

CHAPTER 5

COMMENTS AND META TAGS

Learning Objectives:

After reading this INFORMATION SHEET, YOU MUST be able to:

- ❖ Understand HTML basic concept and syntax;
- ❖ Determine why we need to learn HTML;
- ❖ Define HTML and common terminology related to HTML.
- ❖ Recognize correct HTML syntax;
- ❖ Make your first HTML page;

This chapter demonstrates about the HTML Meta Tags which are used to add the additional information of the document in several ways. We will also study HTML Comments which is used to insert the comments into an HTML document and are ignored by all the browsers.

CHAPTER 5.1: Meta Tags

HTML lets you specify metadata - additional important information about a document in a variety of ways. The META elements can be used to include name/value pairs describing properties of the HTML document, such as author, expiry date, a list of keywords, document author etc.

The **<meta>** tag is used to provide such additional information. This tag is an empty element and so does not have a closing tag but it carries information within its attributes.

You can include one or more meta tags in your document based on what information you want to keep in your document but in general, meta tags do not impact physical appearance of the document so from appearance point of view, it does not matter if you include them or not.

Adding Meta Tags to Your Documents

You can add metadata to your web pages by placing **<meta>** tags inside the header of the document which is represented by **<head>** and **</head>** tags. A meta tag can have following attributes in addition to core attributes –

Number	Attribute & Description
1	Name Name for the property. Can be anything. Examples include, keywords, description, author, revised, generator etc.
2	content Specifies the property's value.
3	scheme Specifies a scheme to interpret the property's value (as declared in the content attribute).
4	http-equiv Used for http response message headers. For example, http-equiv can be used to refresh the page or to set a cookie. Values include content-type, expires, refresh and set-cookie.

Specifying Keywords

You can use <meta> tag to specify important keywords related to the document and later these keywords are used by the search engines while indexing your webpage for searching purpose.

Example

Following is an example, where we are adding HTML, Meta Tags, Metadata as important keywords about the document.

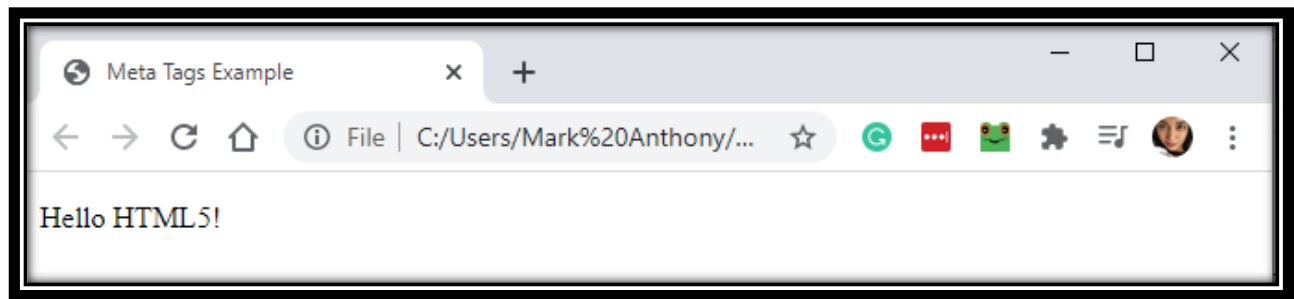
```

<!DOCTYPE html>
<html>
  <head>
    <title>Meta Tags Example</title>
    <meta name = "keywords" content = "HTML, Meta Tags, Metadata" />
  </head>

  <body>
    <p>Hello HTML5!</p>
  </body>
</html>

```

This will produce the following result –



Document Description

You can use <meta> tag to give a short description about the document. This again can be used by various search engines while indexing your webpage for searching purpose.

Example

```
<!DOCTYPE html>
<html>
  <head>
    <title>Meta Tags Example</title>
    <meta name = "keywords" content = "HTML, Meta Tags, Metadata" />
    <meta name = "description" content = "Learning about Meta Tags." />
  </head>

  <body>
    <p>Hello HTML5!</p>
  </body>
</html>
```

Document Revision Date

You can use <meta> tag to give information about when last time the document was updated. This information can be used by various web browsers while refreshing your webpage.

Example

```
<!DOCTYPE html>
<html>
  <head>
    <title>Meta Tags Example</title>
    <meta name = "keywords" content = "HTML, Meta Tags, Metadata" />
    <meta name = "description" content = "Learning about Meta Tags." />
    <meta name = "revised" content = "Tutorialspoint, 3/7/2014" />
  </head>
  <body>
    <p>Hello HTML5!</p>
  </body>
</html>
```

Document Refreshing

A `<meta>` tag can be used to specify a duration after which your web page will keep refreshing automatically.

Example

If you want your page keep refreshing after every 5 seconds then use the following syntax.

```
<!DOCTYPE html>
<html>
  <head>
    <title>Meta Tags Example</title>
    <meta name = "keywords" content = "HTML, Meta Tags, Metadata" />
    <meta name = "description" content = "Learning about Meta Tags." />
    <meta name = "revised" content = "Tutorialspoint, 3/7/2014" />
    <meta http-equiv = "refresh" content = "5" />
  </head>

  <body>
    <p>Hello HTML5!</p>
  </body>
</html>
```

Page Redirection

You can use `<meta>` tag to redirect your page to any other webpage. You can also specify a duration if you want to redirect the page after a certain number of seconds.

Example

Following is an example of redirecting current page to another page after 5 seconds. If you want to redirect page immediately then do not specify *content* attribute.

```
<!DOCTYPE html>
<html>

  <head>
    <title>Meta Tags Example</title>
    <meta name = "keywords" content = "HTML, Meta Tags, Metadata" />
    <meta name = "description" content = "Learning about Meta Tags." />
    <meta name = "revised" content = "Tutorialspoint, 3/7/2014" />
    <meta http-equiv = "refresh" content = "5; url = http://www.tutorialspoint.com" />
  </head>

  <body>
    <p>Hello HTML5!</p>
  </body>

</html>
```

Setting Cookies

Cookies are data, stored in small text files on your computer and it is exchanged between web browser and web server to keep track of various information based on your web application need.

You can use <meta> tag to store cookies on client side and later this information can be used by the Web Server to track a site visitor.

Example

Following is an example of redirecting current page to another page after 5 seconds. If you want to redirect page immediately then do not specify *content* attribute.

```
<!DOCTYPE html>
<html>
  <head>
    <title>Meta Tags Example</title>
    <meta http-equiv = "cookie" content = "userid = xyz; expires
= Wednesday, 08-Aug-15 23:59:59 GMT;" />

  </head>
  <body>
    <p>Hello HTML5!</p>
  </body>
</html>
```

If you do not include the expiration date and time, the cookie is considered a session cookie and will be deleted when the user exits the browser.

Note – You can check PHP and Cookies tutorial for a complete detail on Cookies.

Setting Author Name

You can set an author name in a web page using meta tag. See an example below –

Example

```
<!DOCTYPE html>
<html>

  <head>
    <title>Meta Tags Example</title>
    <meta name = "keywords" content = "HTML, Meta Tags, Metadata" />
    <meta name = "description" content = "Learning about Meta Tags." />
    <meta name = "author" content = "Mahnaz Mohtashim" />
  </head>

  <body>
    <p>Hello HTML5!</p>
  </body>

</html>
```

Specify Character Set

You can use <meta> tag to specify character set used within the webpage.

Example

By default, Web servers and Web browsers use ISO-8859-1 (Latin1) encoding to process Web pages. Following is an example to set UTF-8 encoding –

```
<!DOCTYPE html>
<html>

  <head>
    <title>Meta Tags Example</title>
    <meta name = "keywords" content = "HTML, Meta Tags, Metadata" />
    <meta name = "description" content = "Learning about Meta Tags." />
    <meta name = "author" content = "Mahnaz Mohtashim" />
    <meta http-equiv = "Content-Type" content = "text/html; charset = UTF-8" />
  </head>

  <body>
    <p>Hello HTML5!</p>
  </body>

</html>
```

To serve the static page with traditional Chinese characters, the webpage must contain a <meta> tag to set Big5 encoding –

```
<!DOCTYPE html>
<html>

  <head>
    <title>Meta Tags Example</title>
    <meta name = "keywords" content = "HTML, Meta Tags, Metadata" />
    <meta name = "description" content = "Learning about Meta Tags." />
    <meta name = "author" content = "Mahnaz Mohtashim" />
    <meta http-equiv = "Content-Type" content = "text/html; charset = Big5" />
  </head>

  <body>
    <p>Hello HTML5!</p>
  </body>

</html>
```

CHAPTER 5.2: Comments

Comment is a piece of code which is ignored by any web browser. It is a good practice to add comments into your HTML code, especially in complex documents, to indicate sections of a document, and any other notes to anyone looking at the code. Comments help you and others understand your code and increases code readability.

HTML comments are placed in between <!-- ... --> tags. So, any content placed with-in <!-- ... --> tags will be treated as comment and will be completely ignored by the browser.

Example

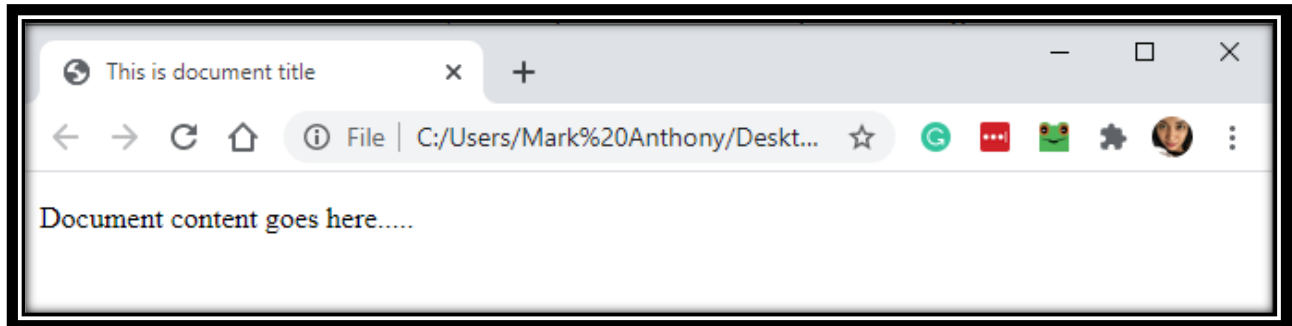
```
<!DOCTYPE html>
<html>

  <head> <!-- Document Header Starts -->
    <title>This is document title</title>
  </head> <!-- Document Header Ends -->

  <body>
    <p>Document content goes here.....</p>
  </body>

</html>
```

This will produce the following result without displaying the content given as a part of comments –



Valid vs Invalid Comments

Comments do not nest which means a comment cannot be put inside another comment. Second the double-dash sequence "--" may not appear inside a comment except as part of the closing --> tag. You must also make sure that there are no spaces in the start-of comment string.

Example

Here, the given comment is a valid comment and will be wiped off by the browser.

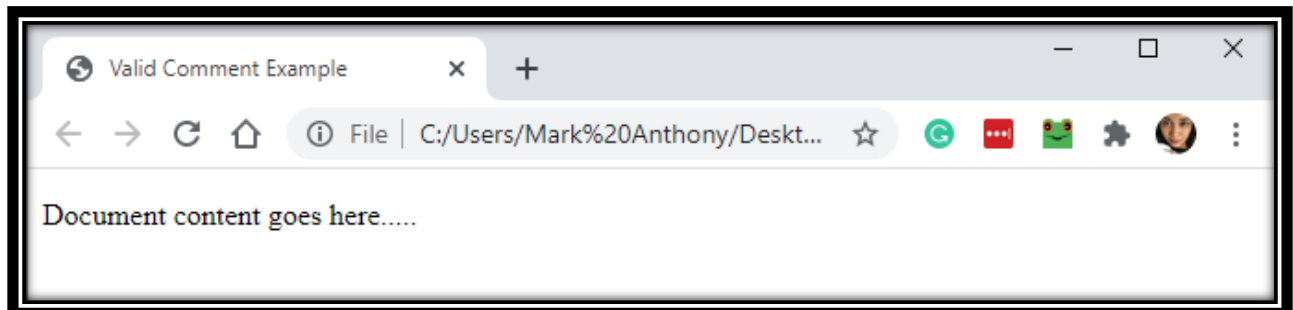
```
<!DOCTYPE html>
<html>

  <head>
    <title>Valid Comment Example</title>
  </head>

  <body>
    <!-- This is valid comment -->
    <p>Document content goes here.....</p>
  </body>

</html>
```

This will produce the following result –



But, following line is not a valid comment and will be displayed by the browser. This is because there is a space between the left angle bracket and the exclamation mark.

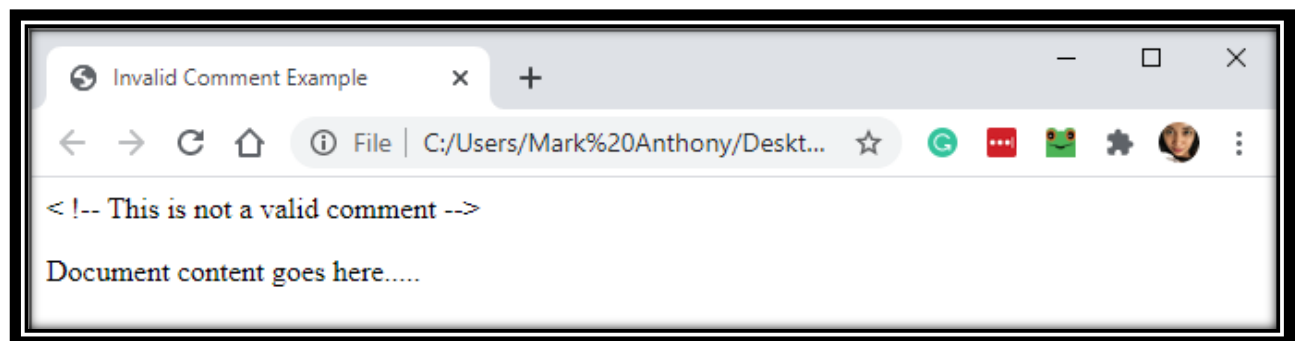
```
<!DOCTYPE html>
<html>

  <head>
    <title>Invalid Comment Example</title>
  </head>

  <body>
    <!--   This is not a valid comment -->
    <p>Document content goes here.....</p>
  </body>

</html>
```

This will produce the following result –



Multiline Comments

So far we have seen single line comments, but HTML supports multi-line comments as well.

You can comment multiple lines by the special beginning tag `<!--` and ending tag `-->` placed before the first line and end of the last line as shown in the given example below.

Example

```
<!DOCTYPE html>
<html>

  <head>
    <title>Multiline Comments</title>
  </head>

  <body>
    <!--
      This is a multiline comment and it can
      span through as many as lines you like.
    -->

    <p>Document content goes here.....</p>
  </body>

</html>
```

This will produce the following result –



Conditional Comments

Conditional comments only work in Internet Explorer (IE) on Windows but they are ignored by other browsers. They are supported from Explorer 5 onwards, and you can use them to give conditional instructions to different versions of IE.

Example

```
<!DOCTYPE html>
<html>

  <head>
    <title>Conditional Comments</title>

    <!--[if IE 6]>
      Special instructions for IE 6 here
    <![endif]-->
  </head>

  <body>
    <p>Document content goes here.....</p>
  </body>

</html>
```

You will come across a situation where you will need to apply a different style sheet based on different versions of Internet Explorer, in such situation conditional comments will be helpful.

Using Comment Tag

There are few browsers that support <comment> tag to comment a part of HTML code.

Note – The <comment> tag deprecated in HTML5. Do not use this element.

Example

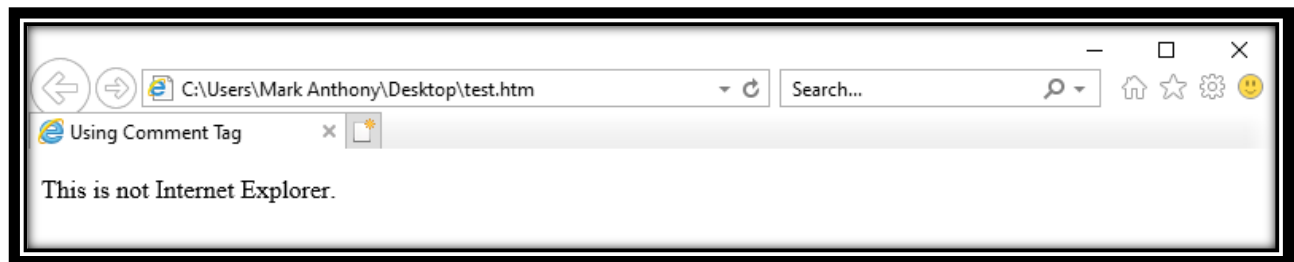
```
<!DOCTYPE html>
<html>

  <head>
    <title>Using Comment Tag</title>
  </head>

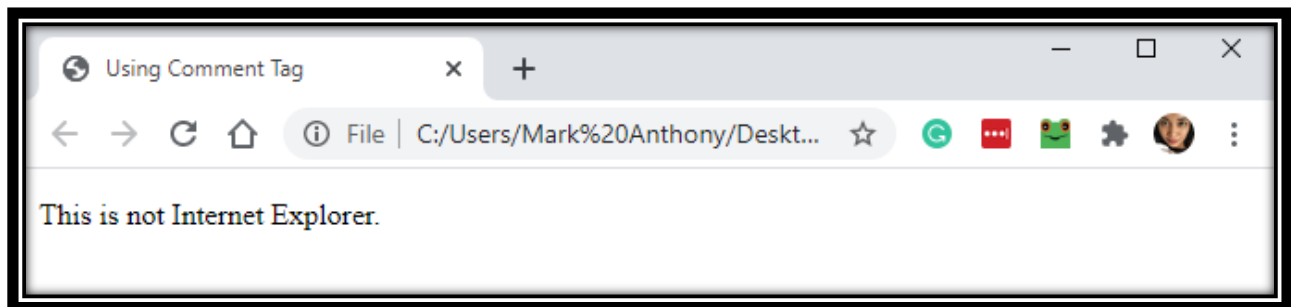
  <body>
    <p>This is <comment>not</comment> Internet Explorer.</p>
  </body>

</html>
```

If you are using IE, then it will produce following result –



But if you are not using IE, then it will produce following result –



Commenting Script Code

Though you will learn JavaScript with HTML, in a separate tutorial, but here you must make a note that if you are using Java Script or VB Script in your HTML code then it is recommended to put that script code inside proper HTML comments so that old browsers can work properly.

Example

```
<!DOCTYPE html>
<html>

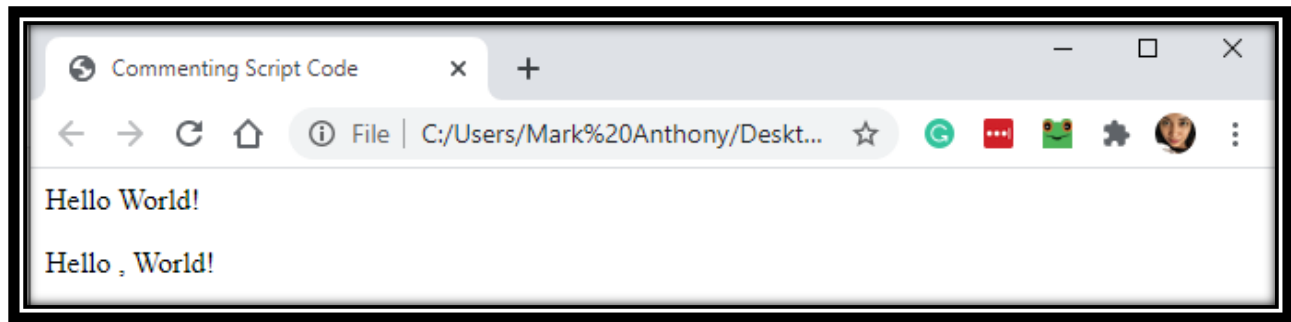
  <head>
    <title>Commenting Script Code</title>

    <script>
      <!--
        document.write("Hello World!")
      //-->
    </script>
  </head>

  <body>
    <p>Hello , World!</p>
  </body>

</html>
```

This will produce the following result –



Commenting Style Sheets

Though you will learn using style sheets with HTML in a separate tutorial, but here you must make a note that if you are using Cascading Style Sheet (CSS) in your HTML code then it is recommended to put that style sheet code inside proper HTML comments so that old browsers can work properly.

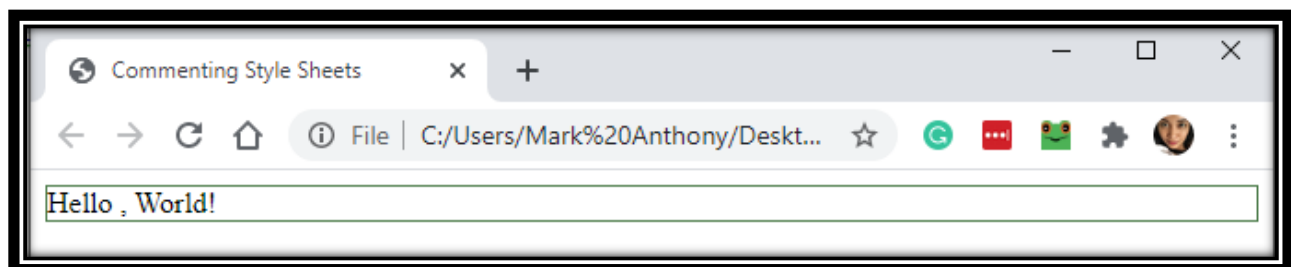
Example

```
<!DOCTYPE html>
<html>
  <head>
    <title>Commenting Style Sheets</title>

    <style>
      <!--
        .example {
          border:1px solid #4a7d49;
        }
      //-->
    </style>
  </head>

  <body>
    <div class = "example">Hello , World!</div>
  </body>
</html>
```

This will produce the following result –



VIDEO TUTORIAL LINK

HTML – Meta Tags

<https://www.youtube.com/watch?v=O3P01QDvdqY&list=PLWPirh4EWFpFI-w62QiV62FOVHcXnynon&index=7>

HTML - Comments

<https://www.youtube.com/watch?v=u0WYSDbmoj8&list=PLWPirh4EWFpFI-w62QiV62FOVHcXnynon&index=8>

REFERENCES:

- https://www.tutorialspoint.com/html/html_meta_tags.htm
- https://www.tutorialspoint.com/html/html_comments.htm