

Intro to HTML5

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High Level Overview

- HTML (hypertext markup language)
- Tim Berners-Lee is the inventor of HTML
- The initial release of HTML was done in 1993
- Elements in a HTML documents are defined and grouped by tags.
- These tags are then interpreted from our browsers and rendered to our screens.
- CSS (cascading style sheets) allows us to alter and manipulate the properties of an element by defining it as a class or unique identifier.

HTML Development Environment

- For this lesson and further lessons we will use an I.D.E (integrated development environment).
- Developers use these in order to structure and organize the source files etc .html file and any other files like images and audio files.
- We'll use an I.D.E called Microsoft code.
- This I.D.E works on all major operating systems and can be found at. <https://code.visualstudio.com/download>

Structure of an HTML Document and Setting up Our Project.

- The first thing we should think about when creating a HTML files is having a vision for what we want our outcome to be in the end.
- I usually take out a piece of paper and try to sketch out what I would like my website to look like before I started coding it out.
- For the purpose of this lesson we'll all have the same vision of how we would like our website to look like.

Hyperlinks

Header

Body

footer

html1.html breakdown

```
<!DOCTYPE html>
<!--nested element-->
<p> Lorem ipsum dolor sit amet, consectetur adipiscing elit,
    sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.
    Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris
    nisi ut aliquip ex ea commodo consequat. <br> <!-- break row tag -->
    Duis aute irure dolor in reprehenderit in voluptate velit esse cillum
    dolore eu fugiat nulla pariatur. Excepteur sint
    occaecat cupidatat non proident,
    sunt in culpa qui officia deserunt mollit anim id est laborum.
</p><!-- end of paragraph tag -->
</html>
```

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defining the head and body in a html document

- Our current .html file has only the bare bones of a real web page.
- Adding the head and body is quite simple we simply only need to add the elements `<head></head>` and `<body></body>` within our `<html></html>` element.

html2.html breakdown

```
<!DOCTYPE html>
  <head>
  </head>
  <body><!--nested element-->
    <p> Lorem ipsum dolor sit amet, consectetur adipiscing elit,
      sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.
      Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris
      nisi ut aliquip ex ea commodo consequat. <br> <!-- break row tag -->
  >
    Duis aute irure dolor in reprehenderit in voluptate velit esse
    cillum dolore eu fugiat nulla pariatur. Excepteur sint
    occaecat cupidatat non proident,
    sunt in culpa qui officia deserunt mollit anim id est laborum.
  </p><!-- end of paragraph tag -->
</body>
</html>
```

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Dividing our html documents

- Now that we have our .html document structured properly let's look at how we can divide our project.
- This allows the web designer to work sections of the webpage without having to worry if it will affect other areas of the web page.
- An example of the code for this is found on the next slide.

html3.html breakdown

```
<!DOCTYPE html>
  <head> <!-- head of document -->
    <div> <!-- div element used to
      |   divide html documents -->
      <h1>This is my cool webpage</h1>
    </div>
  </head>
  <body><!--nested element-->
    <p> Lorem ipsum dolor sit amet, consectetur adipiscing elit,
      |   sed do eiusmod tempor incididunt ut labore et dolore
      |   magna aliqua.Ut enim ad minim veniam, quis nostrud
    </p><!-- end of paragraph tag -->
  </body>
</html>
```

Adding links to other webpages in HTML

- Websites wouldn't be very useful if all the information we wanted to access was all on one page.
- Anchors allow us to traverse to different webpages
- The first thing we need to do is create another page to test our anchoring code.
- The syntax (Code) we will be adding is the element `The name of the link` closing element
- We can break `<a href>` to an anchor that handles a reference to a file.

Adding interactivity

- Now we are ready to have a main page link to another page.
- As discussed in the last slide we need to tell the anchor what page we would like to visit.
- In our example we will create another .html page called page2.html
- Go to file new file Save As the file with your other .html files and name the file page2.html
- Then we will modify our main .html page so that it knows that page2.html exist.

html5.html breakdown

```
<!DOCTYPE html>
  <!-- adds your own text to the title of
  |   our web page -->
  <title>This my cool webpage</title>
  <head> <!-- head of document it is used for meta-deta
  |   |   or things that are not displayed -->
  </head>
  <body><!--nested element-->
  |   <div>
  |   |   <a href="">Page 1</a>
  |   |   <a href="page2.html">Page 2</a>
  |   |   <a href="">Page 3</a>
  |   </div>
  |   <h1>My cool Website</h1>
  |   <p> Lorem ipsum dolor sit amet</p>
  </body>
</html>
```

Calling elements by name

- Now we are going to give unique identifiers to elements in our .html document.
- This will allow us to easily modify properties within the desired element (i.e colour / font / size etc).
- we will add the keyword class = "" to the element and now we can add modifications ie changes.

html6.html breakdown

```
<!DOCTYPE html>

<!-- adds your own text to the title of
      our web page -->
<title>This my cool webpage</title>
<head> <!-- head of document it is used for meta-data
      or things that are not displayed -->
</head>
<body><!--nested element-->
      <div>
        <a href="">Page 1</a>
        <a href="page2.html" class="page2">Page 2</a>
        <a href="">Page 3</a>
      </div>
      <h1>My cool Website</h1>
      <p> Lorem ipsum dolor sit amet</p>
</body>
</html>
```


Adding images to our .html document

- In this section we will add multi-media.
- The form our media that we will add is images.
- You would be surprised with all the work do far you should start seeing similarities

```

```

html7.html breakdown

```
<!DOCTYPE html>
  <!-- adds your own text to the title of
  |   our web page -->
  <title>This my cool webpage</title>
  <head> <!-- head of document it is used for meta-deta
  |   or things that are not displayed -->
  </head>
  <body><!--nested element-->
    <div>
      <a href="">Page 1</a>
      <a href="page2.html" class="page2">Page 2</a>
      <a href="">Page 3</a>
    </div>
    <h1>My cool Website</h1>
    <p> Lorem ipsum dolor sit amet</p>
    
  </body>
</html>
```

Cascading Stylesheets

- Cascading Stylesheets allow the web-designer the ability to add custom functionality or customization to an element.
- We'll start by adding the element style to the <head> of our document <style></style>

html8.html breakdown

```
<title>This my cool webpage</title>
<head> <!-- head of document it is used for meta-deta
      or things that are not displayed -->
      <style>
        body {
          background-color: ■white;
          text-align: center;
          color: ■blue;
          font-family: Arial, Helvetica, sans-serif;
        }
        h1 {
          color: ■brown
        }
      </style>
</head>
```

HTML Assignment

- In this assignment you will complete the html code we have been working on.
- All the links must be active.
- using css give all your `<h1>` tag on each page a different colour
- Also, give each page a different title name