Session: 10

HTML5 Tables, Audio, and Video

Objectives

- Describe how to create and format tables
- Explain the table size and the width of a column
- Explain the process of merging table cells
- Explain the page layout for tables
- Describe the need for multimedia in HTML5
- List the supported media types in HTML5
- Explain the audio elements in HTML5
- Explain the video elements in HTML5
- Explain the accessibility of audio and video elements
- Describe how to deal with non-supporting browsers

Introduction

Tables allow the user to view the data in a structured and classified format.

Tables can contain any type of data such as text, images, links, and other tables.

The user can create tables for displaying timetables, financial reports, and so on.

Example:

Test Done	Amount in $
X Ray	60
X Ray	30

Creating and Formatting Tables 1-2

A table is made up of rows and columns. The intersection of each row and column is called as a cell.

A row is made up of a set of cells that are placed horizontally.

A column is made up of set of cells that are placed vertically.

The user can represent the data in a tabular format by using the `<table>` element in HTML.

The `<tr>` element divides the table into rows and the `<td>` element specifies columns for each row.

By default, a table does not have a border.

The `border` attribute of the `<table>` element specifies a border for making the table visible in a Web page.

Creating and Formatting Tables 2-2

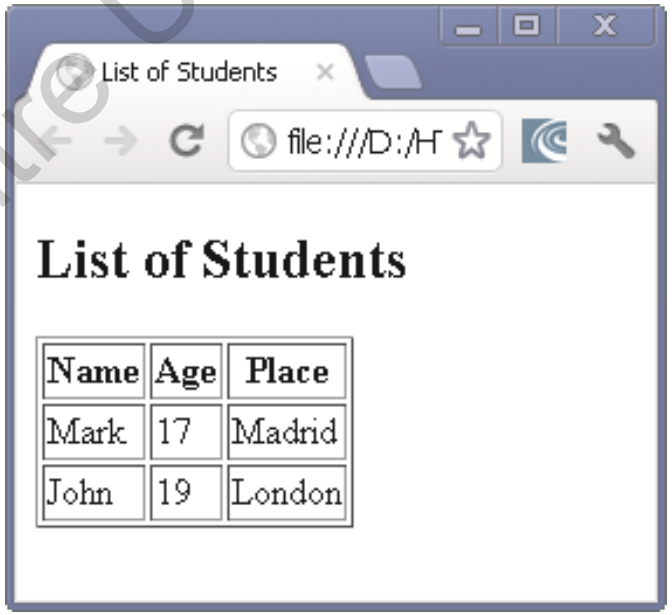
- The Code Snippet demonstrates how to create a table.

```
<!DOCTYPE HTML>
<html>
  <head>
    <title>Languages</title>
  </head>
   <body>
    <h2>Main Languages</h2>
     <table border="1">
      <tr>
       <td>English</td>
       <td>German</td>
      </tr>
      <tr>
       <td>French</td>
       <td>Italian</td>
      </tr>
    </table>
   </body>
</html>
```

Table Headings

- The user can specify the heading for each column in HTML.
- To specify the heading for columns in a table, use the <th> element.
- The text included within the <th> element appears in bold.
- The Code Snippet demonstrates how to create a table with a heading.

```
<!DOCTYPE HTML>
  <html>
    <head>
      <title>List of Students </title>
    </head>
    <body>
      <h2>List of Students</h2>
      <table border="1">
          <tr>
          <th>Name</th>
          <th>Age</th>
          <th>Place</th>
        </tr>
        <tr>
          <td>Mark</td>
          <td>17</td>
          <td>Madrid</td>
        </tr>
          <tr>
          <td>John</td>
          <td>19</td>
          <td>London</td>
        </tr>
      </table>
    </body>
</html>
```



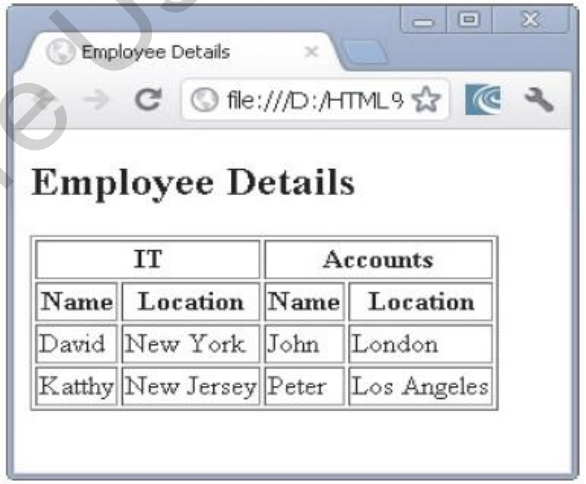
Colspan Attribute 1-2

- Spanning refers to a process of extending a cell across multiple rows or columns.
- To span two or more columns, use the `colspan` attribute of the `<td>` and `<th>` elements.
- The `colspan` attribute allows the user to span a cell along a horizontal row.
- The value of the `colspan` attribute specifies the number of cells across which a specific cell shall be expanded.

Colspan Attribute 2-2

- The Code Snippet demonstrates how to create a table and span header cells across two cells vertically.

```
<!DOCTYPE HTML>
<html>
  <head>
    <title>Employee Details</title>
  </head>
  <body>
    <h2>Employee Details</h2>
    <table border="1">
    <tr>
        <th colspan="2">IT</th>
        <th colspan="2">Accounts</th>
     </tr>
     <tr>
        <th>Name</th>
        <th>Location</th>
        <th>Name</th>
        <th>Location</th>
     </tr>
     <tr>
        <td>David</td>
        <td>New York</td>
        <td>John</td>
        <td>London</td>
     </tr>
     <tr>
        <td>Katthy</td>
        <td>New Jersey</td>
        <td>Peter</td>
         <td>Los Angeles</td>
      </tr>
    </table>
  </body>
</html>
```



Rowspan Attribute 1-3

- The `rowspan` attribute spans a data cell across two or more rows.
- It allows the user to span a data cell along a vertical column.
- Like the `colspan` attribute, the rowspan attribute can be used within the `<td>` and `<th>` elements.
- The Code Snippet demonstrates how to span a cell across multiple rows.

```
<!DOCTYPE HTML>
<html>
  <head>
    <title>Automobile Gallery</title>
  </head>
  <body>
    <table border="1">
      <tr>
      <th>Manufacturer</th>
      <th>Model</th>
      <th>Price</th>
    </tr>
      <tr>
      <th rowspan="3">Audi</th>
       <td>A4</td>
      <td>34.5</td>
      </tr>
```

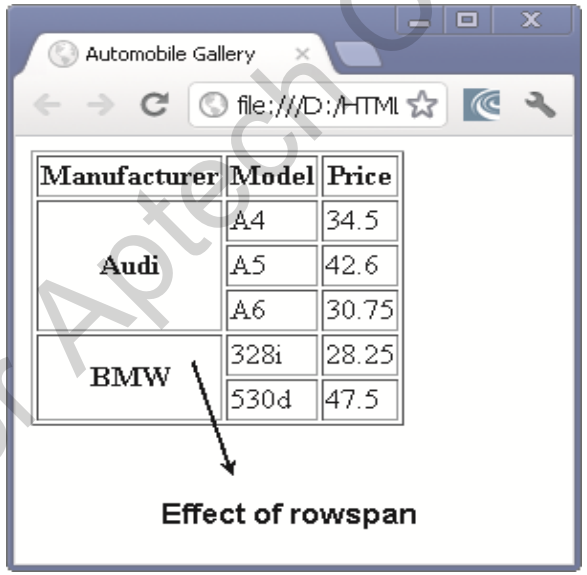
Rowspan Attribute 2-3

```
        <tr>
          <td>A5</td>
          <td>42.6</td>
        </tr>
        <tr>
          <td>A6</td>
          <td>30.75</td>
        </tr>
        <tr>
          <th rowspan="2">BMW</th>
          <td>328i</td>
          <td>28.25</td>
        </tr>
        <tr>
          <td>530d</td>
          <td>47.5</td>
        </tr>
      </table>
    </body>
    </html>
```


- The code creates a table with a border width of one pixel.

Rowspan Attribute 3-3

- Three <th> elements within the <tr> element specify column headings namely, **Manufacturer**, **Model**, and **Price**.
- The rowspan attribute of the <th> element combines the three rows of the **Manufacturer** column into a common brand namely, **Audi**.
- Three different models and the respective prices of the **Audi** brand are displayed in three different rows.
- Similarly, the rowspan attribute of the <th> element combines the next two rows of the **Manufacturer** column into a common brand called **BMW**.
- Following figure displays the rowspan attribute effect:



Horizontal Alignment 1-2

- Alignment determines the representation of text along the left, right, or center positions.
- In HTML, by default, the data within the table is aligned on the left side of the cell.
- HTML5 has deprecated the align attribute.
- The four possible values for setting the horizontal alignment are as follows:

left:

- Aligns the data within a cell on the left side. This is the default value for table content.

center:

- Aligns the data within the cell on the center. This is the default value for table headings.

right:

- Aligns the data within the cell on the right side.

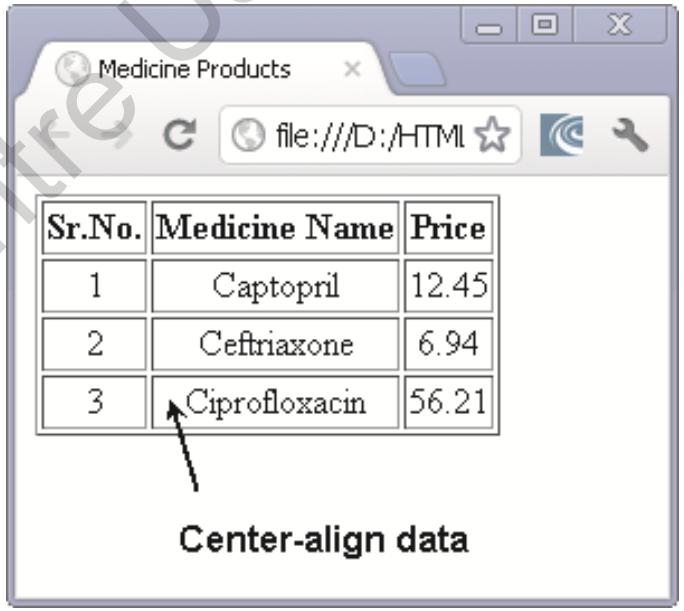
justify:

- Aligns the data within the cell by adjusting the text at the edges.

Horizontal Alignment 2-2

- To set the alignment with style you can use the text-align attribute to specify the horizontal alignment.
- The Code Snippet demonstrates how to center align the table data.

```
<!DOCTYPE HTML>
<html>
  <head>
    <title>Automobile Gallery</title>
  </head>
  <body>
    <table border="1">
      <tr>
      <th>Sr.No.</th>
      <th>Medicine Name</th>
      <th>Price</th>
    </tr>
    <tr style="text-align: center;">
      <td>1</td>
      <td>Captopril</td>
      <td>12.45</td>
    </tr>
<tr style="text-align: center;">
      <td>2</td>
      <td>Ceftriaxone</td>
      <td>6.94</td>
    </tr>
    <tr style="text-align: center;">
      <td>3</td>
      <td>Ciprofloxacin</td>
      <td>56.21</td>
    </tr>
  </table>
  </body>
</html>
```



Vertical Alignment 1-2

- Users can vertically align the position of data earlier by using the `valign` attribute.
- HTML5 has deprecated the `valign` attribute.
- The possible values of vertical alignment are as follows:

top:
- Vertically aligns the data within the cell at the top.

middle:
- Vertically aligns the data within the cell at the center.

bottom:
- Vertically aligns the data within the cell at the bottom.

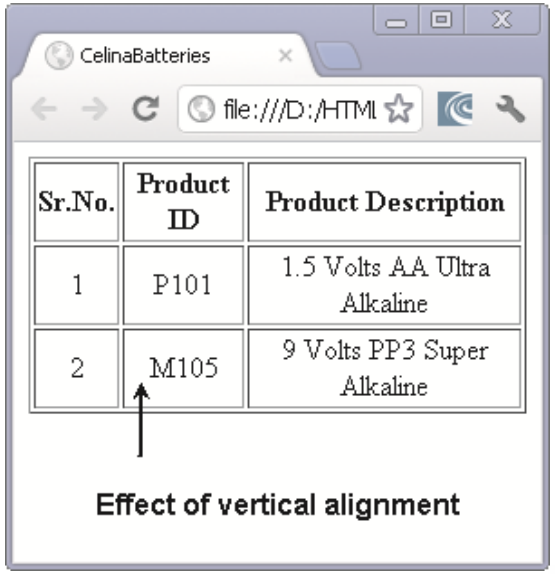
- To set the alignment with the style, you can use the `text-align` attribute to specify the vertical alignment use the following syntax:

```
<td style= "text align: center; vertical align: middle"> Aptech
Web site </a>
```

Vertical Alignment 2-2

- **The Code Snippet demonstrates how to align the data vertically within the table using the `style` attribute.**

```
<!DOCTYPE HTML>
 <html>
  <head>
   <title>CelinaBatteries</title>
  </head>
   <body>
     <table border="1">
      <tr>
        <th>Sr.No.</th>
        <th>Product Id</th>
        <th>Product Description</th>
      </tr>
      <tr>
       <td style="text-align: center; vertical-align: middle">1
       </td>
       <td style="text-align: center; vertical-align: middle">P101
       </td>
       <td>1.5 Volts AA Ultra Alkaline</td>
      </tr>
      <tr>
       <td style="text-align: center; vertical-align: middle">2
       </td>
       <td style="text-align: center; vertical-align: middle">
        M105
       </td>
       <td>9 Volts pp3 Super Alkaline</td>
      </tr>
     </table>
   </body>
 </html>
```



Margin Attributes

- The data in a table might appear cluttered, which may affect the readability.
- This might make it difficult to comprehend data as the data.
- To overcome this issue, use the cell margin attributes.
- Cell padding allows the user to control the look of the content on a page.

➢ Padding

- Padding is the amount of space between the content and its outer edge.
- For tables, padding is referred to as a space between the text and the cell border.
- Suppose, if the user wants to set the padding attribute for the individual cells then padding attribute can be used in a style as follows:

```
<td style="padding: 4px">
```

Caption Element 1-2

- To specify the main heading for the table, use the <caption> element.
- The <caption> element defines a caption for the table. It is a sub-element of the <table> element.
- It must be present immediately after the <table> tag.
- The <caption> element allows the user to specify a title for your entire table.
- There can be only one caption for a table.
- The Code Snippet demonstrates how to specify a heading for a table.

```
<!DOCTYPE HTML>
<html>
 <head>
   <title>Travel Expense Report</title>
 </head>
   <body>
      <table border="1">
         <caption>Travel Expense Report</caption>
           <tr>
              <th> </th>
              <th>Meals</th>
              <th>Hotels</th>
              <th>Transport</th>
           </tr>
```

Caption Element 2-2

```
            <tr>
                <td>25-Apr</td>
                <td>37.74</td>
                <td>112.00</td>
                <td>45.00</td>
            </tr>
            <tr>
                <td>26-Apr</td>
                <td>27.28</td>
                <td>112.00</td>
                <td>45.00</td>
            </tr>
            <tr>
                <td>Totals</td>
                <td>65.02</td>
                <td>224.00</td>
                <td>90.00</td>
            </tr>
        </table>
    </body>
</html>
```

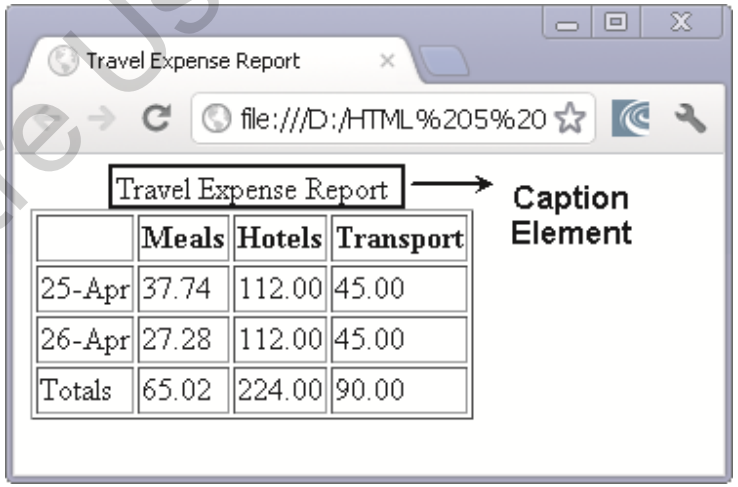
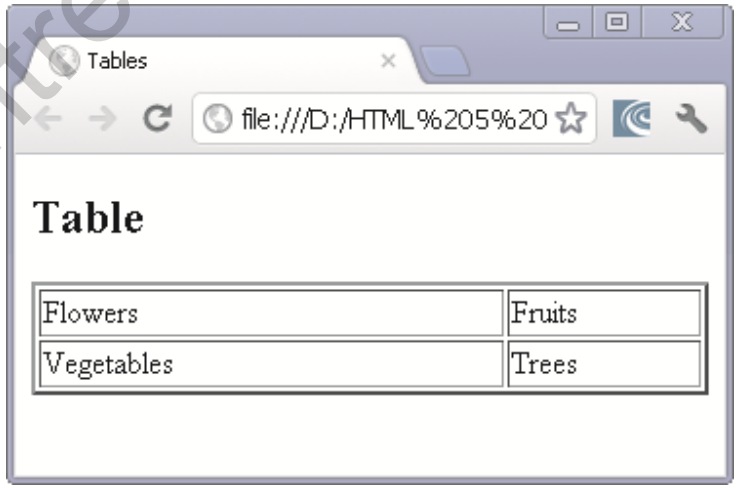


Table Size and Width of a Column

- The table size can be expanded when the user wants to add rows and columns in the table.
- The user can use the `<style>` section to set the default width for the table to 100% of the browser window.
- To set the width of a column in pixels, one can use style attribute in the `<td>` tag.
- The Code Snippet demonstrates how to create a table with specific width for a column.

```
<!DOCTYPE HTML>
 <html>
  <head>
   <title>Tables</title>
   </head>
    <body>
     <h2>Table</h2>
      <table border="1">
       <tr>
         <td style ="width: 200px">Flowers</td>
             <td style ="width: 80px">Fruits</td>
       </tr>

  <tr>
         <td style ="width: 200px">Vegetables</td>
         <td style ="width: 80px">Trees</td>
       </tr>
      </table>
    </body>
</html>
```



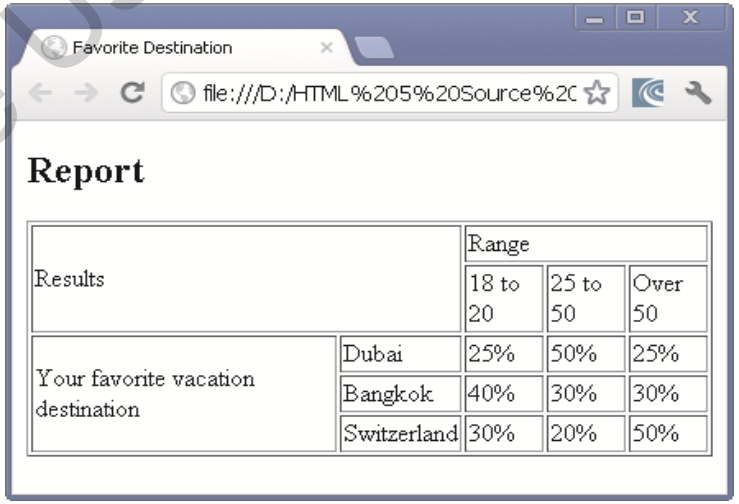
Merging Table Cells 1-2

- To change the cells of a table to different height and width, `colspan` and `rowspan` attributes can be used.
- Consider a scenario, where the user wants to merge a cell into adjacent cells to the right side.
  - The `colspan` attribute can be used to specify the number of columns to span.
  - The `rowspan` attribute can be used to specify the number of rows.
- The Code Snippet demonstrates creating a table having five columns and five rows, but many of the cells span multiple columns or rows.

```
<!DOCTYPE HTML >
 <html>
  <head>
   <title>Favorite Destination</title>
  </head>
    <body>
     <h2>Report</h2>
      <table border="1" width="100%" height="100%">
       <tr>
         <td colspan="2" rowspan="2">Results</td>
         <td colspan="3">Range</td>
       </tr>
```

Merging Table Cells 2-2

```
      <tr>
        <td>18 to 20</td>
        <td>25 to 50</td>
        <td>over 50</td>
      </tr>
      <tr>
        <td rowspan="3">Your favorite vacation destination</td>
       <td>Dubai</td>
       <td>25%</td>
       <td>50%</td>
       <td>25%</td>
      </tr>
      <tr>
       <td>Bangkok</td>
       <td>40%</td>
       <td>30%</td>
       <td>30%</td>
      </tr>
       <tr>
       <td>Switzerland</td>
       <td>30%</td>
       <td>20%</td>
       <td>50%</td>
      </tr>
     </table>
   </body>
</html>
```



Apply Borders by Using Styles 1-2

- CSS can be used for applying borders as it is the best reliable and flexible method.
- One can format the table by using style based border for `<table>` and `<td>` tags.
- To evaluate the attributes used are as follows:

border-width:

- Used to control the thickness of the border and the values are specified in pixels.

border-color:

- Used to control the color of the border and specifies the color by either name, or RGB value, or hexadecimal number.

border-style:

- Used to control the line style. Users can choose between solid, dashed, groove, dotted, outset, ridge, inset, or none.

Apply Borders by Using Styles 2-2

To set all these attributes at one time, the user can use the border attribute and place the settings in the order of width, color, and style respectively.

To format the sides of the border individually, replace the border attribute with border-bottom, border-top, border-right, or border-left attribute.

The user can apply these attributes to the entire table or individual cells and also create rules in the <style> area.

Tables for Page Layout 1-3

- Tables are used for structuring the content and to organize the data in an appropriate manner.
- Tables allow the user to arrange the data horizontally or vertically according to the requirement.
- Each and every Website has a unique way of presenting data to their customers or users.
- Many Websites use pop-ups for providing information to their customers.
- The Code Snippet demonstrates a simple example of using table for structuring the content of a Web page.

```
<!DOCTYPE HTML>
<html>
<head>
  <title>Page Layout </title>
  </head>
  <style>
```

Tables for Page Layout 2-3

```
#navlayout {
        width: 100%;
        float: left;
        margin: 0 0 3em 0;
        padding: 0;
        list-style: none;
        background-color: #f2f2f2;
        border-bottom: 1px solid #ccc;
        border-top: 1px solid #ccc; }
#navlayout li {
        float: left; }
#navlayout li a {
        display: block;
        padding: 8px 15px;
        text-decoration: none;
        font-weight: bold;
        color: #069;
        border-right: 1px solid #ccc; }
#navlayout li a:hover {
        color: #c00;
        background-color: #fff; }
  </style>
```

Tables for Page Layout 3-3

```
<body>
  <img src="../Images/flowers.jpg" width="133"
   height="100"  alt=""
    border="0">
    <h1>Blossoms Gallery</h1>
    <h5><i>The Best sellers for flowers since 1979</i></h5>
     <navlayout>
      <hr>
       <ul id="navlayout">
        <li><a href=”#”>Home</a></li>
             <li><a href="#">Contact Us</a></li>
             <li><a href="#">About Us</a></li>
             <li><a href=”#”> FAQs</a></li>
       </ul>
     </navlayout>
<table>
       <tr>
         <td>
          <b>Flowers are now in stock! </b>
          <i> We have just received a large shipment of flowers
              with prices as low as $19.
          </i>
         </td>
       </tr>
      </table>
 </body>
</html>
```

Introduction to Multimedia

Traditionally, Web browsers were capable of handling only graphics and text.

User had to install a distinct program, plug-in, or an ActiveX control to play some video.

Earlier, Web designers and Web developers used to set up Web pages to play audio and video on the Web using Adobe Flash player.

Multimedia in HTML5

Multimedia is a combination of various elements such as video, graphics, sound, and text.

Common way of inserting a multimedia content on Web pages is by embedding a video or audio file in the Web page.

HTML5 has made lives easier by introducing <audio> and <video> elements.

HTML5 has provided the developers with the features to embed media on the Web pages in a standard manner.

Supported Media Types in Audio and Video

There are various video and audio codecs which are used for handling of video and audio files.

Codec is a device or a program used for encoding and decoding digital data stream.

Different codecs have different level of compression quality.

For storing and transmitting coded video and audio together, a container format is used.

There are a number of container formats which includes Ogg (.ogv), the Audio Video Interleave (.avi), Flash Video (.flv), and many others.

Different browsers support different container format. WebM is a new open source video container format supported by Google.

- Following table lists the common audio and video formats:

Container	Video Codec	Audio Codec
Mp4	H.264	AAC
Ogg	Theora	Vorbis
WebM	VP8	Vorbis

Audio Formats

- There are three supported file formats for the `<audio>` element in HTML5.
- Following table lists audio file formats supported by Web browsers:

Browser Support	MP3	WAV	Ogg
Opera 10.6	No	Yes	Yes
Apple Safari 5	Yes	Yes	No
Google Chrome 6	Yes	Yes	Yes
FireFox 4.0	No	Yes	Yes
Internet Explorer 9	Yes	No	No
Edge 17-91 and 92 onwards	Yes	Yes	Yes

Video Formats

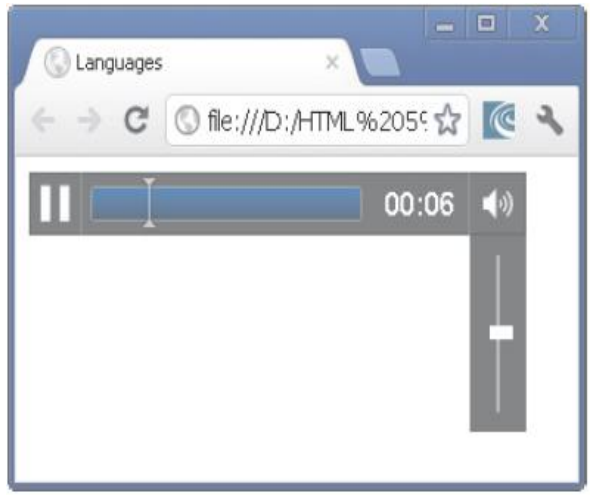
- There are three supported file formats for the `<video>` element in HTML5.
- Following table lists video file formats supported by Web browsers:

Browsers Support	MP4	WebM	Ogg
Opera 10.6 onwards	No	Yes	Yes
Apple Safari 5 onwards	Yes	No	No
Google Chrome 6 onwards	Yes	Yes	Yes
FireFox 4.0 onwards	No	Yes	Yes
Internet Explorer 9 onwards	Yes	No	No
Edge 79 onwards	Yes	Yes	Yes

Audio Elements in HTML5

- `<audio>` element will help the developer to embed music on the Website.
- `<audio>` tag specifies the audio file to be used in the HTML document.
- `src` attribute is used to link the audio file.
- The Code Snippet displays the embedding of an audio file in the Web page using the `<audio>` tag.

```
<!doctype html>
<html>
  <head>
    <title>audio element</title>
  </head>
  <body>
    <audio src="d:\sourcecodes\audio.mp3"
controls autoplay loop>
html5 audio not supported
    </audio>
  </body>
</html>
```



Audio formats frequently used are wav, ogg, and mp3.

Audio Tag Attributes

Attributes provide additional information to the browser about the tag.

HTML5 has a number of attributes for controlling the look and feel of various functionalities.

HTML5 has the following attributes for the <audio> element.

Audio Attributes	Description
autoplay	This attribute identifies whether to start or not the audio once the object is loaded. The attribute accepts a boolean value which when specified will automatically start playing the audio as soon as possible without stopping
autobuffer	This attribute starts the buffering automatically
controls	This attribute identifies the audio playback controls that should be displayed such as resume, pause, play, and volume buttons
loop	This attribute identifies whether to replay the audio once it has stopped
preload	This attribute identifies whether the audio has to be loaded when the page loads and is ready to execute
src	This attribute specifies the location or the URL of the audio file that has to be embedded

Creating Audio Files

To play the audio in older browsers then the <embed> tag will be used.

<embed> tag has two attributes, src and autostart.

src attribute is used to specify the source of the audio.

autostart attribute controls the audio and determines whether the audio should play as soon as the page loads.

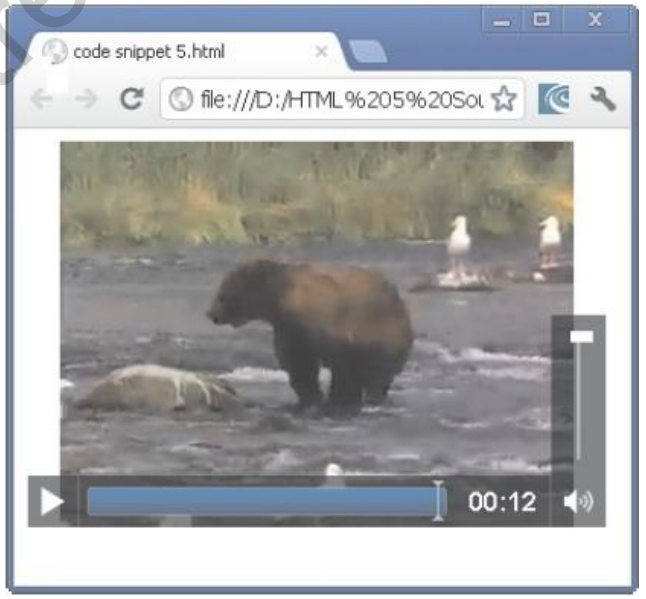
- The Code Snippet demonstrates the use of <embed> tag in the <audio> element.

```
<!DOCTYPE HTML>
<html>
  <body>
    <audio autoplay loop>
      <source src="sampaudio.mp3">
      <source src="sampaudio.ogg">
      <embed src="sampaudio.mp3">
    </audio>
  </body>
</html>
```

Video Elements in HTML5

- `<video>` element is a new feature added in HTML5.
- `<video>` element is for embedding the video content on the Web page.
- `<video>` element if not supported by the browser then the content between the start tag and end tag is displayed.
- `src` attribute is used to link to the video file.
- The Code Snippet demonstrates the use of `<video>` element.

```
<!DOCTYPE HTML>
<html>
  <head>
  </head>
  <body>
    <video src="D:\Source codes\movie.mp4">
Your browser does not support the video.
    </video>
  </body>
</html>
```



Video Tag Attributes

HTML5 specification provides a list of attributes that can be used with the `<video>` element.

HTML5 has the following attributes for the `<video>` element.

- Following table lists some of the `<video>` tag attributes:

Video Attributes	Description
`autoplay`	Specifies that the browser will start playing the video as soon as it is ready
`muted`	Allows to mute the video initially, if this attribute is existing
`controls`	Allows displaying the controls of the video, if the attribute exists
`loop`	Specifies that the browser should repeat playing the existing video once more if the loop attribute exists and accepts a boolean value
`preload`	Specifies whether the video should be loaded or not when the page is loaded
`src`	Specifies the location of the video file to be embedded

Preloading the Video 1-2

- `<video>` element comprises a `preload` attribute that allows the browser to download or buffering the video while the Web page containing the video is being downloaded.
- `preload` attribute has the following values:

None - allows the browser to load only the page. The video will not be downloaded while the page is being loaded.

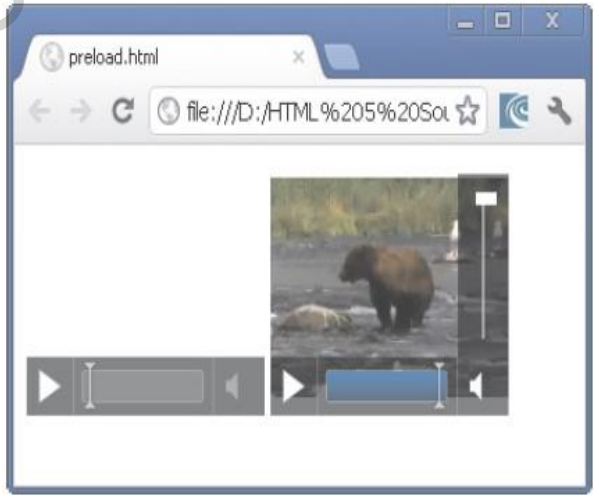
Metadata - allows the browser to load the metadata when the page is being loaded.

Auto - is the default behavior as it allows the browser to download the video when the page is loaded. The browser can avoid the request.

Preloading the Video 2-2

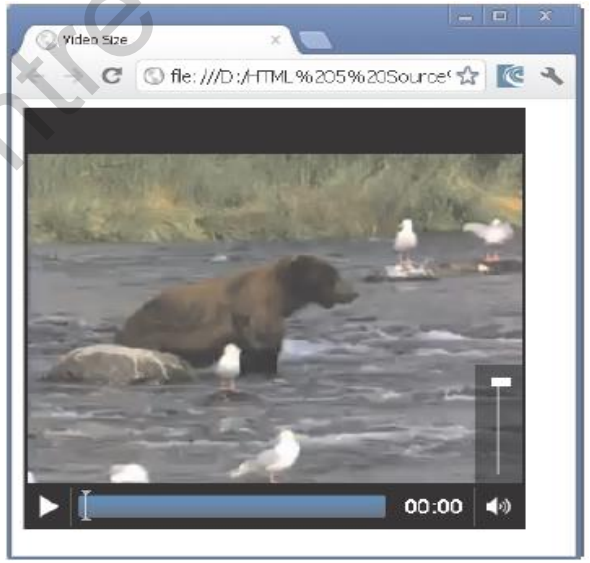
- **The Code Snippet demonstrates the use of `none` and `metadata` values for the `preload` attribute.**

```
<!DOCTYPE HTML>
<html>
  <head>
  </head>
  <body>
    <video width="160" height="140" src="D:\Source
  Codes\movie.mp4" controls preload="none" muted>
       Your browser does not support the video.
    </video>
    <video width="160" height="140" src="D:\ Source
  Codes\movie.mp4" controls preload="metadata" muted>
       Your browser does not support the video.
    </video>
  </body>
</html>
```



Setting the Video Size

- User can specify the size of the video with the `height` and `width` attribute of the `<video>` element.
- If these attributes are not provided then the browser sets the video with the key dimensions of the video.
- The Code Snippet demonstrates how to apply the `height` and `width` attributes to the `<video>` element.




```
<!DOCTYPE HTML>
<html>
  <head>
  </head>
    <title> Video Size</title>
  <style>
    video{
      background-color: black;
      border: medium double black;
    }
  </style>
  <body>
    <video src="D:\Source Codes\movie.mp4" controls preload="auto" width="360" height="340">
      Your browser does not support the video.
    </video>
  </body>
</html>
```

Converting the Video Files

- There are many problems with browser vendors for supporting various video formats on the Web sites.
- Following are some of the video formats supported by the significant browsers:

Ogg/Theora - is an open source, royalty-free, and patent-free format available. This format is supported by browsers such as Opera, Chrome, and Firefox.

WebM - is a royalty-free and patent-free format supported by Google. This format is supported by browsers such as Opera, Chrome, and Firefox.

H.264/MP4 - are supported on iPhone and Google Android devices.

Micro Video Controller - converter creates all files that the user requires for HTML5 <video> element that works on the cross browser.

Accessibility of Audio and Video Elements 1-2

- Enterprises across the world are employing people with varied skills and abilities.
- It may include people with limited abilities or disabilities such as people with visual, cognitive, or mobility impairments.
- Accessibility is the level of ease with which computers can be used and be available to a wide range of users.
- While developing an application a lot of assumptions are to be considered and some of them are as follows:

Users can check the content on laptop, mobile, tablet, or desktop.

Users can listen to the audio by using headphones or speakers.

Users can understand the language in which the media was delivered.

Users can successfully play and download the media.

Accessibility of Audio and Video Elements 2-2

- Earlier, assumptions made will meet the requirements of a vast majority of users accessing the application.
- Not all users will fall in this category.
- Another set of assumptions are to be considered for users and they are as follows:

Users who have hearing and visual impairment and thus, cannot listen to the audio or view the video.

Users who are not familiar with the language that the content is delivered.

Users who uses keyboards and screen readers to access the content on Web.

Users who cannot view or hear the media content because of their working environment or due to device restrictions.

Track Element 1-3

Track element provides an easy, standard way to add captions, subtitles, chapters, and screen reader descriptions to the <audio> and <video> elements.

Track elements are also used for other types of timed metadata.

Source data for this track element is in a form of a text file that is made up of a list of timed cues.

Cue is a pointer at an accurate time point in the length of a video.

Cues contain data in formats such as Comma-Separated Values (CSV) or JavaScript Object Notation.

Track element is not supported in many major browsers and is now available in IE 10 and Chrome 18+.

Track Element 2-3

- Following table lists the track element attributes:

Container	Description
src	Contains the URL of the text track data
srclang	Contains the language of the text track data
kind	Contains the type of content for which the track definition is used
default	Indicates that this will be the default track if the user does not specify the value
label	Specifies the title to be displayed for the user

Track Element 3-3

- The Code Snippet demonstrates how a track element is used in combination with `<video>` element for providing subtitles.

```
<video controls>
  <source src="myvideo.mp4" type="video/mp4" />
  <source src="myvideo.webm" type="video/webm" />
  <track src="eng.vtt" label="English subtitles" kind="subtitles"
  srclang="en" >
</video>
```

- The Code Snippet demonstrates how a track element is used in combination with `<video>` element providing subtitles in another language.

```
<video controls>
  <source src="myvideo.mp4" type="video/mp4" />
  <source src="myvideo.webm" type="video/webm" />
  <track src="de.vtt" label="German subtitles" kind="subtitles"
  srclang="de" >
</video>
```

Accessibility for Audio and Video Element

- Accessibility supports for <audio> and <video> elements are as follows:
  - Audio Support

Firefox - Expose controls with accessibility APIs, however individual controls do not interact with keyboard. Access to keyboard is provided by the Firefox specific shortcuts.

Opera - Has only keyboard support.

IE 9 - Expose controls with accessibility APIs, however individual controls do not interact with keyboard.

  - Video Support

Firefox - Cannot interact with individual controls.

Opera - Has only keyboard support.

IE 9 - Does not allow individual controls to interact with keyboard.

Non-Supporting Browsers

Different browsers such as Firefox, Chrome, Opera, and Safari support <audio> and <video> elements.

Google Chrome 17 and lower versions have no support for <audio> elements.

Safari browser does not support <audio> element in HTML5

Summary

- Tables allow the user to view your data in a structured and classified format.
- Padding is the amount of space between the content and its outer edge.
- The caption element defines a caption for a table. It is a sub-element of the <table> element.
- Spanning refers to a process of extending a cell across multiple rows or columns.
- The rowspan attribute spans a data cell across two or more rows.
- The colspan attribute allows the user to specify the number of columns a cell should span.
- The border attribute of the table element allows the user to specify a border for making the table visible in a Web page.
- Tables allow the user to organize the data. It enables the developer to design a Web page having an attractive page layout.
- Multimedia is a combination of various elements such as video, graphics, sound, and text.
- There are various media types used for audio and video files on different Websites.
- The <audio> element will help the developer to embed music on the Website and allow the user to listen to music.
- Users can play the audio in older browsers using the <embed> tag.
- The <video> element is used for embedding the video content on the Web page.
- Preload attribute identifies whether the audio has to be loaded when the page loads and is ready to execute.
- WebM is a new open source video container format supported by Google.