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HTML Basics

Metadata Elements

The metadata elements are used to set the presentation or behavior of the remaining content of a document. The elements can also be used to set a relationship of a document with other documents. The following is a list of metadata elements:

1. TITLE
2. BASE
3. LINK
4. META
5. SCRIPT
6. NOSCRIPT
7. STYLE

1. The TITLE Element

The TITLE element contains the title of the HTML document, which appears in the title bar of the Web browser. This element is used by search engines to select the document and display it in the search result. Each HEAD element should contain a TITLE element. Remember to keep the title text short because some browsers may find it difficult to handle titles that are longer than 256 characters. The following code snippet shows the use of the TITLE element in an HTML document:

```
<!DOCTYPE HTML>
<HTML> <HEAD> <TITLE>Title of the web page </TITLE> </HEAD></HTML>
```

In the preceding code snippet, the TITLE element is used inside the HEAD element, which specifies the title of the HTML document.

Attributes of the TITLE Element

Attribute	Description
class	Specifies the class of an element in an HTML document
id	Specifies a unique alphanumeric identifier for an element in the 1 document
lang	Specifies the language used by an element
style	Specifies an inline style, to render an element in the document

2. The BASE Element

The BASE element is used to specify a default URL and target for all the links in an HTML document. You can set a base URL for all the links once at the top of the document by using the BASE element, this element appears within the HEAD element of the document and should be used as the first element in the HEAD element. This enables the other elements in the head section to use the information of the BASE element.

Attributes of the BASE Element

Attribute	Description
href	Specifies a URL in an HTML document
target	Specifies the locations where the links of an HTML document open. The following are the four possible values of the target attribute: • **_blank** —Opens the link in a new window • **_parent** —Opens the link in the same frame the link is clicked • **_self** —Opens the link in the present frameset • **_top** —Opens the link in the same window • **<framename>** —Opens the link in the respective frame

The following code snippet shows the use of the BASE element in an HTML document:
```
<!DOCTYPE HTML>
<HTML> <HEAD> <base href="url" target="va1ue" /> </HEAD> </HTML>
```
In the preceding code snippet, the BASE element is used inside the HEAD dement. The BASE element uses two attributes, href and target the href attribute contains the URL of an HTML document you navigate to when a link is clicked, and the target attribute specifies where the link opens. You can specify the _blank, _parent, _self, or _top value in the target attribute.

3. The LINK Element

The LINK element is used to link an HTML document to other HTML documents. It also defines the relationship between two different HTML documents. The LINK element contains the href attribute to specify the destination URL of a link. The href attribute is a required attribute that must have a valid URL. If this attribute is not spedfied, then the LINK element does not define a link. The LINK element also contains the rel attribute that defines the relationship of the linked documents. This attribute is also a required attribute and must have a valid value.

Attributes of the LINK Element

Attribute	Value	Description
href	URL	Specifies the target URL you navigate to after clicking a link
hreflang	language_code	Defines the base language of the target URL
media	screen, tty, tv, projection, handheld, print, braille, aural, all	Specifies the device on which the HTML document is displayed
rel	alternate, archives, author, I feed, first, help, icon, index, last, license, next, pingback, prefetch, prev, search, stylesheet, sidebar, tag, up	Specifies the relationship between the HTML document and the target URL or another HTML document

sizes	any number	Defines the size of the linked HTML document
type	the mime_type, for example: text/javascript, text/ css	Specifies the Multipurpose Internet Mail Extensions (MIME) type of the target URL. The MIME type decides which type of language rules are to be followed in an HTML page, such as JavaScript or CSS.

The following code snippet shows the use of the LINK element in an HTML document:
<HEAD> <link href="file_name.html**" rel="**stylesheet**"> </HEAD>**

The preceding code snippet creates a link by using the LINK element in the document. The LINK element uses the href and rel attributes to specify the type of link.

4. The META Element

The META element is used to provide information about an HTML document, such as page description and keywords. This element appears inside the HEAD element and has five attributes: charset, content, http-equiv, name, and scheme, from which only content is a required attribute. The following code snippet shows the use of the META element in a document:
<HEAD> <META name="keywords**" contents="**some keywords**" /> </HEAD>**
The preceding code snippet defines keywords by using the META element. The contents attribute contains a list of keywords, and the name attribute specifies the content of the contents attribute.

Attributes of the META Element

Attribute	Value	Description
charset	character encoding	Defines character encoding for the document
contents	some_text	Defines the content of the meta data
http-equiv	content- type expires, refresh, set-cookie	Provides information of the contents attribute to an http header
name	author, description, keywords, generator, revised, others	Provides the content of the contents attribute

5. The SCRIPT Element

The SCRIPT element is used to declare a script, such as JavaScript, within an HTML document. This element either contains scripting statements or points to an external script file through the src attribute. You can use the SCRIPT element for validating Web forms and manipulating the content and images present on these forms. The SCRIPT element has five attributes: async, type,

charset, defer, and src. If the value of the async attribute is true, then the script executes asynchronously, In this case, the script executes while the document is parsed. If the value of the async attribute is false but the value of the defer attribute is true, then the. script is executed after the document has finished parsing. If the values of the async and defer attributes are false, then the script is executed immediately, and the HTML page waits for the script to finish executing before continuing the parsing.

The following code snippet shows how to use the SCRIPT element in an HTML document:

<HEAD> <SCRIPT type="text/ javascript**"> Script code here </SCRIPT> </HEAD>**

In the preceding code snippet, the SCRIPT element is used inside the HEAD element, which uses the type attribute. The type attribute specifies the type of script.

Attributes of the SCRIPT Element

Attribute	Value	Description
async	true, false	Specifies whether the script should be executed
type	- text/ecmascript - text/javascript - application/ecmascript - application/javascript - text/vbscript	Specifies the MIME type of the script
charset	charset	Specifies the character encoding used in the script
defer	true, false	Specifies whether or not the browser can continue parsing the
src	URL	Specifies the URL of a file that contains the script

6. The NOSCRIPT Element

The NOSCRIPT element is used to display the alternate content on the Web browser that either does not support JavaScript or has JavaScript disabled. If the JavaScript is enabled or supported by the Web browser, the NOSCRIPT element is not considered. The following code snippet shows an example of the NOSCRIPT element: ¦   L

<SCRIPT type="text/javascript**"> document.write("**Have a good day**.") </SCRIPT>**
<NOSCRIPT>javascript is disabled or not supported on your browser. **</NOSCRIPT>**

The NOSCRIPT element can only be applied on the elements that are inside the BODY element. If you do not want to apply script on any session of the BODY element, you can define it in the NOSCREPT element. This element cannot contain any nested elements.

7. The STYLE Element

The STYLE element is used to declare the style sheets within the HTML document. This element specifies how the HTML elements are rendered in a browser. The STYLE element has three attributes: type, media, and scoped. Generally, the STYLE element is placed inside the HEAD element but if you use the scoped attribute, then you can place the STYLE element in the

BODY element of the document. The following code snippet shows the use of the STYLE element in a document:

<HEAD> <STYLE type="text/css**" > style code here </STYLE> </HEAD>**

In the preceding code snippet, the STYLE element is used within the HEAD element.

Attributes of the STYLE Element

Attribute	Value	Description
type	text/css	Specifies the type of content, such as simple text or style sheet in an HTML document
media	Screen, tty, tv, projection, handheld, print, braille, aural, all	Specifies the destination medium where the style is applied
scoped	scoped	Specifies the style elements, that is the parent element and its child elements

Exercise:

  1: What is the Metadata elements in html code?
  2: Write difference between <SCRIPT> and < NOSCRIPT > tag?
  3: Write short note on style tag.
  4: What is the purpose of using <META> tag ? List the attribute and description of <MATA> tag.