



HTML Links – Lab 2

IMPORTANT! Save all your work to a safe location such as OneDrive. Create a folder for GUI & Web Development into which you will save all your work for this module, arranged how you wish. Ideally you should create a folder each week for your lab exercises. Note that you should create a separate file for each exercise.

Exercise 1: Create internal linked HTML Web Pages

1. Open Notepad++ and enter the following text:

```
1 <!DOCTYPE html>
2 <!-- First HTML -->
3 <!-- Author: YOUR NAME HERE -->
4
5 <html>
6
7     <head>
8         <title>Page 1</title>
9     </head>
10
11    <body>
12
13        <h1>This is page 1</h1>
14        <p>This is a <a href="page2.html">link</a> to page 2</p>
15
16    </body>
17
18 </html>
```

2. Create the page as shown above called "page1.html".
3. Create a second page called page2.html as shown below and test it to ensure that the link to it (from page 1) works.

```
1 <!DOCTYPE html>
2 <html>
3     <head>
4         <title>Page 2</title>
5     </head>
6
7     <body>
8         <h3>This is page 2</h3>
9
10    </body>
11 </html>
```

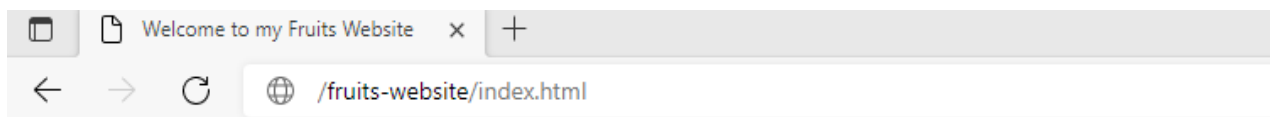
4. Add a link on page 2 that links to page 1 and test it to ensure that the link works. You should now have 2 pages that are linked to each other.
5. Validate/check your code using the World Wide Web Consortium code validator. Amend your code where necessary so that you have no errors.

Exercise 2: Links to Fruits website

1. Download the zip file “fruits-website.zip” from lab resources folder in HTML Links section on Moodle.
2. Unzip the contents to a new folder on your OneDrive or other storage location.
3. The zip file contains html for a small website with a theme of “fruits”. The starting page is “index.html” and the individual fruit html files are contained in the ‘fruit’ subfolder. (Do not change the structure of the folders – i.e., don’t move any of the files)
4. Examine the layout of the “apple.html” page and change the bananas, oranges, and peaches pages so that they have the same structure – using the same heading sizes (H1, H2 or H3) and paragraph layout.
5. On the “index” page, create links so that clicking on the relevant fruit name (ie., banana) will open the relevant page (the banana page). Ensure you specify the relative location of the html pages when creating your links as discussed in class last week.

Exercise 3: Basic Menu on Fruits website

1. Using the files from exercise 2, change the html tags in index.html to present the web page as per the figure below (use heading tags as appropriate).



Welcome to my 'Fruits for Health Website'

Fruits are rich in vitamins and minerals which makes them so good for your health.
I sell only organic foods to give you the best benefits possible.
Just scroll down to your favourite fruit and see what health benefits they bring:

[Apples](#)[Oranges](#)[Bananas](#)[Peaches](#)[Bananas](#)

Note: You can use <pre> tags to ensure the spaces between the links – see [HTML pre tag \(w3schools.com\)](https://www.w3schools.com/html/html_pre_tag.asp). Alternatively you could insert spaces using HTML entities ,   and   Click [here](#) for more information on how to implement spaces using these entities.

2. In index.html link each fruit to its corresponding html file if not already done as part of exercise 2 (e.g. Apple to apple.html).
3. Add a link back to the home page (index.html) in each html file in the fruit subfolder.
4. Ensure that when the user hovers over any link, a tag displays information about that page by including a title attribute.
5. Amend your site to include a "menu" (similar to the menu on the index page) on **all pages** so that a user can navigate to any page on the site. Ensure that you use relative locations for all hyperlinks.

Exercise 4: Create a basic Web Page with Anchor Links

1. Download the “tbl.txt” file from lab resources folder in HTML Links section on Moodle.
2. Using paragraph tags, heading tags and any other tags you deem to be appropriate, format the page so that it has a clean layout.
3. Create a link (a “back to top” link) at the bottom of the page so that when clicked will jump all the way to the top of the page.
4. Create a contents section at the top of the page that uses anchor links that link to the various sections of the page, similar to as shown below:

Tim Berners Lee

1. [Early Life and Education](#)
2. [Career and research](#)
3. [Personal life](#)
4. [References](#)
5. [Awards and honours](#)
6. [Further Reading](#)

Early life and education

Sir Timothy John Berners-Lee OM KBE FRS FREng FRSA FBCS (born 8 June 1955),^[1] also known as TimBL, is an English engineer and computer scientist, best known as the inventor of the World Wide Web. He is currently a professor of Computer Science at the University of Oxford and at Massachusetts Institute of Technology (MIT).^{[3][4]} He made a proposal for an information management system in March 1989,^[5] and he implemented the first successful communication between a Hypertext Transfer Protocol (HTTP) client and server via the internet in mid-November the same year.

Career and research

Berners-Lee is the director of the World Wide Web Consortium (W3C), which oversees the continued development of the Web. He is also the founder of the World Wide Web Foundation and is a senior researcher and holder of the 3Com founders chair at the MIT Computer Science and Artificial Intelligence Laboratory (CSAIL).^[11] He is a director of the Web Science Research Initiative (WSRI).^[12] and a member of the advisory board of the MIT Center for Collective Intelligence.^{[13][14]} In 2011, he was named as a member of the board of trustees of the Ford Foundation.^[15] He is a founder and president of the Open Data Institute.

Exercise 5: Links to pages in a small website

1. Download the zip file “jenskitchen.zip” from lab resources folder in HTML Links section on Moodle.
2. Unzip the contents to a new folder on your OneDrive or other storage location.
3. The zip file contains html and image files for a small website. The starting page is index.html and the recipe html files are contained in subfolders
4. Create links to the appropriate html file in the list e.g. “Tapenade (Olive Spread)” should link to “tapenade.html”.
5. Edit each html file to link back to the home page “index.html” hint: use ../ to go up a level in the directory structure.
6. Add in an external link for “The Food Network” (<https://foodnetwork.co.uk/>) and for “Epicurious” (<https://www.epicurious.com/recipes-menus>) on the index.html page.



Welcome to Jen's Kitchen

People who know me know that I love to cook. I've created this site to share some of my favorite recipes and online food resources. *Bon Appetit!*

About the site

From Jen's Cookbook

- Tapenade (Olive Spread)
- Garlic Salmon
- Linguine with Clam Sauce
- Couscous with Peas and Mint

Good Food on the Web

- The Food Network
- Epicurious

Exercise 6: Create a Glossary Web Page with Anchor Links

1. Download the html file “glossary.html” from lab resources folder in HTML Links section on Moodle. The page should look as shown below:

Glossary

A | B | C | D | E | F | G | H | I | J | L | M | N | O | P | Q | R | S | T | U | V | W | X

A

aliasing

The jagged stair-stepped edges that can appear between colors in a bitmapped graphic.

anchor

The HTML element responsible for making hyperlinks.

applet

A self-contained, mini-executable program, such as one written in the Java programming language.

attribute

Parameters that extend or modify an HTML element.

B

backend

Aspects of a web site that pertain to functions that take place on the server.

2. This uses a special variation of the href to link to a specific location in the html file defined by an “id” tag.
3. The href uses a ‘#’ to define the anchor link e.g.
4. This links to the id tag on line 90 <h2 id="h">H</h2>
5. Save the file as `glossary_complete.html` on your OneDrive or other storage location.
6. Edit this file and put in an anchor tag and link for the complete alphabet – A, B, C, D..... up to X.
7. Include a “Back to top” link at the end of each letter.
8. Open the webpage in a browser and test all links work.
9. Submit to https://validator.w3.org/#validate_by_input to validate the HTML.