

Web & Mobile app development

WMA - Lecture # 13

Throwback

- Whenever you want to collect information from visitors you will need a form, which lives inside a `<form>` element.
- Information from a form is sent in name/value pairs.
- Each form control is given a name, and the text the user types in or the values of the options they select are sent to the server.
- HTML5 introduces new form elements which make it easier for visitors to fill in forms.

At this point, we have covered the main tags that fit nicely into groups and sections.

Next, we will focus on some helpful topics that are not easily grouped together.



Let's see

The different versions of HTML and how to indicate which version you are using

Versions of html

XML

Strict XHTML

Transitional XHTML

HTML 4

HTML 5

Doctype

Because there have been several versions of HTML, each web page should begin with a **DOCTYPE** declaration to tell a browser which version of HTML the page is using (although browsers usually display the page even if it is not included).

| HTML5 | HTML |
|---|------|
| <pre><!DOCTYPE html></pre> | |
| HTML 4 | |
| <pre><!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd"></pre> | |
| Transitional XHTML 1.0 | |
| <pre><!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/ xhtml1-transitional.dtd"></pre> | |
| Strict XHTML 1.0 | |
| <pre><!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN" "http://www.w3.org/TR/xhtml1/DTD/ xhtml1-strict.dtd"></pre> | |
| XML Declaration | |
| <pre><?xml version="1.0" ?></pre> | |

Comments in html < ! -- -- >

If you want to add a comment to your code that will not be visible in the user's browser, you can add the text between these characters:

It is a good idea to add comments to your code because, no matter how familiar you are with the page at the time of writing it, when you come back to it later (or if someone else needs to look at the code), comments will make it much easier to understand.

< ! -- comment goes here -- >

ID Attribute



To give a unique name to any Tag / element.



Every HTML element can carry the id attribute. It is used to uniquely identify that element from other elements on the page

Example

Giving an element a unique identity allows you to style it differently than any other instance of the same element on the page.

For example, you might want to assign one paragraph within the page (perhaps a paragraph containing a pull quote) a different style than all of the other paragraphs. In the example on the right, the paragraph with the id attribute whose value is pullquote is made uppercase using CSS.

chapter-08/id-attribute.html

HTML

```
<p>Water and air. So very commonplace are these  
substances, they hardly attract attention - and  
yet they vouchsafe our very existence.</p>  
<p id="pullquote">Every time I view the sea I feel  
a calming sense of security, as if visiting my  
ancestral home; I embark on a voyage of seeing.  
</p>  
<p>Mystery of mysteries, water and air are right  
there before us in the sea.</p>
```

RESULT

Water and air. So very commonplace are these
substances, they hardly attract attention - and yet
they vouchsafe our very existence.

EVERY TIME I VIEW THE SEA I FEEL A
CALMING SENSE OF SECURITY, AS IF
VISITING MY ANCESTRAL HOME; I
EMBARK ON A VOYAGE OF SEEING.

Mystery of mysteries, water and air are right there
before us in the sea.



Class Attribute



Every HTML element can also carry a class attribute.

Sometimes, rather than uniquely identifying one element within a document, you will want a way to identify several elements as being different from the other elements on the page.

```
<p class="important">For a one-year period from  
November 2010, the Marugame Genichiro-Inokuma  
Museum of Contemporary Art (MIMOCA) will host a  
cycle of four Hiroshi Sugimoto exhibitions.</p>  
<p>Each will showcase works by the artist  
thematically contextualized under the headings  
"Science," "Architecture," "History" and  
"Religion" so as to present a comprehensive  
panorama of the artist's oeuvre.</p>  
<p class="important admittance">Hours: 10:00 - 18:00  
(No admittance after 17:30)</p>
```

RESULT

FOR A ONE-YEAR PERIOD FROM NOVEMBER 2010,
THE MARUGAME GENICHIRO-INOKUMA MUSEUM
OF CONTEMPORARY ART (MIMOCA) WILL HOST A
CYCLE OF FOUR HIROSHI SUGIMOTO EXHIBITIONS.

Each will showcase works by the artist thematically
contextualized under the headings "Science," "Architecture,"
"History" and "Religion" so as to present a comprehensive
panorama of the artist's oeuvre.

HOURS: 10:00 - 18:00 (NO ADMITTANCE AFTER 17:30)

Example

You might have some paragraphs of text that contain information that is more important than others and want to distinguish these elements, or you might want to differentiate between links that point to other pages on your own site and links that point to external sites.

Block elements

Some elements will always appear to start on a new line in the browser window. These are known as block level elements.

Examples of block elements are:

**<h1>, <p>, and **

chapter-08/block-elements.html

HTML

```
<h1>Hiroshi Sugimoto</h1>
<p>The dates for the ORIGIN OF ART exhibition are as follows:</p>
<ul>
  <li>Science: 21 Nov - 20 Feb 2010/11</li>
  <li>Architecture: 6 Mar - 15 May 2011</li>
  <li>History: 29 May - 21 Aug 2011</li>
  <li>Religion: 28 Aug - 6 Nov 2011</li>
</ul>
```

RESULT

Hiroshi Sugimoto

The dates for the ORIGIN OF ART exhibition are as follows:

- Science: 21 Nov - 20 Feb 2010/11
- Architecture: 6 Mar - 15 May 2011
- History: 29 May - 21 Aug 2011
- Religion: 28 Aug - 6 Nov 2011

Grouping Text & Elements In a Block

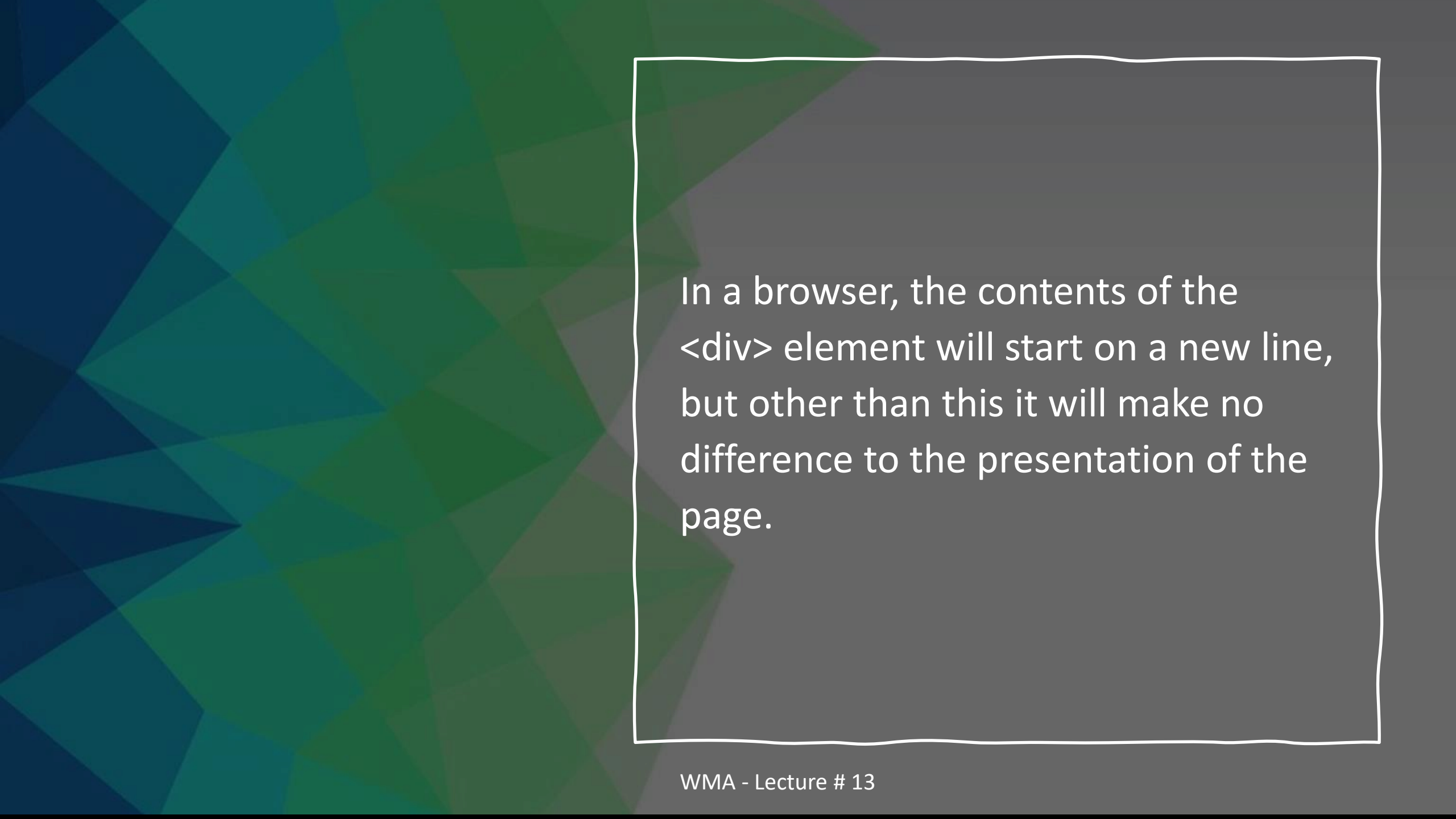
The `<div>` element allows you to group a set of elements together in one block-level box.


```
<div id="header">
  
  <ul>
    <li><a href="index.html">Home</a></li>
    <li><a href="biography.html">Biography</a></li>
    <li><a href="works.html">Works</a></li>
    <li><a href="contact.html">Contact</a></li>
  </ul>
</div><!-- end of header -->
```




For Example

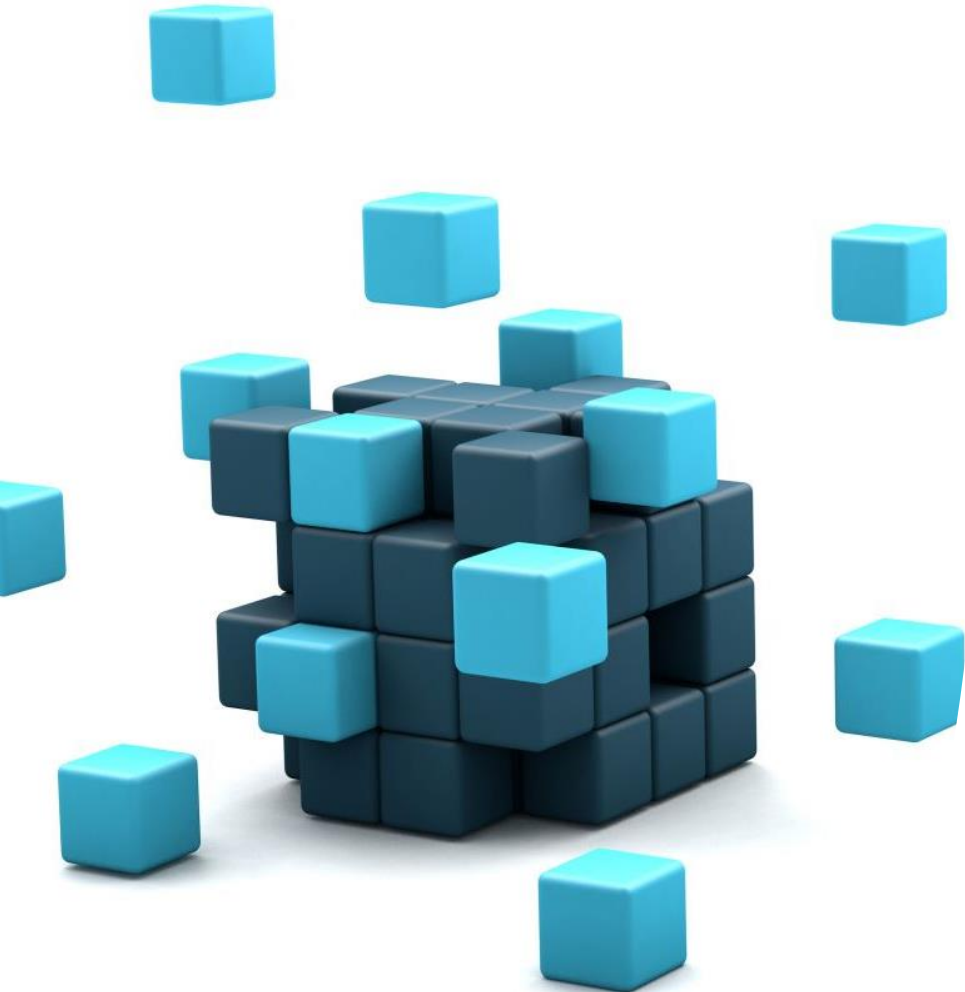
You might create a `<div>` element to contain all of the elements for the header of your site (the logo and the navigation), or you might create a `<div>` element to contain comments from visitors.



In a browser, the contents of the `<div>` element will start on a new line, but other than this it will make no difference to the presentation of the page.



Using an id or class attribute on the element, however, means that you can create CSS style rules to indicate how much space the element should occupy on the screen and change the appearance of all the elements contained within it.



Div is also a Block element

Inline elements

Some elements will always appear to continue on the same line as their neighboring elements. These are known as inline elements.

- Example: `<a>`, ``, `<i>`, ``

HTML

chapter-08/inline-elements.html

```
Timed to a single revolution of the planet around the sun at a 23.4 degrees tilt that plays out the rhythm of the seasons, this <em>Origins of Art</em> cycle is organized around four themes: <b>science, architecture, history</b> and <b>religion</b>.
```

RESULT

Timed to a single revolution of the planet around the sun at a 23.4 degrees tilt that plays out the rhythm of the seasons, this *Origins of Art* cycle is organized around four themes: **science, architecture, history and religion.**

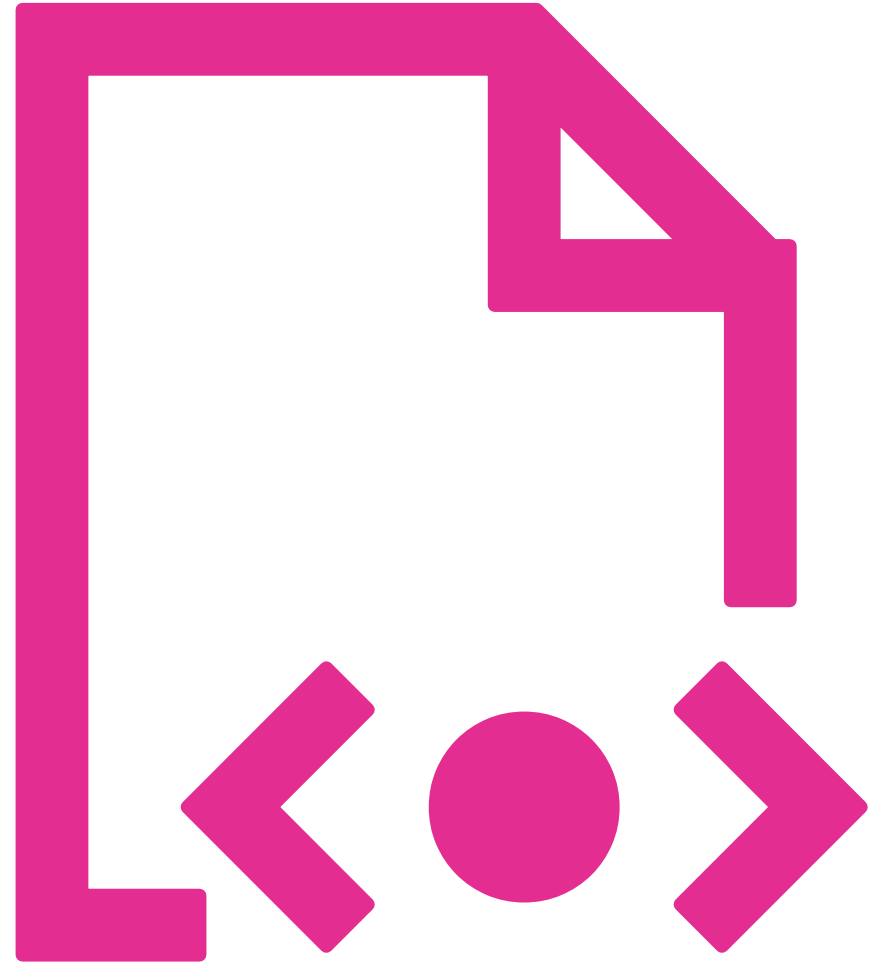
Span

The `` element acts like an inline equivalent of the element.

```
<a href="">faceboo  
<span>  
<a href="">google.  
<a href="">yahoo.c  
</span>
```

<iframe>

An iframe is like a little window that has been cut into your page — and in that window you can see another page. The term iframe is an abbreviation of inline frame.



Example – Adding Google Maps link in your Website

chapter-08/iframes.html

HTML

```
<iframe  
  width="450"  
  height="350"  
  src="http://maps.google.co.uk/maps?q=moma+new+york  
    &output=embed">  
</iframe>
```

RESULT



<Meta>

The element lives inside the element and contains information about that web page.

HTML

chapter-08/meta.html

```
<!DOCTYPE html>
<html>
  <head>
    <title>Information About Your Pages</title>
    <meta name="description"
      content="An Essay on Installation Art" />
    <meta name="keywords"
      content="installation, art, opinion" />
    <meta name="robots"
      content="nofollow" />
    <meta http-equiv="author"
      content="Jon Duckett" />
    <meta http-equiv="pragma"
      content="no-cache" />
    <meta http-equiv="expires"
      content="Fri, 04 Apr 2014 23:59:59 GMT" />
  </head>
  <body>
  </body>
</html>
```

Reserved Characters

There are some characters that are used in and reserved by HTML code. (For example, the left and right angled brackets.)

| | | | | | |
|---|------------------------------------|---|---|---|---|
| < | Less-than sign < < | ¢ | Cent sign ¢ ¢ | ‘ | Left single quote &lquo; ‘ |
| > | Greater-than sign > & | £ | Pound sign £ £ | ’ | Right single quote &rquo; ’ |
| & | Ampersand & & | ¥ | Yen sign ¥ ¥ | “ | Left double quotes &lquo; “ |
| " | Quotation mark " " | € | Euro sign € € | ” | Right double quotes ” ” |
| | | © | Copyright symbol © © | × | Multiplication sign × × |
| | | ® | Registered trademark ® ® | ÷ | Division sign ÷ ÷ |
| | | ™ | Trademark ™ ™ | | |





<Video>

HTML

chapter-09/adding-html5-video.html

```
<!DOCTYPE html>
<html>
  <head>
    <title>Adding HTML5 Video</title>
  </head>
  <body>
    <video src="video/puppy.mp4"
      poster="images/puppy.jpg"
      width="400" height="300"
      preload
      controls
      loop>
      <p>A video of a puppy playing in the snow</p>
    </video>
  </body>
</html>
```

The <video> element has a number of attributes which allow you to control video playback.

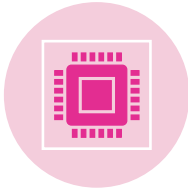
Video Attributes



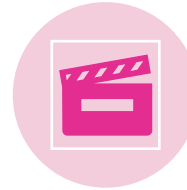
Poster: This attribute allows you to specify an image to show while the video is downloading or until the user tells the video to play.



Src: This attribute defines the path of the video



Width/ Height: These attributes specify the size of the player in pixels.



Control: When used, this attribute indicates that the browser should supply its own controls for playback.



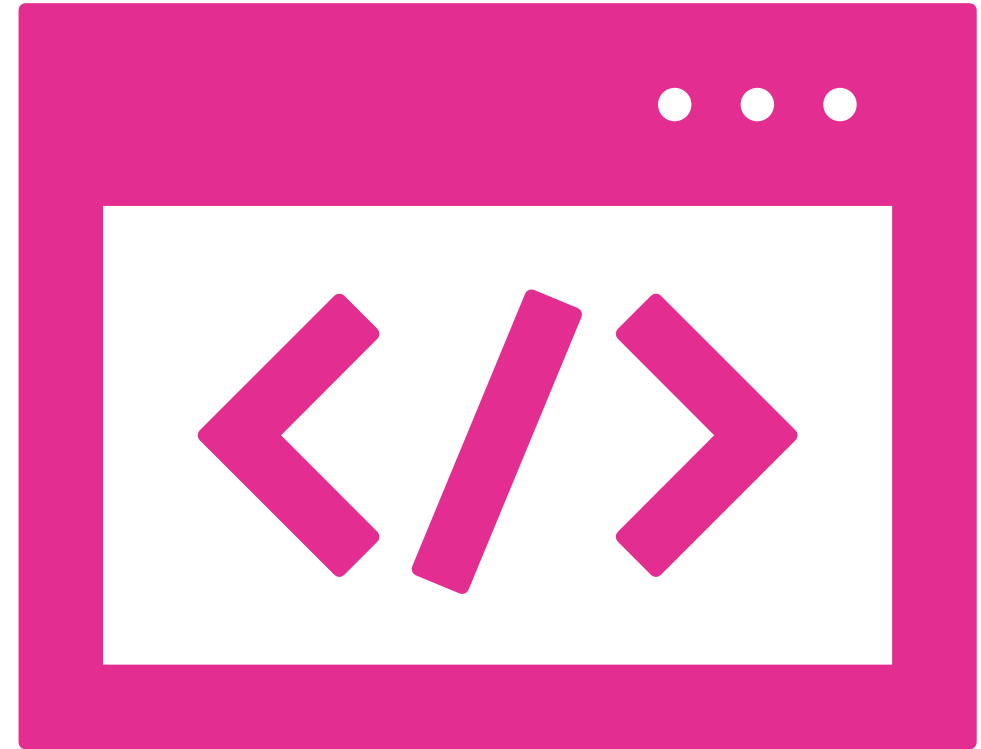
Autoplay: When used, this attribute specifies that the file should play automatically.



Loop: When used, this attribute indicates that the video should start playing again once it has ended.

<Audio>

HTML5 introduced the element to include audio files in your pages. As with HTML5 video, browsers expect different formats for the audio.



Example

chapter-09/adding-html5-audio.html HTML

```
<!DOCTYPE html>
<html>
  <head>
    <title>Adding HTML5 Audio</title>
  </head>
  <body>
    <audio src="audio/test-audio.ogg"
      controls autoplay>
      <p>This browser does not support our audio
        format.</p>
    </audio>
  </body>
</html>
```

RESULT



The image shows a browser window displaying an HTML5 audio player. The player interface includes a pause button, a progress bar with a current time of 0:04 and a total duration of 0:18, and a volume icon. The audio player is embedded within a web page that has a title "Adding HTML5 Audio" and a fallback message: "This browser does not support our audio format."

<Source>

- It is possible to specify more than one audio file using the <source> element between the opening and closing tags (instead of the src attribute on the opening tag).
- This is important because different browsers support different formats for audio files.
- MP3: Safari 5+, Chrome 6+, IE9
- Ogg: Firefox 3.6, Chrome 6, Opera 1.5, IE9