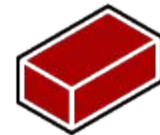


Intro to HTML & CSS



Intro to Web Development



Redbrick

What are we going to cover ?

Intro to HTML

Intro to CSS

What's new in HTML5

What's New in CSS3

Designing a personal RB site

Uploading it to your webspace



Redbrick

H

Hyper

T

Text

M

Markup

L

Language

C

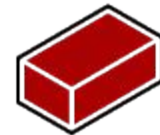
Cascading

S

Style

S

Sheets



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Rules of HTML

- HTML is comprised of tags
 - `<tag>`
- Tags that are opened must be closed
 - `<tag> </tag>`
- Some tags self close
 - `
`
- Tags can contain attributes
 - `<tag attribute="MyAttribute"></tag>`
- Tags can contain other tags
 - `<tag attribute="MyAttribute"> <tag></tag> </tag>`
- Just because it doesn't throw an error doesn't mean it's right!



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Intro(Boilerplate) Tags

- `<!DOCTYPE HTML>` *Informs the Browser of the HTML version*
- `<html>` *the start of the HTML document*
- `<head>` *Stores Metadata about a page*
- `<body>` *Everything in this block is rendered to the browser's view port.*



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<head>

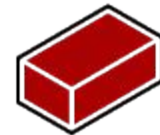
<title> The title of the web page

<link> Used to Link external files into HTML (Usually CSS files)

<meta> Used to describe metadata on a HTML page

<script> used to add JavaScript functionality to the site

<script> tags can be placed in the body tag.



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<body>

- <h1> --> <h6> Heading tags h1 being the largest h6 being the smallest
- <p> Paragraph tags normal sized text
- <pre> Preformatted Paragraph
- <div> Containers for tags (blocking)
- Container for tags (inline)
- <a> Links to other webpage's
- <hr> horizontal rule
- image



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Demo Usage

```
<div>
```

```
  <h1>Hello World</h1>
```

```
  <p> This is a pretty good site :)</p>
```

```
  <a href="http://www.redbrick.dcu.ie">Link to RB</a>
```

```
  <hr>
```

```
  
```

```
</div>
```

- Some tags are self closing an example of this is the <hr> tag
- & <a> tags contain attributes like src



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Exercise: Hello HTML!

Lets try to put together what we just learned

So we are going to create a basic html page that says

- “Hello HTML“ in a **h1** tag and “Time to build a website” in a **p** tag
- The page must have a title
- create multiple paragraphs of text using multiple p tags.

Bonus Round

- Create a link to <http://www.redbrick.dcu.ie/>
- Put a cool image on the page



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TIME TO CODE



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Intro to CSS

- So we've covered the basics structuring a HTML document.
 - Time to style it :D
- Let's create a folder called "css" to store our css files.
 - inside that lets create a file called master.css
- Let's add a stylesheet to our page
 - `<link rel="stylesheet" href="/css/master.css">`
- Don't make stuff look like this
 - <http://www.twwwe.com/>
- People make puns with css
 - <http://saijogeorge.com/css-puns/>



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Selectors

- First thing we need to know is what tag/s we are applying our css to.
- To do this we give css a target
- A good example is:

```
body {  
    //Attributes go here;  
}
```

This targets the body tag and allows us to style it. Sub-tags inherit styles



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Selectors (cont)

This will apply this style to all the body tags in your document.

- This works great but only when one of a specific type of tag
 - (so basically never.)
 - A good example of where this fails is with the div tag which as websites get more complicated will become more numerous
- Look at your previous exercise.
 - How would the browser know to style one p tag one way and another p tag another way?
- There are tonnes of useful selectors supported in CSS
 - <http://code.tutsplus.com/tutorials/the-30-css-selectors-you-must-memorize--net-16048>



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HTML selector Attributes

If you recall earlier in the presentation we talked about HTML tag attributes

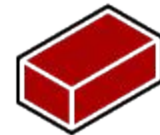
```
<div attributes="myAttribute">
```

We are going to talk about two target attributes and use them to target specific tags in our HTML document.



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#id vs .class



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#id

- Id's are the first targeting attribute

```
<div id="myID"></div>
```

- This creates a target called #myID that can be referenced in CSS

```
#myID{  
    color : "red";  
}
```

- Id's are meant to be used as once off targets.
 - **No two tags should share the same id.**
 - Remember just because it will work doesn't mean it's right!



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.class

Class is a touch more flexible than ID

```
<div class="myClass"></div>
```

- This creates a target called `.myClass` that can be referenced in CSS.
 - This works exactly the same as id in this regard.

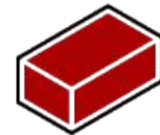
```
.myClass{  
  color: "red";  
}
```

- Classes are to be used when multiple tags need the same style



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**When in doubt use a
class**

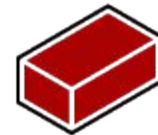


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CSS Properties

So in our previous slides I showed you a sample CSS property.

- `color :#000000 //Color text black`
 - `width: 250px; // Sets element width to 250 pixels`
 - `height: 100%; // sets height to 100% of available height`
 - `margin: 20px; // adds 20px gap between element and others`
 - `background: #FFFFFF; //sets background of element to white.`
-
- For a Full list of properties you can use
 - <http://www.w3schools.com/cssref/default.asp>



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The New Wave

- HTML5

- Discussion points on new features and why they are awesome
- `<canvas>` <https://nodegarden.js.org/>
- `<video>`
- `<audio>`
- `<nav>`

- CSS3

- Media Selectors.
- Masking
- Animations
- More awesome selectors



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Exercise: Personal Site

- Let's Build a personal site to show people how awesome your HTML and CSS skills are.
 - <http://www.redbrick.dcu.ie/~voy/>
- Style the page through an external css file.
- Add some text about yourself and a link to your favorite website/social media profile.
- Place an image of yourself on the page.

Bonus Round

- Find a new HTML5 Tag / CSS3 attribute and try them out
 - http://www.w3schools.com/css/css3_intro.asp
 - http://www.w3schools.com/html/html5_new_elements.asp



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Offload to Helpdesk for uploading to webspace ;)

- Linux & Mac Users:
 - `rsync -val path/to/yourfiles yourname@redbrick.dcu.ie:~/public_html/`
- Windows Users:
 - FTP Client/WinSCP:
 - Protocol: SFTP
 - Host: redbrick.dcu.ie
 - Port: 22
 - Drag your files to “public_html”
- Helpdesk are on standby if you have trouble!



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Working FOSS

Redbrick is currently in the process of open sourcing its front end/backend.

- If you want to sharpen your HTML CSS & JavaScript skills you can
- You'll also get an intro to tools like Git
 - Really useful for working in team projects.
 - You'll actually use in a code producing context
 - Turns out git is valuable to know
 - <http://www.mnu.edu/business/software-skills-demand>



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