

# COMMON CSS PROPERTIES

## INFocus

Some CSS properties can be applied to all elements in order to change their colours, backgrounds, fonts, alignments, borders, margins and padding. This chapter will take you through some of the common CSS properties that are used for basic formatting.

### In this session you will:

- ✓ gain an understanding of colours and backgrounds
- ✓ gain an understanding of borders
- ✓ gain an understanding of fonts and text
- ✓ gain an understanding of the height and width of elements
- ✓ gain an understanding of margins
- ✓ gain an understanding of padding
- ✓ learn how to create margin settings using style sheets
- ✓ learn how to align text in cells in a table.

# COLOUR AND BACKGROUND

Changing the colours and backgrounds of HTML elements is essential to making a page that looks aesthetically pleasing and is also easy to use and accessible to people with visual impairments.

You can change the colour of element text, an element's background and even set an image to appear as the background of an element.

## Setting An Element's Text Colour

You can use the **color** property to set the colour of an element's text. In the example below, paragraph text is assigned a light blue colour:

```
p {
    color: lightblue;
}
```

## Setting An Element's Background Colour

You can use the **background-color** property to set the background colour of an element. In the example below the background for a paragraph of light blue coloured text is assigned the background colour dark blue:

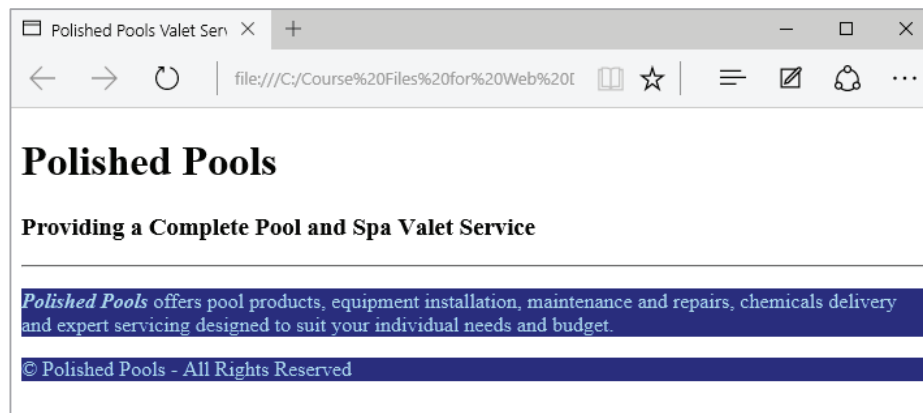
```
p {
    color: lightblue;
    background-color: darkblue;
}
```

## Giving An Element A Background Image

You can use the **background-image** property to set an image as the background of an element. In the example below a paragraph of light blue text with a dark blue background is assigned a background image file titled "**Trees.jpg**":

```
p {
    color: lightblue;
    background-color: darkblue;
    background-image: url("Trees.jpg");
}
```

When you set the background-image property, you should also set the background-colour property. If there is a problem retrieving the background image file (e.g. in the case of a network connectivity issue that prevents the image file from loading) then the element will be shown with the specified background colour instead.



# BORDERS

Using CSS you can give your HTML elements borders with a variety of widths, styles and colours. Borders are useful not just for outlining elements, but also for displaying the active item

(e.g. with a coloured bottom border) and for separating the items in a list (e.g. with a side border), among other things.

## Width, Style And Color

There are a number of CSS properties you can apply to set the borders of an element.

The ***border-width*** property allows you to specify the size of the border, generally measured in pixels.

The ***border-style*** property allows you to set the style of the border. The most common value is **solid**, but you can also set the border style to **none, dotted, dashed, double, groove, ridge, inset and outset**.

The ***border-color*** property allows you to set the colour of the border.

```
div {
  border-width: 2px;
  border-style: dashed;
  border-color: blue;
}
```

### Our Opening Hours

Day	Open
Monday	9:00 AM - 5:00 PM
Tuesday	9:00 AM - 5:00 PM
Wednesday	9:00 AM - 5:00 PM
Thursday	9:00 AM - 8:00 PM
Friday	9:00 AM - 9:30 PM
Saturday	Closed
Sunday	Closed

## The Border Shorthand Property

To reduce typing, CSS allows you to specify the width, style and colour of a border with the ***border*** shorthand property. The order of the properties you specify in the shorthand property is **width, style and then colour**:

```
div {
  border: 2px dashed blue;
}
```

## Styling One Or More Borders

Often you will want to change only one of the borders of an element, which you can do with the ***border-left***, ***border-right***, ***border-top*** and ***border-bottom*** properties:

```
div {
  border-bottom: 2px solid orange;
}
```

### Our Opening Hours

Day	Open
Monday	9:00 AM - 5:00 PM
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# FONT AND TEXT

By using CSS you can change many aspects of the fonts that appear in your web pages in order to create eye-catching layouts. For instance, you can change the font family, size, style and

weight, as well as changing the alignment of text in an element.

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## Setting Font Properties

You can change many aspects of the fonts in your web pages, including the font family, size, style and weight.

The **font-family** property is used to set the name of the font that will be displayed in the element. Examples of font names are Arial, Helvetica and Times New Roman. Different computers have different fonts installed, and so the font-family property allows you to set a list of fonts to be tried by the browser until one is found that is installed on the user's computer.

The **font-size** property is used to set the size of the font. This can be measured in a fixed unit such as px or pt or a relative unit such as a percentage or em.

If your text should be italic, you can set the **font-style** property to italic.

If you need to change the weight of your text (e.g. to make it thin or bold), you can set the **font-weight** property to one of the following values: **lighter, normal, bold or bolder**.

```
p {
  font-family: Arial, Helvetica, sans-serif;
  font-size: 2em;
  font-style: italic;
  font-weight: bolder;
}
```

If you need to set several font properties, you can do them all at once with the shorthand **font** property which merges together the above properties in the order **style, weight, size, family**:

```
p {
  font: italic bolder 2em Arial, Helvetica, sans-serif;
}
```

## Setting Text Decoration

While you set italics and bold with the font-style and font-weight properties, you set underlines and strikethroughs with the **text-decoration** property, which might be confusing for those used to dealing with word processing applications where these properties tend to be grouped together. The values that you can use for text-decoration are: **underline, overline, line-through and blink**.

```
p {
  text-decoration: underline;
}
```

## Setting Text Alignment

You might sometimes need to change the alignment of text in an element, which you can do so with the **text-align** property. Acceptable values for text-align are: **left, right, center and justify** (where both left and right edges are aligned to the element's box).

```
p {
  text-align: right;
}
```

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# HEIGHT AND WIDTH

Using CSS you can explicitly set the height and width of elements rather than leaving it up to the browser. You can set height and width using an absolute unit or a relative unit. This allows you to

have greater control over how elements will appear to users.

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## Setting Height And Width

The **height** and **width** properties are used to set the size of the element. This can be measured in a fixed unit such as px or a relative unit such as a percentage (to set its size based on its parent element) or em (to set its size based on the size of the font it contains). The following example will set the size of the image to 100 pixels high and 200 pixels wide:

```
img {  
  height: 100px;  
  width: 200px;  
}
```

The following example will set the width of the image to 25% of its containing element. If the element is contained in the HTML body element, the browser is full-screen and the screen is 800px wide, the element will be displayed with a width of 200px:

```
img {  
  width: 25%;  
}
```

## Setting Minimum And Maximum Sizes

Using relative units to set element sizes is great for displaying elements at a size that works well for a range of screen sizes. When the screen gets too large or too small, though, you might want to limit the size of the element so that it doesn't look silly. You can prevent the element from going outside of a certain width using the **min-width** and **max-width** properties and prevent the element from going outside of a certain height using the **min-height** and **max-height** properties.

The following example will set the height and width of the element to 25% of the screen size, unless that would result in the element being smaller than 200px high and 200px wide, or larger than 800px high and 800px wide:

```
img {  
  height: 25%;  
  width: 25%;  
  min-height: 200px;  
  min-width: 200px;  
  max-height: 800px;  
  max-width: 800px;  
}
```

---

# MARGINS

HTML elements can be spaced out with the margin property. Setting a margin property affects the space between elements by setting the size of the white space outside of the border.

You can choose to set the value of individual margin properties or use the auto value to automatically create a margin that horizontally centres the element within its container.

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## Setting Individual Margins

Setting the margin property for an element affects the space around its border. You can set the value of individual margin properties:

```
div {
  margin-top: 10px;
  margin-left: 20px;
  margin-bottom: 15px;
  margin-right: 20px;
}
```

## The Margin Shorthand Property

To reduce typing, CSS allows you to specify all or some of an element's margins at once with the **margin** shorthand property. You can set all margins to the same value:

```
div {
  margin: 20px;
}
```

You can also specify all margin measurements in the order **top, right, bottom, left**:

```
div {
  margin: 10px 20px 10px 20px;
}
```

You can also set the top and bottom margins followed by the left and right margins. The following example sets the top and bottom margins to 0 and the left and right margins to 20px:

```
div {
  margin: 0 20px;
}
```

You can also set the top margin followed by the left and right margins followed by the bottom margin. The following example sets the top margin to 10px, the left and right margins to 20px and the bottom margin to 15px:

```
div {
  margin: 10px 20px 15px;
}
```

## Auto Margins

If you want to create a margin automatically, without specifying the individual values, you can set the margin property to auto. This horizontally centres the element within its container. The following example sets the margin to auto:

```
div {
  margin: auto;
}
```

---

# PADDING

HTML elements can be spaced out with the margin and padding CSS properties. Setting a padding property affects the space within an element, between the element's border and its

content. You can set individual padding measurements but you cannot set padding to auto in the same way you can with the margin property.

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## Setting Individual Padding Measurements

Setting the padding property for an element affects the space within the element, between its border and its content. You can set the value of individual padding properties:

```
div {
  padding-top: 10px;
  padding-left: 20px;
  padding-bottom: 15px;
  padding-right: 20px;
}
```

## The Padding Shorthand Property

To reduce typing, CSS allows you to specify all or some of an element's padding measurements at once with the **padding** shorthand property. You can set all padding to the same value:

```
div {
  padding: 20px;
}
```

You can also specify all padding measurements in the order top, right, bottom, left:

```
div {
  padding: 10px 20px 10px 20px;
}
```

You can also set the top and bottom padding measurements followed by the left and right padding measurements. The following example sets the top and bottom padding to 0 and the left and right padding to 20px:

```
div {
  padding: 0 20px;
}
```

You can also set the top padding followed by the left and right padding measurements followed by the bottom padding. The following example sets the top padding to 10px, the left and right padding to 20px and the bottom padding to 15px:

```
div {
  padding: 10px 20px 15px;
}
```

---

# APPLYING MARGINS TO A PAGE

One of the great features of cascading style sheets is that they can be used to adjust the layout of a web page. For example, you can set top, bottom, left, and right margins for an

element, such as the body of the page or individual paragraphs.

## Try This Yourself:

Open File

*Before starting this exercise you **MUST** open the file **Common CSS Properties\_1.html** in the web browser in your text editor and browser...*

**1** In your text editor, open **StyleSheets\_1.css** and make the additions as shown

**2** Save the changes to the file

**3** Switch to your web browser, then click on **Refresh** to redisplay the page

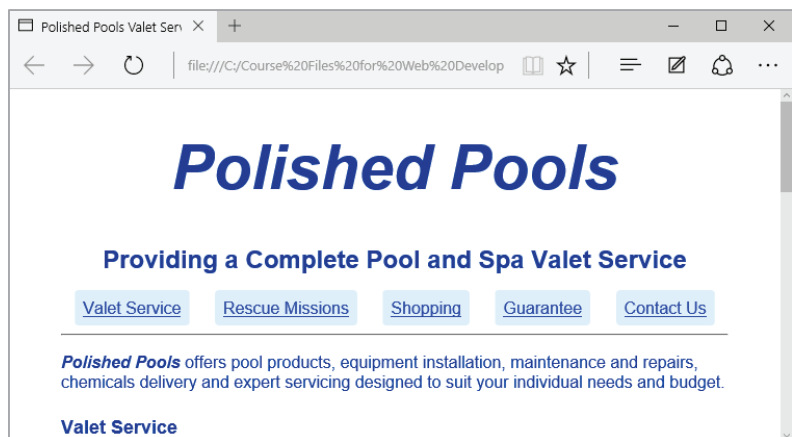
*Instead of the text being firmly wedged against the left hand edge of the screen, there is now a comfortable gap making the text easier to read...*

**4** Click on the **maintenance schedule** link to display the changes

*The margins are applied to this page as well*

```
body {
  font-family: sans-serif;
  color: #003399;
  margin-left: 50px;
  margin-right: 50px;
  margin-bottom: 35px;
}
```

**1**



**3**

## For Your Reference...

To **apply margins** to a **Web page**:

- Add one of the margin CSS rules (margin-left, margin-right, margin-bottom or margin-top) to the body selector in your style sheet

## Handy to Know...

- There are a huge number of styles that can be applied to the body tag.
- As well as margins, you might want to set the body's font, colour, background colour, and so on.



# STYLING A TABLE

In most modern browsers, tables will be displayed without borders, with the text in table header cells bold and centred, and with the text in table data cells left-aligned. Cascading Style

Sheets can be used to change the appearance of your tables, giving them a distinctive look.

## Try This Yourself:

Open File

*Before starting this exercise you MUST open the file **Common CSS Properties\_2.html** in the text editor...*

- 1 Scroll down to the table and give it the **id** of "openinghours"
  - 2 Save the changes to the file
  - 3 Open the file **Tables.css** in your text editor
  - 4 Add the table styles as shown
  - 5 Save the changes to the CSS file
  - 6 Display **Common CSS Properties\_2.html** in your web browser, then scroll down to view the table
- The table should have borders and the alignment of headers should have changed*

```
<h4>Our Opening Hours</h4>
<table id="openinghours">
  <tr>
    <th>Day</th>
    <th>Open</th>
  </tr>
  <tr>
    <td>Monday</td>
    <td>9:00 AM - 5:00 PM</td>
  </tr>
```

1

```
table#openinghours {
  font-size: 12px;
  border: 1px solid #ADD8E6;
  border-collapse: collapse;
}

table#openinghours th {
  text-align: left;
  border: 1px solid #ADD8E6;
  background-color: #F0F8FF;
  padding: 8px;
}

table#openinghours td {
  border: 1px solid #ADD8E6;
  padding: 8px;
}
```

4

- Check for corrosion of metal parts or staining of pool
- Check for calcium build-up on filters and pipes, and cloudiness of water

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Saturday	Closed
Sunday	

6

## For Your Reference...

To **style** a **table**:

- Optionally give the table an ID or class name to distinguish it from other tables in the page
- Add style rules to your style sheet

## Handy to Know...

- By giving your table an ID and then using compound selectors to target rows and cells for styling, you can use CSS to style only this table without having to give every row and cell a class or ID.

## NOTES:

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