

Lab 3a Styling Navigation with CSS

Introduction

In this worksheet you will use CSS to style an HTML list as a navigation menu. It is a good way to understand the [CSS Box Model](#). Turning an HTML list into a navigation menu is largely a case of applying [margins and padding](#), as well as [borders and backgrounds](#). To create a horizontal menu, you will also learn the difference between [‘inline’ and ‘block-level’](#) elements.

You have been provided with start files. The **html** document includes an unordered list containing links. The list is repeated several times. You also have the start of a **stylesheet**, which is already linked to the html document. You will be guided through the styling of one menu, then you can use what you have learned to apply some styles of your own to one or more of the other menus.

Getting Started - Download and save files

Download the contents of the Lab3a_navigation_start.zip folder in this week's Moodle area and extract the contents.

Style links as a navigation menu

1. Open **navigation.html** in a browser. You will see that each list has been given an id, to enable you to try out different styles on the same page. This will give you practice of using [ids in your selectors](#).
2. The default browser style for an anchor tag, or link, is blue underlined text. We can remove the underline using the **text-decoration** property, with a value of **none**. Because the underline is a style associated with the anchor tag `<a>`, it is this tag that we target to remove it. Type the following in your stylesheet.

```
a {text-decoration: none;}
```

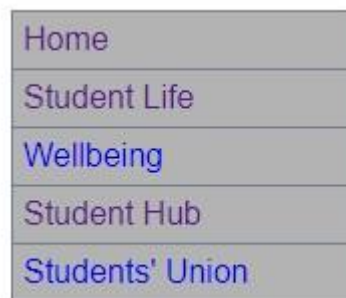
3. Save the stylesheet and view the html page in your browser to check that the underline has been removed from all the links.
4. Now remove the bullet icons from the lists. The bullet icon is the default browser styling associated with a list. CSS has a **“list-style-type”** property which we can use to remove (or change) the bullet icon. Add the following to your stylesheet, then save and check that the lists are no longer bulleted.

```
ul {
  list-style-type: none;
}
```

5. To illustrate the potential impact of browser default styling, you will now set the **margin** and **padding to zero** for the elements related to the list. Add the following to the top of your CSS document, below the charset statement, then check in the browser. You should see a notable difference in the position of the list items.

```
ul, li {
  margin: 0;
  padding: 0;
}
```

All the styling so far has been remove default styles, but now you will start to add styles to the first list only, so you will start to include the id in the selectors. The look we are aiming for initially is shown in the screenshot below.



6. In your CSS document, add the following code, then save and check in the browser. We have applied a bottom border to the anchor tags, which hold the links. You will have much the same effect as when the links had their default style; the border looks just like underlining, because it only displays under the text characters. This is because the **anchor tag** is an **inline** element and only takes up the width of its content.

```
#nav1 a {
  border-bottom: 1px solid #708090;
}
```

You can find your own [colour at W3Schools](https://www.w3schools.com/colors/colors_names.asp) if you wish.

7. Now add a 'display' property to the same selector, as shown below. This turns the anchor tags from inline elements into **block** elements. Now the underline fills the screen width, because the list containing the anchor tags fills the screen, as no width has been set in the stylesheet.

```
#nav1 a {
  border-bottom: 1px solid #708090;
  display: block;
}
```

8. Add the following code to the stylesheet to give the list a width. The underline should no longer extend across the whole screen width when the page is viewed in the browser.

```
#nav1 ul {
    width: 170px;
}
```

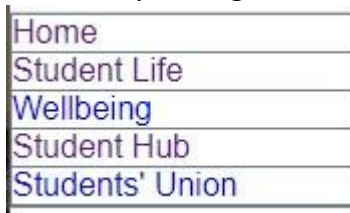
9. Now that you have learned the difference between the way in which inline and block-level elements behave, **delete the “display: block;”** property and value. Now you will target the bottom border at an element which is already a block-level element, this being the list item .
10. In the style for **#nav1 a**, change the selector to li, so it now targets the list items instead of the anchor tags. When you refresh the browser it should still look the same. This illustrates that when styling lists for navigation, you will get very different results depending on whether you target an inline element, or a block-level element (i.e. <a> or). So, if your style is not working as you expect, this is something to be aware of and check.

```
#nav1 li {
    border-bottom: 1px solid #708090;
}
```

11. Add a border to the outside of the whole list by targeting the element, using the same border values as for . You already have some code giving the list a width, so the border style can be added to the same selector.

```
#nav1 ul {
    width: 170px;
    border: 1px solid #708090;
}
```

12. After saving, check your menu in the browser. It should look like the screenshot below. You will notice that the border at the bottom of the list is thicker than the others. This is effectively a double border, because you added a bottom border to the overall list, and to each list item. You could fix this by setting the bottom border of the list to ‘none’.



```
#nav1 ul {
    border-bottom: none;
}
```

13. Now add some styling to move the whole list so that it sits away from the top and left of the browser window, and fill it with a background colour. You will use the 'margin' property to move it. **Margins** add space to the **outside** of a container, whereas **padding** is added to the **inside**.

```
#nav1 ul {
  width: 170px;
  border: 1px solid #E
  margin: 20px 0
  background: #E
}
```

These margin values set the margins as follows:

Top 20px

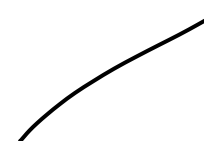
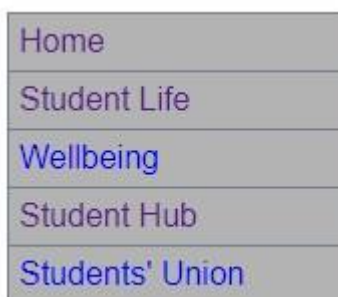
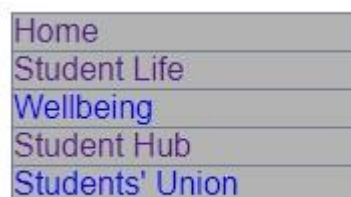
Right 0

Bottom 0

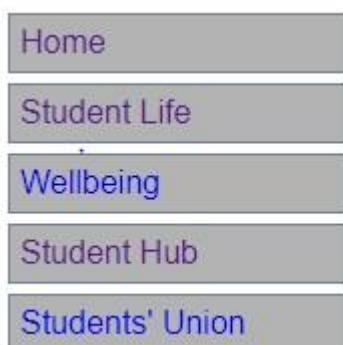
Left 20px

See video on Moodle "introduction to the CSS box model"

14. Your menu should look like the left screenshot below. It all looks rather squashed, so think about how you can add some spacing between the text and borders, so it looks more like the screenshot on the right. You only need one line of code. **Hint:** you will need to apply **padding** to the correct element.



15. Now that you have learned how to apply styles, and how targeting a style at a particular selector in an HTML list can have a different effect to the same style applied to another selector, apply what you have learned. Firstly, try to change your code so that the menu looks like the screenshot below.



Hints:

The background colour was previously applied to the `` element, which is the entire list container. But now the background is associated with the items in the list.

Spacing has been added below each list item.

16. Once you have achieved the above 'button-style' layout, you can easily change the menu from displaying vertically, to displaying horizontally, as shown below. Try it out.

Home Student Life Wellbeing Student Hub Students' Union

Hint:

This layout can be achieved by turning the display of the list items from their default of block, to being inline, but the container needs to be wide enough to allow them to spread out – remember you set a width for the list!

Styling to improve usability

It is good practice to show users which link they're hovering over, which links they have visited, and which link they are clicking by adding a standard set of styles.

1. Refer to http://www.w3schools.com/CSSref/sel_hover.asp, and add 'link', 'visited' 'hover' and 'active' styles to your stylesheet.
2. To make it even clearer which link the user is hovering over, make the 'hover' style apply to the **background colour** rather than the text of the anchor tags.

Try it on your own

There are some examples of menu more styles on the page below. Try applying some of them to the other lists in your HTML document. This will test your understanding of what you have covered in the worksheet.

For rounded corners you use the border-radius property, e.g. **border-radius: 15px** (changing the pixel value to give the size of curve required).

Home Student Life Wellbeing Student Hub Students' Union

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