, you will make it easier for me and the marker to grade your work.

Hand in your **zip** file to the **Lab Exercise 1** D2L hand-in folder.

You can show the instructor your work in the office hour for detailed feedback.

Resources:

- MDN is one of my favorite resources on web development, and they have a very thorough introductory article to HTML:
 - o https://developer.mozilla.org/en-US/docs/Learn/HTML/Introduction_to_HTML/Getting_started
- A great introductory tutorial for HTML:
 - o <https://marksheet.io/html-syntax.html>
- Although not as thorough as MDN, W3Schools is always a great quick reference for web development topics:
 - o <https://www.w3schools.com/html/>
- Explanation of how and are different from bold and italics, respectively, and why choosing the correct tag matters in the context of accessibility:
 - o <https://support.siteimprove.com/hc/en-gb/articles/115002726312-Accessibility-Bold-vs-Strong-and-Italic-vs-Emphasis>
- HTML Entities for typesetting special characters:
 - o https://www.w3.org/wiki/Common_HTML_entities_used_for_typography
- HTML style and formatting: (so that your code is easy to read and attractive!)

- <https://github.com/xfiveco/html-coding-standards#lowercase-names>
- <https://github.com/xfiveco/html-coding-standards#closing-tags>
- <https://github.com/xfiveco/html-coding-standards#nested-elements>
- <https://github.com/xfiveco/html-coding-standards#attribute-values>
- <https://github.com/xfiveco/html-coding-standards#indentation>
- <https://github.com/xfiveco/html-coding-standards#comments>
- High-quality, free images:
 - <https://www.pexels.com/>
- W3C HTML Validation service:
 - <https://validator.w3.org/>