Week 2 Lab – Basics of HTML5

Instructions:

Save all the files you use in this lab in the Web Development folder you created last week. Create a new folder for this week's lab – **Week2**

Assignment 1: Home Page

Use the template file to create a basic .html page and save it as index.html

```
<!DOCTYPE html>
<html lang="en-IE">
<head>
    <meta charset="utf-8">
    <title>  </title>

</head>
<body>

</body>
</html>
```

Part 1: Formatting Text

1. In the <head> section add content to title: `<title>Week 2 Labs</title>`
2. In the <body> section, enter the code shown below and save your changes:

```
<h1>Week 2 Labs</h1>
<h2>Paragraphs</h2>
<p>Text of your choice can go here</p>

<h2>Formatting Text</h2>
<p>Text in <strong>Bold</strong> format </p>

<p>Text in <em>Italics</em> format</p>

<p>Text in <strong><em>Bold and Italics</em></strong> format.
Be careful of the order of closing the tags, first opened should be last closed.</p>

<p>This paragraph contains text that appears on a separate line from the rest of the text. <br>
This text is on it's own line<br>
The paragraph may continue after the line break also. </p>
<hr>
```

3. View your page in the web browser, and then check the code in the HTML validator - https://validator.w3.org

Part 2: Hyperlinks in Documents

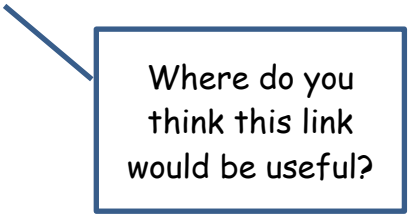
4. Download the text file "Assignment1.txt" from Canvas. Use copy and paste to position this text after the <hr> tag from the code above.
5. Save the file again.
6. Add the heading tags and the hyperlinks as directed by the comments in the file.
7. Save your changes and view the file in the web browser.
8. Test the hyperlinks
9. Validate your code – https://validator.w3.org

Adding an email Link in a Web Page

1. Add an email link to your MyCIT email address using a `href="mailto:"` attribute. **View and validate as usual.**

Adding a telephone Link in a Web Page

2. Add a telephone link to+353871234567 using a `href="tel: "` attribute. **View and validate as usual.**



Assignment 2: Adding Images to a Web Page

Images – <img src="*image filename*" alt="*some text*" title="*some text*">

1. Create a new folder, **`images`**, in the same folder that the html file is saved in.
2. Download the MTU and MyCIT logo files from Canvas and save to the images folder.
3. Check the size dimensions (height and width) of each of the two image files.
    a. Go to the properties of the files to get that information.
4. Using `<img>` tag put the images into the index.html page where indicated.
    - `src` = (**required** in HTML5, because it is the source of the image, *i.e. the name and location of the image you want to use in your webpage*)
    - `alt` text (**required** in HTML5 – it should describe what the image is about)
    - `title` (not required but useful as hover text and tooltips and accessibility software)
5. Save your file again, and view in your browser
6. Add `height` and `width` attributes and validate your HTML5 again
    a. Make it really small
    b. Make it really large until image distorts (pixelates)
7. Validate your html on http://validator.w3.org/

Assignment 3: Working with Images

1. Enter the code below to a new page/tab in your text editor.
2. Save the file as `fishingImages.html` in the **Week2** folder.
3. The images for this assignment are available for download from Canvas – *see Lab Notes for this week*. Save the image files in the **images** folder you created earlier
4. Create a basic navigation menu on this page which should link to the index.html page created earlier.
5. Copy the navigation menu to the index.html page and save both files.
6. View the file in a browser.

```
<!DOCTYPE html>
<!-- Resizing images in HTML -->
<html lang="en-IE">
<head>
    <title>Image Sizing and Placement</title>
    <meta charset="utf-8">
</head>
<body>
    <h1>Something Fishy Is Going On Here! </h1>
    <img src="images/fish.png" alt="Goofy Fish Image Large" width="200" height="150">
    <img src="images/fish.png" alt="Goofy Fish Image Medium" width="150" height="112">
    <img src="images/fish.png" alt="Goofy Fish Image Small" width="100" height="75">

    <p>When I'm not here, see below!! </p>
    <p><img src="images/gonefishing.png" alt="Gone Fishing sign" title="Gone Fishing sign">
    </p>
    <!-- Using Figure and Figcaption elements -->
    <figure>
        <img src="images/gonefishing.jpg" alt="Gone Fishing Sign" height="150" width="150">
        <figcaption>
            <p>When I'm not here, see above!! </p>
        </figcaption>
    </figure>
    <hr>
    <footer>
        <p><small>copyright 2021 Your Name </small></p>
    </footer>
```

The browser should display the HTML file similar to the following:

Note that the browser displays **`alt`** text for the first instance of `gonefishing.png` as it cannot find the image file. *(I entered the incorrect filename in the code – should be gonefishing1.png*)

Resize the Image

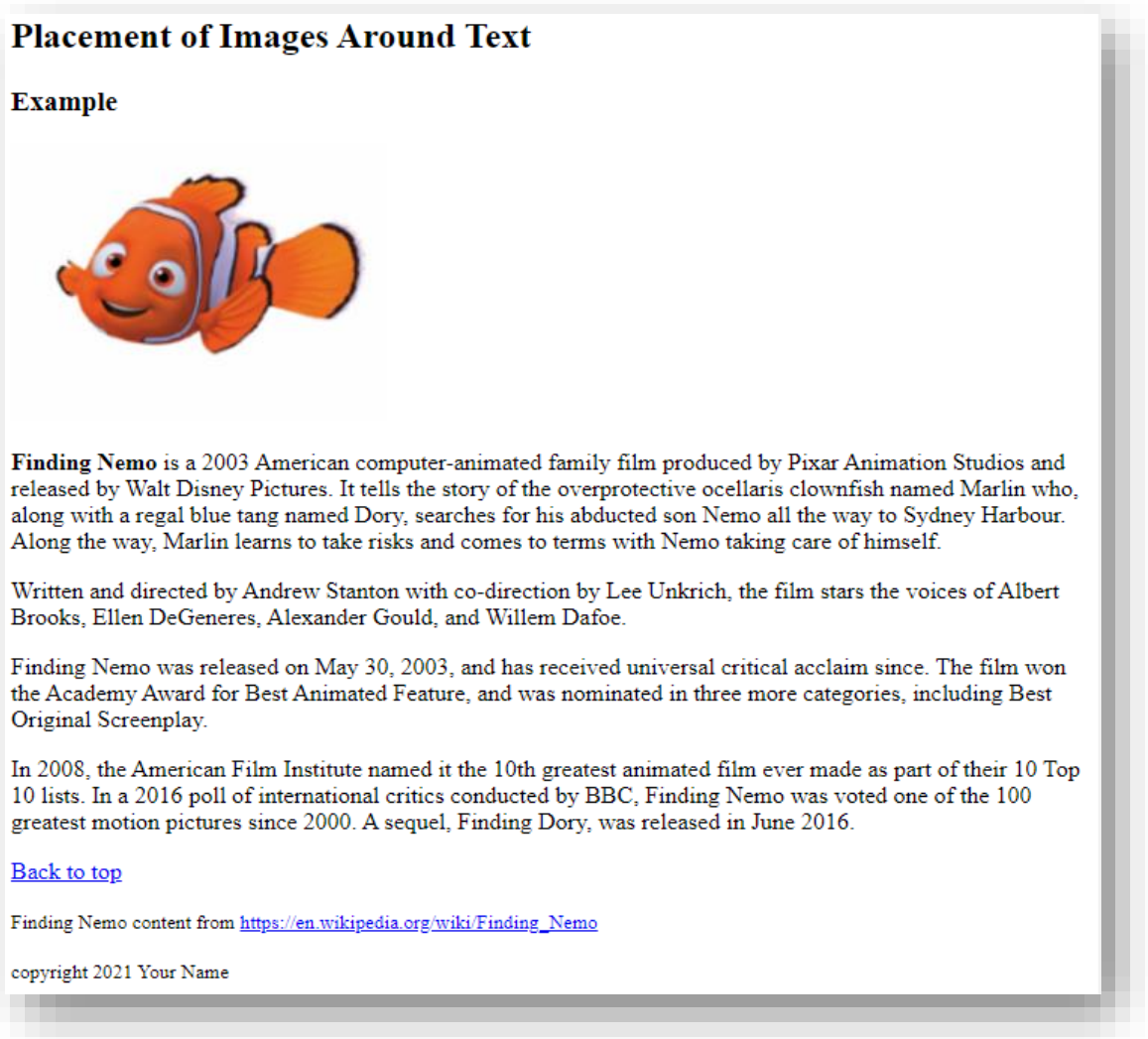
1. Edit the HTML to correct the spelling error from the previous task, (if not already done)
2. Open the image `gonefishing1.png` in the program **Paint**
3. Click on `Resize` on the ribbon
4. Change the percentage Horizontal number from 100 to 70
   The Vertical should automatically change at the same time
5. Save the changes and you can close the program
6. Refresh the web page and see the difference the resizing made to the image displayed.
7. Submit the file to http://validator.w3.org/ to validate code as HTML 5.

Assignment 4: Placement of Images around Text

When working with images it is important to remember that `<img>` is actually an inline element. Images and text will not always display beside each other as you may expect when entering the code, so it is important to check the effect in a web browser. CSS is normally used to position images with more precision. We will return to this issue again when we start using CSS.

Edit the previous assignment by copying additional content from the file *FindingNemo.txt* on Canvas.

1. After the <hr> code enter HTML code to add structure to the content as shown in sample output – e.g. h2, h3 p.
2. Download a suitable image and include it between the heading and main text.
3. Add a hyperlink to navigate back to the top of the page:
   `<a href="#top">Back to top</a>`
4. Add a hyperlink to the Wikipedia page: https://en.wikipedia.org/wiki/Finding_Nemo
5. Replace the word **copyright** with a copyright symbol followed by your name
   - Use a character entity code to do this - ©
6. Save the file again, check in the browser and validate.



Placement of Images Around Text

Example

Finding Nemo is a 2003 American computer-animated family film produced by Pixar Animation Studios and released by Walt Disney Pictures. It tells the story of the overprotective ocellaris clownfish named Marlin who, along with a regal blue tang named Dory, searches for his abducted son Nemo all the way to Sydney Harbour. Along the way, Marlin learns to take risks and comes to terms with Nemo taking care of himself.

Written and directed by Andrew Stanton with co-direction by Lee Unkrich, the film stars the voices of Albert Brooks, Ellen DeGeneres, Alexander Gould, and Willem Dafoe.

Finding Nemo was released on May 30, 2003, and has received universal critical acclaim since. The film won the Academy Award for Best Animated Feature, and was nominated in three more categories, including Best Original Screenplay.

In 2008, the American Film Institute named it the 10th greatest animated film ever made as part of their 10 Top 10 lists. In a 2016 poll of international critics conducted by BBC, Finding Nemo was voted one of the 100 greatest motion pictures since 2000. A sequel, Finding Dory, was released in June 2016.

Back to top

Finding Nemo content from https://en.wikipedia.org/wiki/Finding_Nemo

copyright 2021 Your Name

Testing the Image Placement

1. Copy the content from the heading for Example down to the "Back to top" link, and paste it twice above the link to the Wikipedia page.
2. Edit the headings to Example 1, Example 2 and Example 3.
3. Move the `<img>` tag in Example 2 so it appears after the first two words "Finding Nemo" in the first paragraph.
4. Move the `<img>` tag in Example 3 so it appears after the words "Sydney Harbour" near the end of the first paragraph.
5. Save the file again and refresh the view in the web browser.
6. Move the `<img>` tags around in each example to see the effect in the browser.
7. Save the file again when you are finished.

Creating Links to In-Page Sections

1. In the Start Tag for each of the 3 headings Example 1, Example 2 and Example 3, add the following attribute: `id="example?"`
   Replace the ? with the number 1, 2, or 3.
2. Just below the main heading "Placement of Images Around Text" add this paragraph code with a similar link for each of the Examples (the first one is shown below):

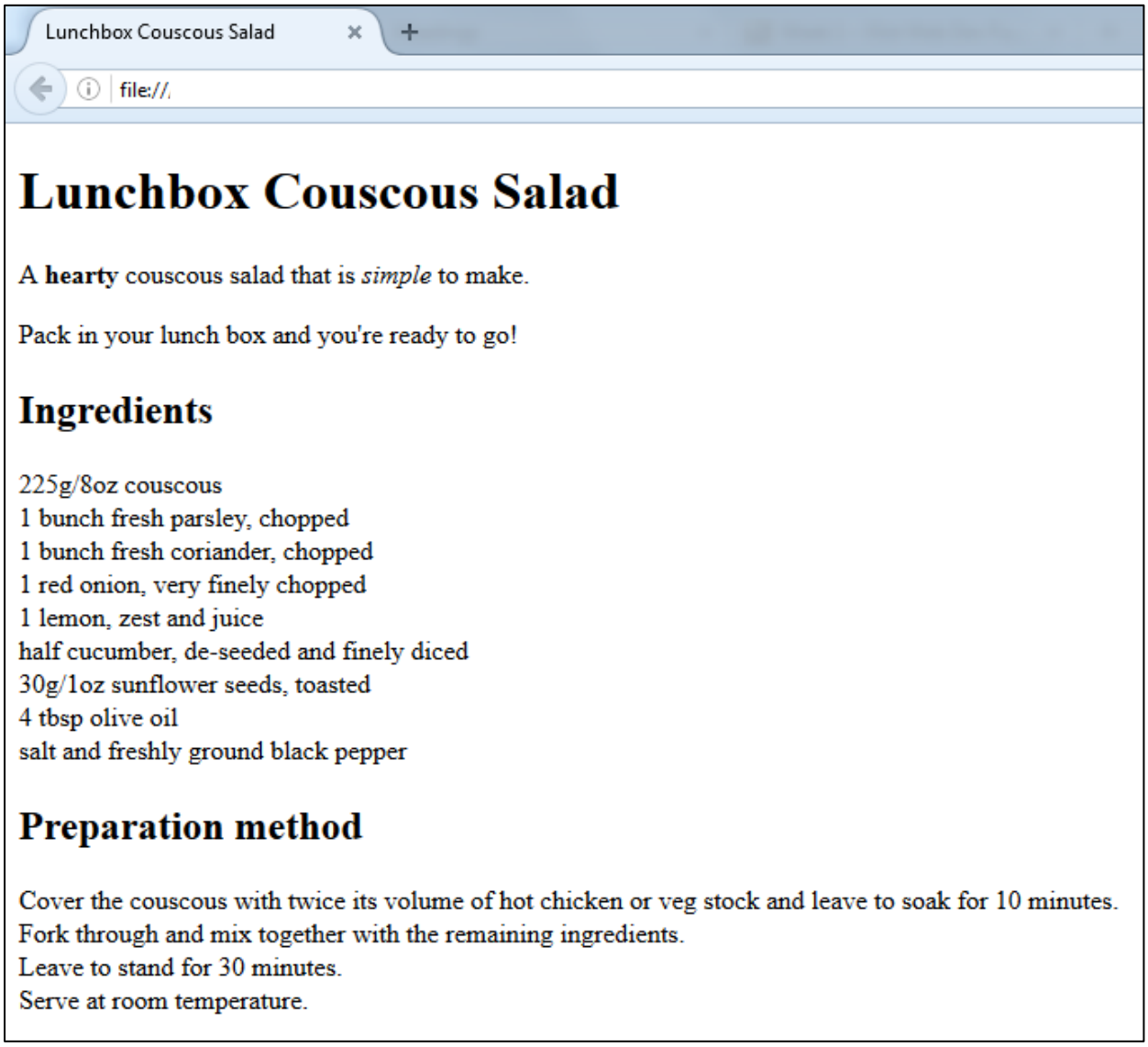
   ```
   <p>| <a href="#example1">Example 1</a>| Example 2 | Example 3 |</p>
   ```

3. Save the file and view it in your browser. Test the links.
4. Validate all your code once file is completed.

Additional Exercise:

Exercise 1: Marking Up Text

Create a new webpage called "recipe.html" – the text file (`recipe.txt`) is available on the module's Canvas page to download. Mark up the text using `<h1>`, `<h2>`, `<p>` and `<br>` tags so that it appears similar to the sample browser output shown below.



- Create a hyperlink to this page on the index page, then add a link on this page to the index page. Save your changes.
- View the file in a web browser and test the hyperlinks.
- Don't forget to validate your HTML on http://validator.w3.org/

Exercise 2: Adding some style

If you are feeling adventurous, try a little CSS to add some style to your page(s).

```
*{
    font-family: "Arial Rounded MT", Arial, sans-serif;
}
h1{
    color: navy;
    text-decoration: underline;
}
h2{
    color: red;
}
```

- Create a folder called `styles` (in the Week2 folder)
- Enter the code shown above into Notepad++, and save in the `styles` folder as `lab2styles.css`
- Now in your HTML file add the following link to these styles between the `<head>` tags

```
<link href="styles/lab2styles.css" rel="stylesheet">
```

- View and validate as usual
- Ask for your instructor to show you how to use the Dev Tools in your favourite browser.