

HTML5 To Do List

In this project we will be writing the HTML for a website that helps you compose a simple to-do list. This first step of the project will just make a static list, and allow the user to tick items off. The items will be hard coded into the HTML. We will be writing our own CSS file to style the page.

In a later project we will be using JavaScript to make the list more dynamic, allowing the user to add items and save the list to the browser's local storage.

In a future super advanced project we will write a server side application for storing the to-do list, and put it into a database.

For now, we will simply write a static HTML5 page, this will introduce the HTML5 language and show you how to build a simple web page.

The completed To Do List will look like this.

My To Do List

Things I have yet to accomplish

Tick off as complete

- ☐ Wash Clothes
- ☐ Take Dog for Walk
- ☐ Do Maths Homework
- ☐ Play New Nintendo Switch for 2 days straight

Don't hold me to these!

Take note of the basic structure of the page.

- Header - gives our page a title and a subtitle
- Footer - Used to frame the page, not all websites use these, but they can be used to host all the social network widgets.
- To Do List fieldset. There is a box around our tick list which frames the main content of our page.

Create the Basic Page Template

There is a certain recommended starting point for HTML pages. Create a new .html file in your folder under KidsProjects/Kids and write the basic HTML, HEAD and BODY sections as shown:

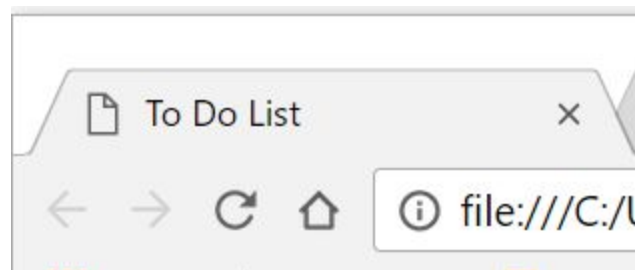
```
1  <!DOCTYPE html>
2  <meta charset="utf-8"/>
3  <html>
4  <head>
5  |
6  </head>
7  |
8  <body>
9  |
10 </body>
11 </html>
12
```

I have been good and specified the DOCTYPE and the charset encoding.

We shall give our page a title so that the browser can put something sensible in the tab. Put the <title> tag inside the <head> section

```
4  <head>
5  |   <title>To Do List</title>
6  </head>
```

Open this HTML page in your web browser and it should put the title on the tab as shown.



Next we will layout the <header>, <main> and <footer> sections of our <body>. Add the tags as shown.

```
8  <body>
9    <header>
10   </header>
11
12   <main>
13   </main>
14
15   <footer>
16   </footer>
17 </body>
```

Open the page in your web browser and it will still show as an empty white space. Let's get some content on that page!

Write the Page Header

We will be using <h1> to put a top level heading on our page. We will then use a <p> tag to create a paragraph containing our subtitle.

```
9  <header>
10    <h1>My To Do List</h1>
11    <p class="Subtitle">Things I have yet to accomplish</p>
12  </header>
```

Note that I have specified a CSS class called **Subtitle** on the paragraph. Later we will create a stylesheet to make this look nice. For now open the page and the header should look like this.



Not that nice yet? Let us create our stylesheet and make it look a bit more pleasant.

Starting the Style Sheet

Create a new file in the same directory as your .html file. Call it something sensible like **ToDoList.css**. Write the following CSS to get it started.

```
1 header {  
2     background-color: #7695FE;  
3     border: thin #336699 solid;  
4     padding: 10px;  
5     margin: 10px;  
6     text-align: center;  
7 }
```

We now need to add a <link> tag into our HTML page to make use of this stylesheet. Add the following <link> tag (line 7) to the <head> section of your HTML file.

```
4 <head>  
5     <title>To Do List</title>  
6  
7     <link rel="stylesheet" href="ToDoList.css">  
8 </head>
```

Reload the page and it should now look like this:



There, that's a bit nicer :-). Before we move on, let's finish off styling the <header> and also pick a different font to apply to our page.

Refine the Header Styling

Add the following to the CSS file to change the font.

```
9 body {  
10     font-family: "Lucida Sans Unicode", "Lucida Grande", Geneva, sans-serif;  
11 }
```

The header text will now look like this.

My To Do List

Things I have yet to accomplish

Add the following CSS to style our <h1> tag.

```
13 header h1 {  
14     margin: 0px;  
15     color: white;  
16     font-size: xx-large;  
17 }
```

Which should have the following effect.

My To Do List

Things I have yet to accomplish

Lastly style the subtitle using the following:

```
19 header .Subtitle {  
20     margin: 0px;  
21     font-weight: bold;  
22 }
```

My To Do List

Things I have yet to accomplish

That will do, now to move onto the main list itself.

Write the Main Tick List Section

The main section will compose of a single `<form>` containing our checklist. The checklist itself will be contained inside a `<fieldset>` which will tell the page that our tick items all belong together in a logical section.

Add the `<form>` and `<fieldset>` tags as shown.

```
16  <main>
17    <form>
18      <fieldset>
19
20      </fieldset>
21    </form>
22  </main>
```

If you reload your page this will just show as a black box at the moment. We should give our `fieldset` a `<legend>` so it can be labelled. We will use the `<legend>` to instruct the user. Add the following `<legend>` tag inside the `<fieldset>`.

```
18  <fieldset>
19    <legend>Tick off as complete</legend>
20  </fieldset>
```

Reload the page and it should look like this.

My To Do List

Things I have yet to accomplish

Tick off as complete

Add the First Item to the List

We will use a combination of `<input>` and `<label>` tags to build a single item in the list. I will also use a `
` to force line breaks between items.

The first item on our list will look like this in HTML.

```
18 <fieldset>
19   <legend>Tick off as complete</legend>
20
21   <input id="item1" type="checkbox">
22   <label class="strikethrough" for="item1">Wash Clothes</label>
23   <br>
24 </fieldset>
```

Load the page and it should look like this.



Tick off as complete

☐ Wash Clothes

Copy and past the 3 lines 21-23 shown above and write more items into your list. My list ended up looking like this.

Tick off as complete

☐ Wash Clothes

☒ Take Dog for Walk

☒ Do Maths Homework

☐ Play New Nintendo Switch for 2 days straight

Style the main section

The list spreads out beyond the reaches of the header, and the font size doesn't match very well with the heading. We will now fix this. Add the following CSS to your .css file.

```
24 main {  
25     font-size: medium;  
26     font-family: Cambria, Cochin, Georgia, "Times New Roman", Times, serif;  
27     padding-top: 20px;  
28     padding-right: 50px;  
29     padding-bottom: 5px;  
30     padding-left: 50px;  
31     line-height: 120%;  
32 }
```

Reload the page and it should look like this.



Tick off as complete

- ☐ Wash Clothes
- ☒ Take Dog for Walk
- ☒ Do Maths Homework
- ☐ Play New Nintendo Switch for 2 days straight

Lastly, I would like the 'ticked off' items to be struck through with a line. How do we do this? After some hasty Googling I found that the following style rule will have the desired effect.

```
34 input[type=checkbox]:checked + label.strikethrough {  
35     text-decoration: line-through;  
36 }
```

Reload the page and try ticking a few items again, they should now strikethrough as shown.

Tick off as complete

- ☐ Wash Clothes
- ☒ ~~Take Dog for Walk~~
- ☒ ~~Do Maths Homework~~
- ☐ Play New Nintendo Switch for 2 days straight

Add the Footer

Last bit of the page is the footer, this is very simple. I will simply add another paragraph tag `<p>` to the `<footer>` section we put in place earlier. It will look like this.

```
40 <footer>
41     <p>Don't hold me to these!</p>
42 </footer>
```

If you reload the page it simply plops the text at the bottom. I would like the footer to be styled and rooted to the bottom of the page. The following CSS should achieve the desired effect.

```
38 footer {
39     text-align: center;
40     font-size: x-small;
41     font-style: italic;
42     position: fixed;
43     bottom: 0px;
44     height: 3.5em;
45     background: #7695FE;
46     border-top: thin solid black;
47     font-size: x-large;
48     width: 100%;
49 }
50
```

The page should now look like this

My To Do List

Things I have yet to accomplish

Tick off as complete

☐ Wash Clothes

☐ Take Dog for Walk

☐ Do Maths Homework

☐ Play New Nintendo Switch for 2 days straight

Don't hold me to these!

Optional - Stylesheet experimentation.

Try playing around with the stylesheet to make the page look completely different. Here are some examples.

My To Do List
Things I have yet to accomplish

Tick off as complete

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Don't hold me to these!

My To Do List
Things I have yet to accomplish

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☐ Play New Nintendo Switch for 2 days straight

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