

# TASK HTML II

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## Introduction

Welcome to The Second HTML Task!

In this task, some more HTML elements will be introduced. We will be looking at using links. This includes linking to other places within your website, linking to other websites and importing images. All of these links can be used in the HTML elements that we have already covered. You will also learn to create HTML forms. You will also learn to start using coding best practice to make sure that your code, not only works, but is written in a professional manner that is easy to read and maintain.



Remember that with our courses, you're not alone! You can contact your mentor to get support on any aspect of your course.

The best way to get help is to login to <u>www.hyperiondev.com/portal</u> to start a chat with your mentor. You can also schedule a call or get support via email.

Your mentor is happy to offer you support that is tailored to your individual career or education needs. Do not hesitate to ask a question or for additional support!

#### LINKS

You can add links to your web page as follows:

<a href="url" target="\_blank">link text</a>

The <a> element is used to add all links on a web page. Using this element you can link to other pages in your website, to external web pages and to enable users to send an email.

#### Linking to other places on your web page

Often on your web page, you will want your users to be able to click on a link which will then take them to another part of the same page. Think about the "back to the top" button - you click on this and you are suddenly viewing the top of the page again!

In order to do this, we need to use *ID* attributes. An ID is used to uniquely identify one of your HTML elements, such as a paragraph, heading or table. Then we can use the link tag to make the text or image a link that the user clicks on to take them to whichever address we choose!

An ID can be assigned to any of your elements, and is done as follows:

```
<h1 id="theHeading">My first web page</h1>
```

Notice how the attribute "id" is within the opening tag.

Now that we have this heading, we can look at how to reference it within our text. We use the <a> tag which shows which address we are using. To reference a structure with an ID, we need to precede the value assigned to the id attribute with a "#" otherwise, the browser will think you are looking for a website.

```
<h1 id="theHeading">My first web page</h1>
<a href="#theHeading">Back to top</a>
```

Consider the "example.html file" that contains the elements shown above. If you open it you will see that it will make the text "Back to top" look like a hyperlink (blue and underlined). When this is clicked, it will take you to the Heading with the id "theHeading".

#### Linking to other web pages

Similarly, we can link to another page. This is done as follows:

```
<a href="http://www.hyperiondev.com">This cool place!</a>
```

The "http://" in front of the address lets the browser know that you are linking to an external website rather than a file on your system.

That's not to say, however, that you can only link through text! All the content that is between the <a> tags is what is to be clicked on in order to get to the destination address.

With the link specified above, if you click on the link it will change the window you're currently on. What if you wanted to open the destination address of a link in a new tab? You can add an attribute to the link tag called *target* which specifies how the link should be opened, e.g. in the same window, new browser instance or new tab. To open in a new tab, simply modify the link as follows:

```
<a target = "_blank" href="http://www.hyperiondev.com"/>
This cool place!
</a>
```

#### **IMAGES**

We add images to our website using the <img> element as shown below:

```
<img src="http://hyperiondev.com/static/moocadmin/assets/img/hyperionLogo.png">
<img src="images/image1.jpg">
```

There are a few things to note about the <img> element.

- Unlike most of the other elements we have explored so far, the <img> element doesn't have a closing tag.
- The <img> element has a number of attributes that can describe it. These include:
  - src= The src attribute gives the path to where the image can be found or the *source* of the image.
  - alt= The alt attribute defines the *alternate text* that will be displayed if the image won't display.
  - o Intuitively, the height and width attributes define the height and width of the image.
- The src attribute can point to a URL or a file location. In the example above, the first image uses a URL as the source of an image. The second image shows how the src attribute is defined to display an image named image1.jpg that is stored in a folder named images that resides in the same folder as your web page.



# A note from our coding mentor **Sabir**

When adding images to your web page, it is important to remember that this page may be viewed on many different devices with widely differing screen sizes, resolutions etc. You want the images to look good independent of the device that is used to view the page. Thus responsive images (images that work well on devices with widely differing screen sizes, resolutions) are important. To see how to create responsive images, see <a href="here">here</a> and Chapter 15 of "HTML5 notes for professionals" (additional reading in the Dropbox folder of the first task).

#### **HTML FORMS**

A dynamic website is driven by user interaction. In order for users to be able to interact with your website, you need to provide them with the means to enter the information that is to be used and displayed on the pages. Forms are the instruments that we use to allow users to enter data in HTML. Forms can be structured in various ways; in fact, web designers often try to make them as cool as possible to encourage users to interact with the site. Here are some examples of different kinds of forms on the Web:

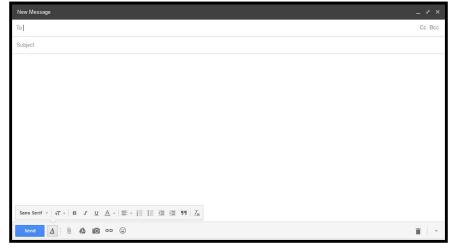


Figure 1: Here's another sophisticated form from gmail (mail.google.com) - this is the popup text editor used to draft an email.

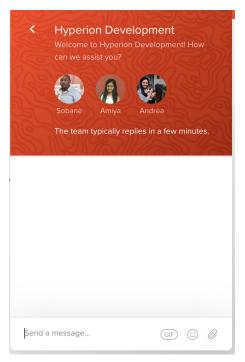


Figure 2: Hyperion Development's (<u>www.hyperiondev.com</u>) chat box is actually a very sophisticated form, but a form nonetheless

#### **CREATING A FORM**

We won't begin with complex forms like the ones you see above. First, we're going to build a simple form and focus on investigating some of the components of a form. At this stage, our forms won't be functional. You will create forms that function correctly later when you learn JavaScript.

In the example above we create a form to capture our user's biographical information. It captures the following information:

• First Name

- Surname
- Gender
- Age

We expect the user to enter text for their name and surname. We, therefore, use the **input** element. This element has a **type** attribute with the **text** property assigned to it. This displays text boxes in the browser into which users can type input. We add labels to tell our visitors what information we want them to enter into the boxes.

The **select** element is used to create a drop-down menu that users can select from instead of typing out their gender.

To see a list of other HTML input types, see <u>here</u> and Chapter 17 of "HTML5 notes for professionals" (additional reading in the Dropbox folder of the first task). See "example2.html" to see an example of an HTML form.

#### **READABILITY**

As you start to create HTML pages with more elements, it becomes increasingly important to make sure that your HTML is easy to read. In software development, readability is an important principle! Code and markup that is easy to read are easier to debug and maintain than code or markup that is not easy to read.

Indenting your HTML is an important way of improving the readability of your code. For example, consider the HTML below:

```
<!DOCTYPE html><html><head>
<title>My first web page</title>
</head>
<body>
<form><label>First Name:</label><input type="text"><br>
<label>Surname:</label><input type="text"><br>
<label>Gender:</label>
<select><option value="male">Male</option>
<option value="female">Female</option></select>
<label>Age:</label>
<input type="text">
</form></body></html>
```

The above is perfectly correct HTML that will render properly in the browser but it is certainly not as easy to read and understand as the code below which is properly indented:

```
<!DOCTYPE html>
<html>
<head>
   <title>My first web page</title>
   <!-- This is a comment, by the way -->
</head>
<body>
        <label>First Name:</label>
        <input type="text"><br>
       <label>Surname:</label>
        <input type="text"><br>
        <label>Gender:</label> <br>
        <select>
            <option value="male">Male</option>
            <option value="female">Female</option>
        </select><br>>
        <label>Age:</label><br>
        <input type="text"><br>
       <input type="submit" value="Add user">
    </form>
</body>
</html>
```

As you can see above, indentation should be used to show which HTML elements are nested within other HTML elements. As shown above, all the other elements are nested within the <a href="https://www.ncbe.nested.com/">https://www.ncbe.nested.com/ncbe.nested.com/</a>

There are several tools that can help you improve the readability of your HTML. Since you will soon be working with CSS and JavaScript too, we highly recommend that you use HTML-CSS-JS Prettify.

You can add this package to Sublime Text by doing the following:

- 1. Make sure that you install package control for Sublime Text. Open Sublime Text and follow the simple <u>instructions here</u> to do this.
- 2. Open the Command Palette (Tools > Command Palette...).
- 3. Search for and choose "Package Control: Install Package" (give it a few seconds to return a list of available packages).
- 4. Type "prettify".
- 5. Select HTML-CSS-JS Prettify.
- 6. To use this tool, right click on the markup you would like to edit and select "HTML/CSS/JS Prettify" > "Prettify code".

### **Instructions**

Open example.html and example2.html in Sublime Text and read through the comments before attempting these tasks.

# **Compulsory Task**

#### Follow these steps:

- Open the 'WebFundamentals.html' file which you created in the previous task.
- If you have not yet done so, make sure that your webpage contains appropriate headings and paragraphs.
- Add an appropriate heading and paragraph to your webpage in which you explain
  in your own words what you should think about before adding images to your
  website. Note the information <a href="here">here</a> in the red warning box.
- Add at least 3 relevant pictures (either from your PC or online) to your webpage.
   Don't worry about the sizes and position for now we will deal with that in the CSS section.
- Add a heading called "Acknowledgements" to your webpage. Under this heading
  list all the websites that you have used to accessed images or information for this
  task. Add links to each of the websites you have referenced.
- Add a "back to top" link at the bottom of your webpage that will return the user to the top of the webpage when clicked.
- Place the HyperionDev logo (URL given in the example.html file) after your last paragraph. Link this picture so that, when you click on it, it takes you to the Hyperion website. Hint: Think about what the content in the link that they should click on might be. (Normally it would be text, but what is it now?).
- Use HTML-CSS-JS Prettify to improve the readability of your code before submitting it to your mentor.
- Before submitting your code, check it with the HTML validator <u>here.</u>

Once you have completed the task in line with the instructions above, click the button below to request your mentor to review your work and provide feedback. If you have any questions while attempting the task, leave your mentor a note on the comments.txt file in your Student Dropbox folder.

# Completed the task(s)?

Ask your mentor review your work!

**Review work** 

#### Things to look out for:

 Make sure that you have installed and setup all programs correctly. You have setup **Dropbox** correctly if you are reading this, but **Sublime Text** may not be installed correctly. Please make sure that you have followed the instructions in 'Setting up your text editor.pdf.'



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