

INTRODUCING HTML5

This section introduces the basics of HTML and provides a number of examples for you to copy or try for yourself.

EXERCISE 1

Create your own web page called “index.html” and display it in a browser.

Hint: Using your editor type in the code from the simple HTML page example below. When you are finished save the page to your work directory, html-workspace and call it “index.html”

WHAT IS HTML

HTML is a language for describing web pages; HTML5 is the latest version of the HTML language.

- HTML stands for Hyper Text Mark-up Language.
- HTML is a mark-up language.
- A mark-up language is a set of mark-up tags.
- The tags describe document content.
- HTML documents contain HTML tags and plain text.
- HTML documents are also called web pages.

HTML5 is usually used with CSS3 the style language used to define how HTML is displayed, more about that later.

```
<!DOCTYPE html>

<html>

<head>
  <title>My First Web Page</title>
</head>

<body>
  <h1>My First Heading</h1>
  <p>My first paragraph.</p>
</body>

</html>
```

1EXAMPLE OF SIMPLE HTML PAGE

HTML TAGS

HTML mark-up tags are usually called HTML tags

- HTML tags are keywords (tag names) surrounded by angle brackets like <html>.
- HTML tags normally come in pairs like and .
- The first tag in a pair is the start tag, the second tag is the end tag.

HTML1: HTML Basics, Day1

- The end tag is written like the start tag, with a forward slash before the tag name.
- Start and end tags are also called opening tags and closing tags.

```
<TAGNAME>CONTENT</TAGNAME>
```

HTML ELEMENTS

"HTML tags" and "HTML elements" are often used to describe the same thing.

But strictly speaking, an HTML element is everything between the start tag and the end tag, including the tags, This paragraph makes up an HTML element...

```
<P>THIS IS A PARAGRAPH.</P>
```

HTML PAGE STRUCTURE

The basic HTML page is made up of a number of elements as follows...

```
<html>
  <body>
    <h1>This a heading</h1>
    <p>This is a paragraph.</p>
    <p>This is another paragraph.</p>
  </body>
</html>
```

THE WEB BROWSER

The purpose of a web browser (such as Google Chrome, Internet Explorer, Firefox, Safari) is to read HTML documents and display them as web pages.

The browser does not display the HTML tags, but uses the tags to determine how the content of the HTML page is to be presented or displayed to the user:



THE HEAD OF THE DOCUMENT

The HTML <head> Element

The <head> element is a container for all the head elements. Elements inside <head> can include scripts, instruct the browser where to find style sheets, provide meta information, and more.

The following tags can be added to the head section: <title>, <style>, <meta>, <link>, <script>, <noscript>, and <base>.

The HTML <title> Element

The <title> tag defines the title of the document. The <title> element is required in all HTML/XHTML documents.

The <title> element:

- defines a title in the browser toolbar
- provides a title for the page when it is added to favourites
- displays a title for the page in search-engine results

THE BODY OF THE DOCUMENT

The body of the document delineated by the <body> tag contains all the content of the HTML document such as the text, hyperlinks, images, tables, lists, etc.

```
<html>
<head>
<title>Title of the document</title>
</head>

<body>
The content of the document.....
</body>

</html>
```

2 HEAD AND BODY ELEMENTS IN ACTION

MANIPULATING TEXT

In this section we will find out how to work with text on our HTML page and we will learn about paragraph and heading elements as well as learning how to change the look of text on the page through formatting.

EXERCISE 2

Add some text organized into paragraphs with headings to the index.html page you created in Exercise 1 and use formatting tags to change the look of some of the text. Show some text displayed as bold, italic and small.

BASIC TEXT STRUCTURES

The basic structure for text on a web page is for it to be organized into headings or paragraphs.

```
<!DOCTYPE HTML>
<html>
<head>
<title>My First Web Page</title>
</head>
<body>

    <h1>My First Heading</h1>
    <p>On the <b>Insert</b> tab, the galleries include items that are designed to
coordinate with the overall look of your document. <i>You can use these galleries to insert
tables</i>, headers, footers, lists, cover pages, and other document building blocks. When
you create pictures, charts, or diagrams, they also coordinate with your current document
look. You can easily change the formatting of selected text in the document text by choosing
a look for the selected text from the Quick Styles gallery on the Home tab. <strong>You can
also format text directly by using the other controls on the Home tab.</strong></p>
    <h2>This is a Sub-Heading</h2>
    <p><em>Most controls offer a choice of using the look from the current theme or
using a format that you specify directly. To change the overall look of your document,
choose new Theme elements on the Page Layout tab.</em> To change the looks available in
the Quick Style gallery, use the Change Current Quick Style Set command. Both the Themes
gallery and the Quick Styles gallery provide reset commands so that you can always restore
the look of your document to the original contained in your current template. On the Insert
tab, the galleries include items that are designed to coordinate with the overall look of your
document.</p>

</body>
</html>
```

3EXAMLE OF TEXT PARAGRAPHS AND HEADINGS

Note how the paragraph flows and resizes with the size of the browser.

HTML HEADINGS

Headings are important in HTML documents.

Headings are defined with the <h1> to <h6> tags.

<h1> defines the most important heading, <h6> defines the least important heading.

Example

```
<h1>This is a heading</h1>
```

```
<h2>This is a heading</h2>
```

```
<h3>This is a heading</h3>
```

Use HTML headings for headings only. Don't use headings to make text BIG or bold.

Search engines use your headings to index the structure and content of your web pages.

Since users may skim your pages by its headings, it is important to use headings to show the document structure.

H1 headings should be used as main headings, followed by H2 headings, then the less important H3 headings, and so on.

HTML PARAGRAPHS

HTML documents are divided into paragraphs. Paragraphs are defined with the <p> tag.

Example

```
<p>This is a paragraph</p>
```

```
<p>This is another paragraph</p>
```

Note: Browsers automatically add an empty line before and after a paragraph.

Tip: Don't Forget the End Tag

HTML TEXT FORMATTING

HTML Text Formatting

This text is bold

This text is italic

This is computer output

This is _{subscript} and ^{superscript}

HTML FORMATTING TAGS

HTML uses tags like `` and `<i>` for formatting output, like bold or italic text.

These HTML tags are called formatting tags.

Note

Often `` renders as ``, and `` renders as `<i>`.

However, there is a difference in the meaning of these tags:

`` or `<i>` defines bold or italic text only.

`` or `` means that you want the text to be rendered in a way that the user understands as "important". Today, all major browsers render strong as bold and em as italics. However, if a browser one day wants to make a text highlighted with the strong feature, it might be cursive for example and not bold!

HTML TEXT FORMATTING TAGS

Tag	Description
<code></code>	Defines bold text
<code></code>	Defines emphasized text
<code><i></code>	Defines a part of text in an alternate voice or mood
<code><small></code>	Defines smaller text
<code></code>	Defines important text
<code><sub></code>	Defines subscripted text
<code><sup></code>	Defines superscripted text
<code><ins></code>	Defines inserted text
<code></code>	Defines deleted text
<code><mark></code>	Defines marked/highlighted text

OTHER FORMATTING TAGS

HTML LINE BREAKS

Use the `
` tag if you want a line break (a new line) without starting a new paragraph:

Example

```
<p>This is<br>a para<br>graph with line breaks</p>
```

The `
` element is an empty HTML element. It has no end tag.

HTML LINES

The `<hr>` tag creates a horizontal line in an HTML page.

The `hr` element can be used to separate content:

Example

```
<p>This is a paragraph.</p>  
<hr>  
<p>This is a paragraph.</p>  
<hr>  
<p>This is a paragraph.</p>
```

HTML COMMENTS

Comments can be inserted into the HTML code to make it more readable and understandable. Comments are ignored by the browser and are not displayed.

Comments are written like this:

Example

```
<!-- This is a comment -->
```

Note: There is an exclamation point after the opening bracket, but not before the closing bracket.