

HTML5

Content

- Introduction
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- HTML Editors
- HTML Basic Elements

What is HTML?

- HTML stands for Hyper Text Markup Language
- HTML is the standard markup language for creating Web pages
- HTML describes the structure of a Web page
- HTML consists of a series of elements
- HTML elements tell the browser how to display the content
- HTML elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc.

Example

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>

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

</body>
</html>
```

- `<!DOCTYPE html>`: declaration defines that this document is an HTML5 document
- `<html>`: element is the root element of an HTML page
- `<head>`: element contains meta information about the HTML page
- `<title>` element specifies a title for the HTML page (which is shown in the browser's title bar or in the page's tab)
- `<body>` element defines the document's body, and is a container for all the visible contents, such as headings, paragraphs, images, hyperlinks, tables, lists, etc.
- `<h1>` element defines a large heading
- `<p>` element defines a paragraph

HTML Page Structure

```
<html>
```

```
<head>
```

```
<title>Page title</title>
```

```
</head>
```

```
<body>
```

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

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

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

```
</body>
```

```
</html>
```

HTML Basics

HTML Documents

- All HTML documents must start with a document type declaration: **<!DOCTYPE html>.**
- The HTML document itself begins with <html> and ends with </html>.
- The visible part of the HTML document is between <body> and </body>

The <!DOCTYPE> Declaration

- The <!DOCTYPE> declaration represents the document type, and helps browsers to display web pages correctly.
- It must only appear once, at the top of the page (before any HTML tags).
- The <!DOCTYPE> declaration is not case sensitive.

How To View HTML Source?

View HTML Source Code:

- Right-click in an HTML page and select "View Page Source" (in Chrome) or "View Source" (in Edge), or similar in other browsers.
- This will open a window containing the HTML source code of the page.

Inspect an HTML Element:

- Right-click on an element (or a blank area), and choose "Inspect" or "Inspect Element" to see what elements are made up of (you will see both the HTML and the CSS).
- You can also edit the HTML or CSS on-the-fly in the Elements or Styles panel that opens.

HTML Editors

- A simple text editor can be used to write html code
- Web pages can be created and modified by using professional HTML editors.

Steps to create web page using notepad



Fundamental Syntax And Semantics

...

What is an HTML Element?

- An HTML element is defined by a start tag, some content, and an end tag:

<tagname> Content goes here... **</tagname>**

- The HTML element is everything from the start tag to the end tag:

<h1> My First Heading **</h1>**

<p> My first paragraph. **</p>**

Start Tag	Element content	End Tag
<h1>	My First Heading	</h1>
<p>	My First Paragraph	</p>
 	None	none

Nested HTML ELEMENT

```
• <!DOCTYPE html>
  <html>
    <head>
      <title>Page Title</title>
    </head>
    <body>

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

    </body>
  </html>
```

- HTML elements can be nested
- It means that elements can contain other elements
- All HTML documents consist of nested HTML elements.

HTML Element

Few Tips:

- Never skip end tag
 - Document may be displayed incorrectly
- HTML is not case sensitive
- Empty HTML elements
 - `
` tag is without end tag: Used to break the line

HTML Attributes

- All HTML elements can have attributes
- Attributes provide additional information about elements
- Attributes are always specified in the start tag
- Attributes usually come in name/value pairs like: **name="value"**

HTML Attributes

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>

<h1>My First Heading</h1>

<a href="https://www.w3schools.com">Visit W3Schools</a>

<p>My first paragraph.</p>

</body>
</html>
```

<a> tag defines hyperlink

Attribute --

href: This attribute specifies the URL where it will go to

HTML Attributes

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>

<h1>My First Heading</h1>

<a href="https://www.w3schools.com">Visit W3Schools</a>


<p>My first paragraph.</p>

</body>
</html>
```

Note:

- External images might be under copyright.
- If you do not get permission to use it, you may be in violation of copyright laws.
- In addition, you cannot control external images; it can suddenly be removed or changed.

**** tag is used to embed an image in an HTML page.

Attribute --

src: This attribute specifies the path to the image to be displayed

There are two ways to specify the URL in the src attribute:

1. Absolute URL - Links to an external image that is hosted on another website.

Example: src=https://www.w3schools.com/images/img_girl.jpg

2. Relative URL

- Links to an image that is hosted within the website.
- The URL does not include the domain name.
- If the URL begins without a slash, it will be relative to the current page.

Example: src="img_girl.jpg".

- If the URL begins with a slash, it will be relative to the domain.

Example: src="/images/img_girl.jpg".

HTML Attributes

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>

<h1>My First Heading</h1>

<a href="https://www.w3schools.com">Visit W3Schools</a>


<p>My first paragraph.</p>

</body>
</html>
```

The **** tag

Attribute --

The **width** and **height**: It specifies the width and height of the image (in pixels)

HTML Attributes

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>

<h1>My First Heading</h1>

<a href="https://www.w3schools.com">Visit W3Schools</a>


<p>My first paragraph.</p>

</body>
</html>
```

The **** tag

Attribute --

- **alt:** It specifies an alternate text for an image, if the image for some reason cannot be displayed.
- This can be due to slow connection, or an error in the src attribute, or if the user uses a screen reader.

HTML Attributes

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>

<h1>My First Heading</h1>

<a href="https://www.w3schools.com">Visit W3Schools</a>


<p style="color:red;">This is a red paragraph.</p>
</body>
</html>
```

The **style** attribute:

- The style attribute is used to add styles to an element, such as **color, font, size, and more**.

HTML Attributes

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Page Title</title>
</head>
<body>

<h1>My First Heading</h1>

<a href="https://www.w3schools.com">Visit W3Schools</a>


<p style="color:red;">This is a red paragraph.</p>
</body>
</html>
```

The lang attribute:

- You should always include the lang attribute **inside the <html> tag**
- It is used to declare the language of the Web page.
- This is meant to assist search engines and browsers.
- Country codes can also be added to the language code in the lang attribute.
- The first two characters define the language of the HTML page
- The last two characters define the country.

HTML Attributes

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Page Title</title>
</head>
<body>

<h1>My First Heading</h1>

<a href="https://www.w3schools.com">Visit W3Schools</a>


<p style="color:red;">This is a red paragraph.</p>
<p title="I'm a tooltip">This is a paragraph.</p>

</body>
</html>
```

The **title** attribute:

- The title attribute defines some extra information about an element.
- The value of the title attribute will be displayed as a tooltip when you mouse over the element

HTML Attributes

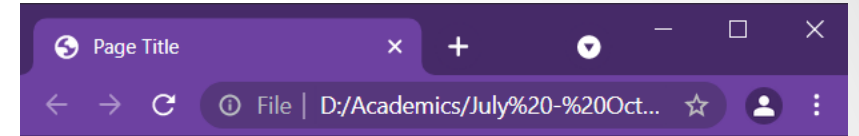
```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Page Title</title>
</head>
<body>

<h1>My First Heading</h1>

<a href="https://www.w3schools.com">Visit W3Schools</a>


<p style="color:red;">This is a red paragraph.</p>
<p title="I'm a tooltip">This is a paragraph.</p>

</body>
</html>
```



My First Heading

[Visit W3Schools](#)  sample image

This is a red paragraph.

This is a paragraph.

HTML Headings

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Heading</title>
</head>
<body>

<h1>Heading 1</h1>
<h2>Heading 2</h2>
<h3>Heading 3</h3>
<h4>Heading 4</h4>
<h5>Heading 5</h5>
<h6>Heading 6</h6>

<h1 style="font-size:60px;">Heading 1</h1>

</body>
</html>
```

- HTML headings are titles or subtitles that to be displayed on a webpage.
- Search engines use the headings to index the structure and content of your web pages.
- Users often skim a page by its headings.
- It is important to use headings to show the document structure.
- <h1> headings should be used for main headings, followed by <h2> headings, then the less important <h3>, and so on.
- Each HTML heading has a default size.
- The size of any heading can be specified with the style attribute,
- The font-size property of CSS can be used

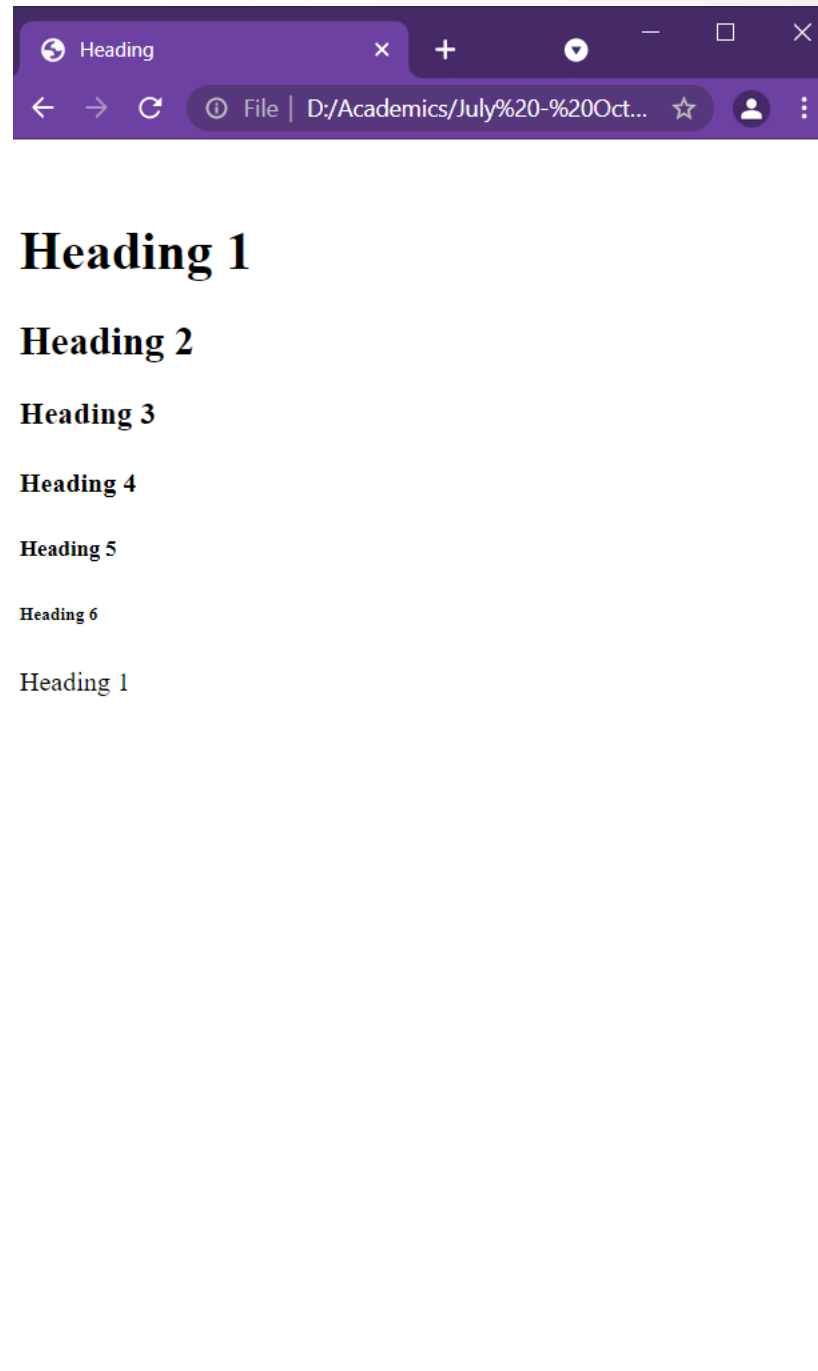
HTML Headings

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Heading</title>
</head>
<body>

<h1>Heading 1</h1>
<h2>Heading 2</h2>
<h3>Heading 3</h3>
<h4>Heading 4</h4>
<h5>Heading 5</h5>
<h6>Heading 6</h6>

<h1 style="font-size:60px;">Heading 1</h1>

</body>
</html>
```



HTML Paragraph

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Paragraph</title>
</head>
<body>

<p>
This paragraph
contains a lot of lines
in the source code,
but the browser
ignores it.
</p>

<p>
This paragraph
contains      a lot of spaces
in the source      code,
but the      browser
ignores it.
</p>
</body>
</html>
```

- A paragraph always starts on a new line, and is usually a block of text.
- The HTML <p> element defines a paragraph.
- Browsers automatically add some white space (a margin) before and after a paragraph.

Note:

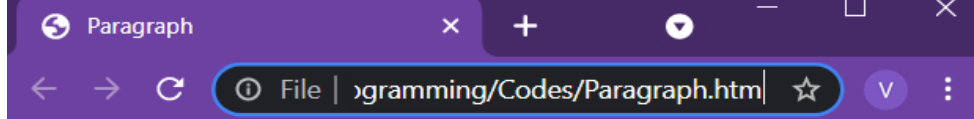
- It is not sure how HTML will be displayed.
- Large or small screens, and resized windows will create different results.
- In HTML, display can't be changed by adding extra spaces or extra lines in HTML code.
- The browser will automatically remove any extra spaces and lines when the page is displayed:

HTML Paragraph

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Paragraph</title>
</head>
<body>

<p>
This paragraph
contains a lot of lines
in the source code,
but the browser
ignores it.
</p>

<p>
This paragraph
contains      a lot of spaces
in the source      code,
but the      browser
ignores it.
</p>
</body>
</html>
```



This paragraph contains a lot of lines in the source code, but the browser ignores it.

This paragraph contains a lot of spaces in the source code, but the browser ignores it.

HTML Paragraph

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Paragraph1</title>
</head>
<body>

<h1>This is heading 1</h1>
<p>This is some text.</p>
<hr>

<h2>This is heading 2</h2>
<p>This is some other text.</p>
<hr>

<p>This is<br>a paragraph<br>with line breaks.</p>
</body>
</html>
```

HTML Horizontal Rule

- The <hr> tag defines a thematic break in an HTML page,
- It is most often displayed as a horizontal rule.
- The <hr> element is used to separate content (or define a change) in an HTML page

HTML Line Breaks

- The HTML
 element defines a line break.
- Use
 tag to make a line break (a new line) without starting a new paragraph
- The
 tag is an empty tag

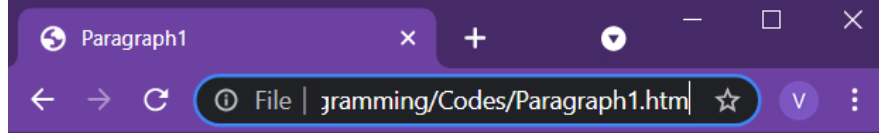
HTML Paragraph

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Paragraph1</title>
</head>
<body>

<h1>This is heading 1</h1>
<p>This is some text.</p>
<hr>

<h2>This is heading 2</h2>
<p>This is some other text.</p>
<hr>

<p>This is<br>a paragraph<br>with line breaks.</p>
</body>
</html>
```



This is heading 1

This is some text.

This is heading 2

This is some other text.

This is
a paragraph
with line breaks.

HTML Paragraph

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Paragraph2</title>
</head>
<body>

<pre>
  My Bonnie lies over the ocean.

  My Bonnie lies over the sea.

  My Bonnie lies over the ocean.

  Oh, bring back my Bonnie to me.
</pre>

</body>
</html>
```

HTML <pre> element

- The HTML <pre> element defines preformatted text.
- The text inside a <pre> element is displayed in a fixed-width font (usually Courier),
- It preserves both spaces and line breaks:

HTML Paragraph

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Paragraph2</title>
</head>
<body>

<pre>
  My Bonnie lies over the ocean.

  My Bonnie lies over the sea.

  My Bonnie lies over the ocean.

  Oh, bring back my Bonnie to me.
</pre>

</body>
</html>
```

My Bonnie lies over the ocean.

My Bonnie lies over the sea.

My Bonnie lies over the ocean.

Oh, bring back my Bonnie to me.

HTML Styles

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Style 1</title>
</head>
<body style= "background-color:orange;">

<h1 style="background-color:powderblue;">This is a heading</h1>
<p style="background-color:tomato;">This is a paragraph.</p>

<h1 style="color:blue;">This is a heading</h1>
<p style="color:red;">This is a paragraph.</p>

</body>
</html>
```

- The HTML style attribute is used to add styles to an element, such as color, font, size, and more.
- Setting the style of an HTML element, can be done with the style attribute.

The HTML style attribute has the following syntax:

<tagname style="property:value;">

The property is a CSS property.

The value is a CSS value.

Properties:

1. Background Colour

The CSS background-color property defines the background color for an HTML element.

2. Text Color

The CSS color property defines the text color for an HTML element

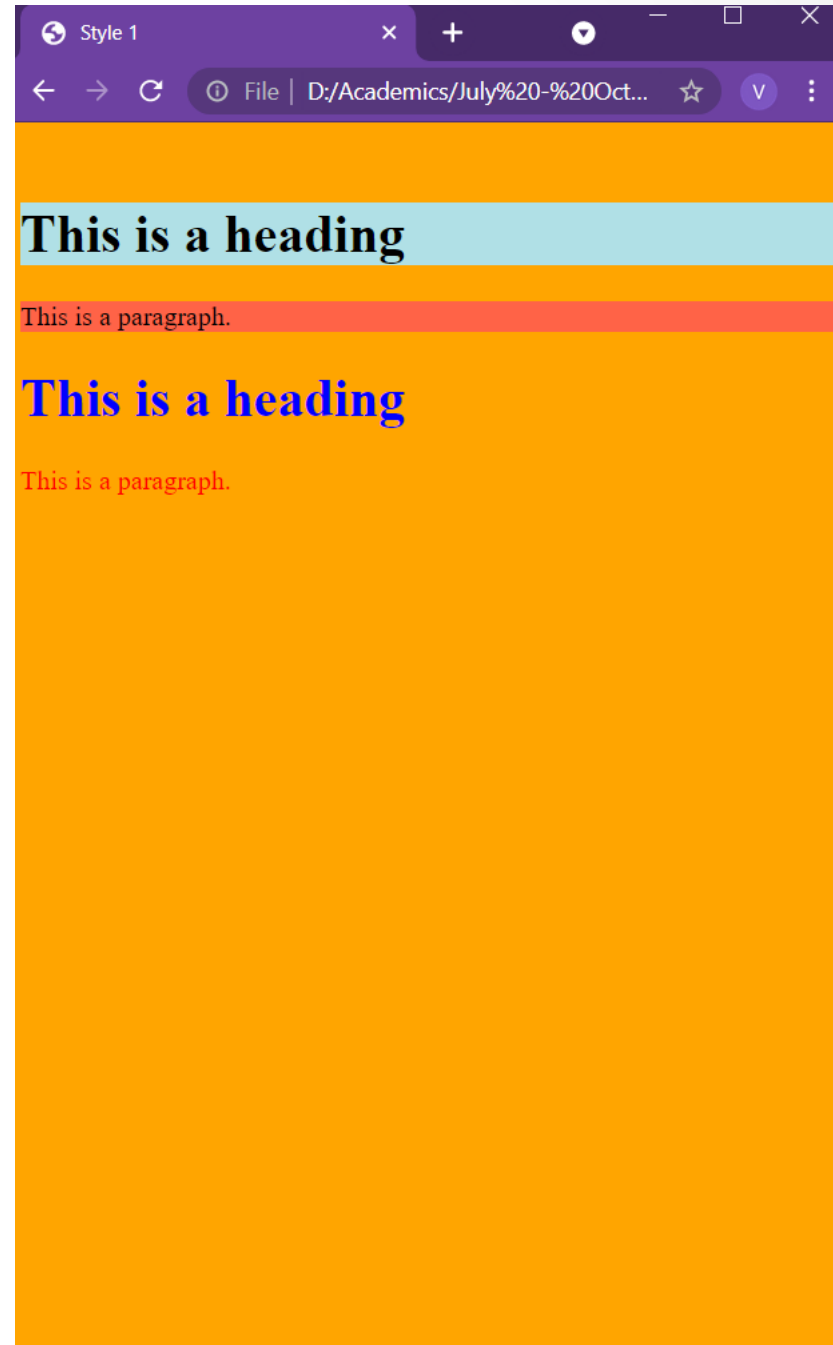
HTML Styles

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Style 1</title>
</head>
<body style= "background-color:orange;">

<h1 style="background-color:powderblue;">This is a heading</h1>
<p style="background-color:tomato;">This is a paragraph.</p>

<h1 style="color:blue;">This is a heading</h1>
<p style="color:red;">This is a paragraph.</p>

</body>
</html>
```



HTML Styles

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Style 2</title>
</head>
<body>

<h1 style="font-family:verdana;">This is a heading</h1>
<p style="font-family:courier;">This is a paragraph.</p>

<h1 style="font-size:300%;">This is a heading</h1>
<p style="font-size:160%;">This is a paragraph.</p>

<h1 style="text-align:center;">Centered Heading</h1>
<p style="text-align:center;">Centered paragraph.</p>

</body>
</html>
```

Properties:

3. Font

The CSS font-family property defines the font to be used for an HTML element

4. Text size

The CSS font-size property defines the text size for an HTML element

5. Text Alignment

The CSS text-align property defines the horizontal text alignment for an HTML element

HTML Styles

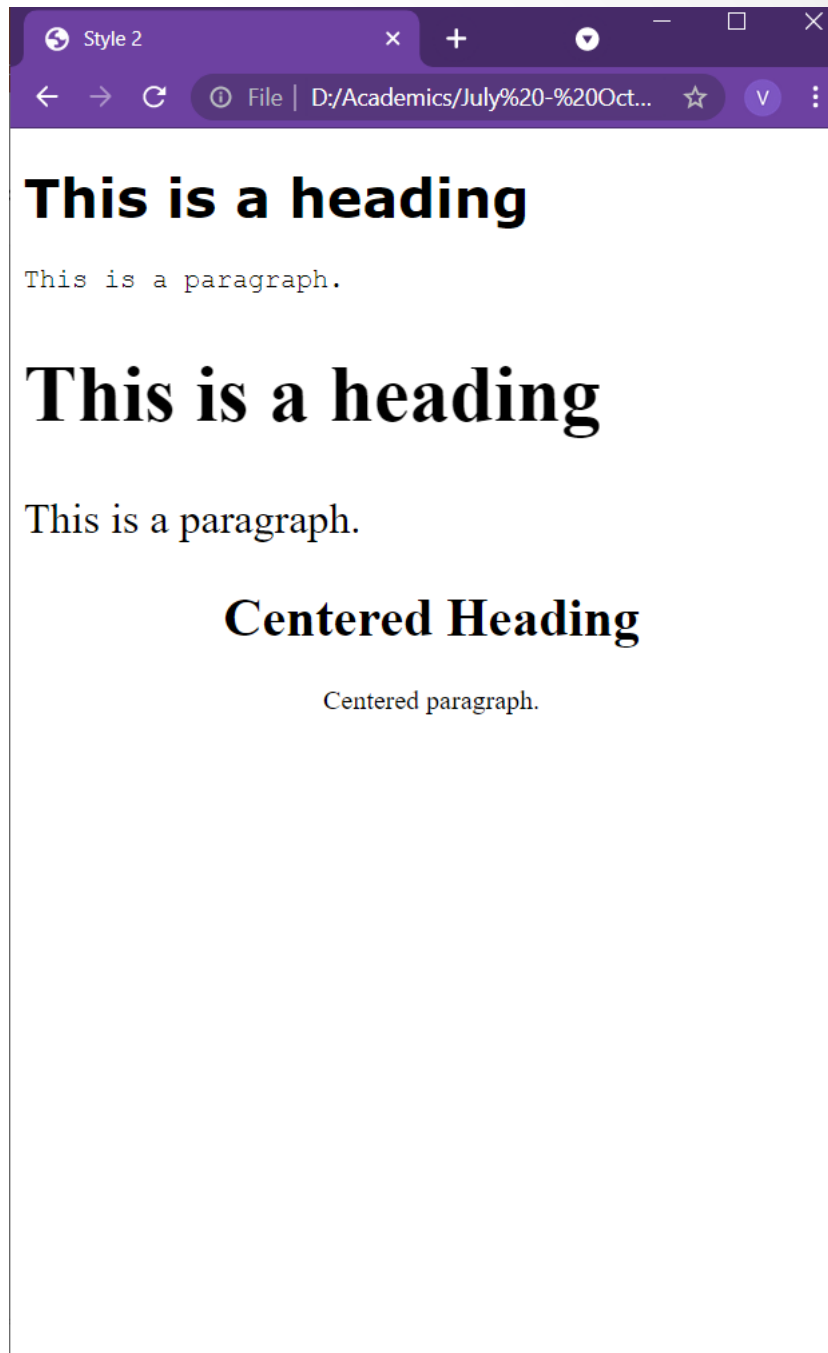
```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Style 2</title>
</head>
<body>

<h1 style="font-family:verdana;">This is a heading</h1>
<p style="font-family:courier;">This is a paragraph.</p>

<h1 style="font-size:300%;">This is a heading</h1>
<p style="font-size:160%;">This is a paragraph.</p>

<h1 style="text-align:center;">Centered Heading</h1>
<p style="text-align:center;">Centered paragraph.</p>

</body>
</html>
```



HTML Formatting Elements

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Formatting</title>
</head>
<body>

<p><b>This text is bold</b></p>
<p><strong>This text is important!</strong></p>
<p><i>This text is italic</i></p>
<p><em>This text is emphasized</em></p>

</body>
</html>
```

HTML Element

- It defines bold text, without any extra importance

The HTML element

- It defines text with strong importance.
- The content inside is typically displayed in bold.

The HTML <i> element

- It defines a part of text in an alternate voice or mood.
- The content inside is typically displayed in italic.
- The <i> tag is often used to indicate a technical term, a phrase from another language, a thought, a ship name, etc.

The HTML element

- It defines emphasized text.
- The content inside is typically displayed in italic.
- A screen reader will pronounce the words in with an emphasis, using verbal stress.

HTML Formatting Elements

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Paragraph</title>
</head>
<body>

<p><b>This text is bold</b></p>
<p><strong>This text is important!</strong></p>
<p><i>This text is italic</i></p>
<p><em>This text is emphasized</em></p>

<p><small>This is some smaller text.</small></p>
<p>Do not forget to buy <mark>milk</mark> today.</p>
<p>My favorite color
is <del>blue</del> <ins>red</ins>.</p>

</body>
</html>
```

HTML <small> Element

- It defines smaller text

HTML <mark> Element

- It defines text that should be marked or highlighted

The HTML element

- It defines text that has been deleted from a document.
- Browsers will usually strike a line through deleted text

HTML <ins> Element

- It defines a text that has been inserted into a document.
- Browsers will usually underline inserted text:

HTML Formatting Elements

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Paragraph</title>
</head>
<body>

<p><b>This text is bold</b></p>
<p><strong>This text is important!</strong></p>
<p><i>This text is italic</i></p>
<p><em>This text is emphasized</em></p>

<p><small>This is some smaller text.</small></p>
<p>Do not forget to buy <mark>milk</mark> today.</p>
<p>My favorite color
is <del>blue</del> <ins>red</ins>.</p>

<p>This is <sub>subscripted</sub> text.</p>
<p>This is <sup>superscripted</sup> text.</p>

</body>
</html>
```

The HTML <sub> element

- It defines subscript text.
- Subscript text appears half a character below the normal line, and is sometimes rendered in a smaller font.
- Subscript text can be used for chemical formulas, like H₂O

The HTML <sup> element

- It defines superscript text.
- Superscript text appears half a character above the normal line, and is sometimes rendered in a smaller font.
- Superscript text can be used for footnotes, like WWW^[1]

HTML Formatting Elements

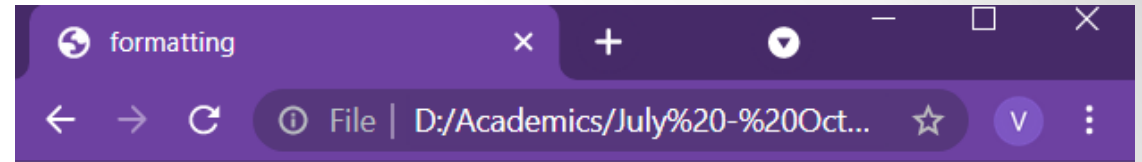
```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Paragraph</title>
</head>
<body>

<p><b>This text is bold</b></p>
<p><strong>This text is important!</strong></p>
<p><i>This text is italic</i></p>
<p><em>This text is emphasized</em></p>

<p><small>This is some smaller text.</small></p>
<p>Do not forget to buy <mark>milk</mark> today.</p>
<p>My favorite color
is <del>blue</del> <ins>red</ins>.</p>

<p>This is <sub>subscripted</sub> text.</p>
<p>This is <sup>superscripted</sup> text.</p>

</body>
</html>
```



This text is bold

This text is important!

This text is italic

This text is emphasized

This is some smaller text.

Do not forget to buy **milk** today.

My favorite color is ~~blue~~ red.

This is subscripted text.

This is superscripted text.

HTML5

Content

- HTML Links
- HTML Tables
- HTML Lists

HTML Links

- Links are found in nearly all web pages. Links allow users to click their way from page to page.
- HTML links are hyperlinks.
- You can click on a link and jump to another document.
- When you move the mouse over a link, the mouse arrow will turn into a little hand.
- A link does not have to be text.
- A link can be an image or any other HTML element
- The HTML `<a>` tag defines a hyperlink. It has the following syntax:
`link text`
 - The most important attribute of the `<a>` element is the href attribute, which indicates the link's destination.
 - The link text is the part that will be visible to the reader.
 - Clicking on the link text, will send the reader to the specified URL address.

HTML Links

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Link</title>
</head>
<body>

<a href="https://www.w3schools.com/">Visit W3Schools.com!</a>
<a href="https://www.w3schools.com/" target="_blank">Visit W3Schools!</a>

</body>
</html>
```

By default, links will appear as follows in all browsers:

- **An unvisited link** is underlined and blue
- **A visited link** is underlined and purple
- **An active link** is underlined and red

Links can be styled with CSS, to get another look

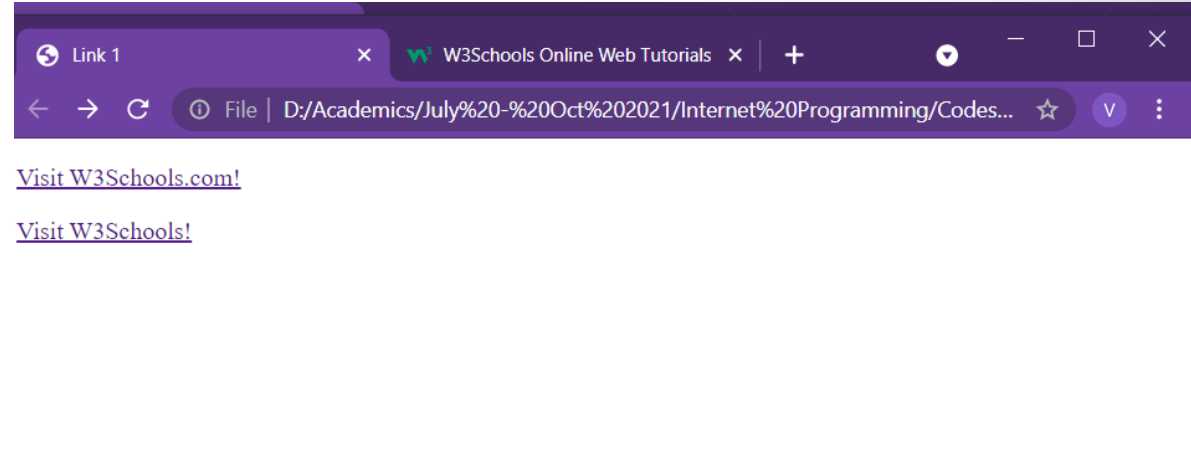
- By default, the linked page will be displayed in the current browser window.
- To change this, specify another target for the link.
- The target attribute specifies where to open the linked document.
- The target attribute can have one of the following values:
 - **__self** - Default. Opens the document in the same window/tab as it was clicked
 - **__blank** - Opens the document in a new window or tab
 - **__parent** - Opens the document in the parent frame
 - **__top** - Opens the document in the full body of the window

HTML Links

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Link</title>
</head>
<body>

<a href="https://www.w3schools.com/">Visit W3Schools.com!</a>
<a href="https://www.w3schools.com/" target="_blank">Visit W3Schools!</a>

</body>
</html>
```

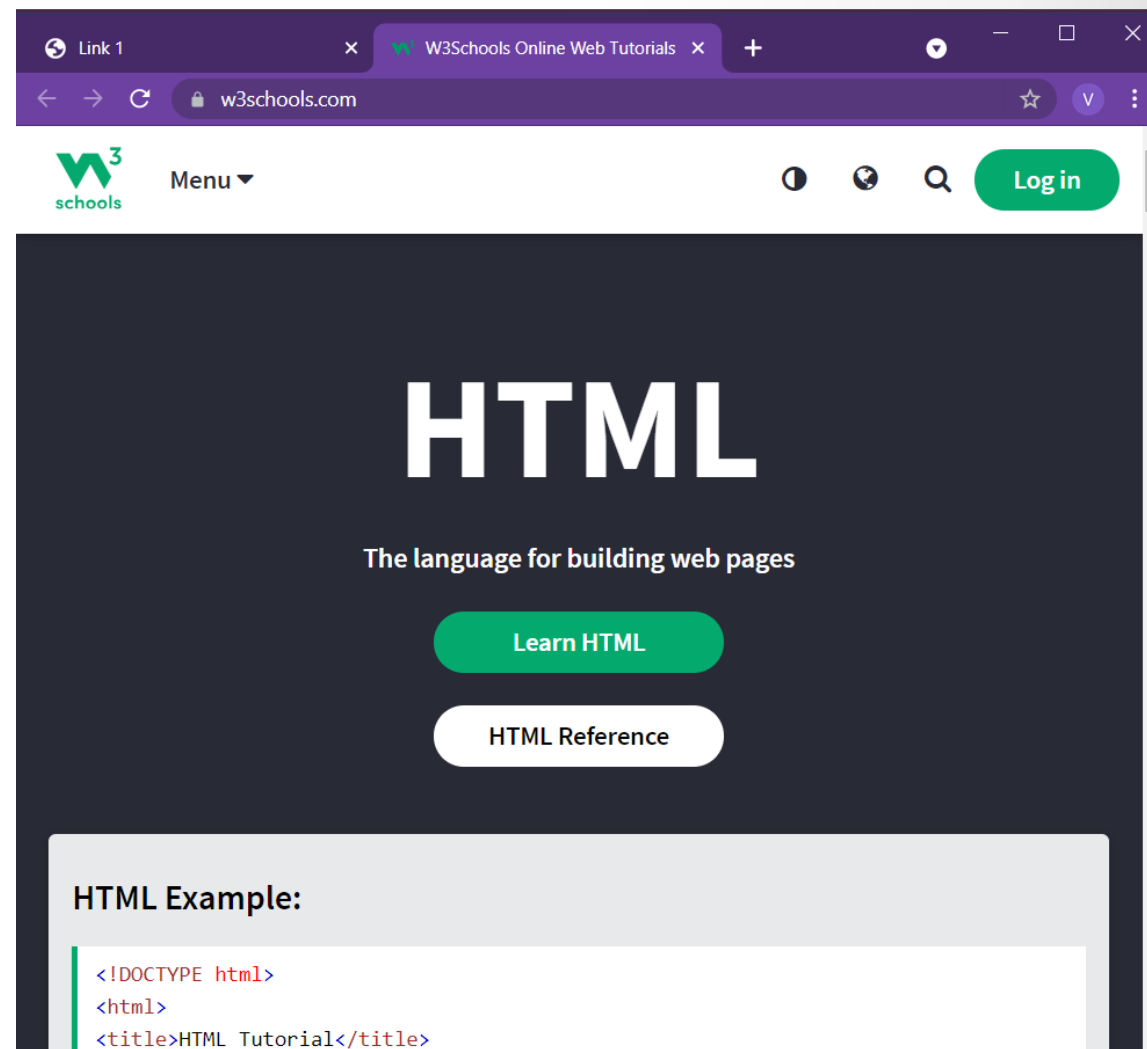


HTML Links

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Link</title>
</head>
<body>

<a href="https://www.w3schools.com/">Visit W3Schools.com!</a>
<a href="https://www.w3schools.com/" target="_blank">Visit W3Schools!</a>

</body>
</html>
```



HTML Links

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Link 2</title>
</head>
<body>

<h2>Absolute URLs</h2>
<p><a href="https://www.w3.org/">W3C</a></p>
<p><a href="https://www.google.com/">Google</a></p>

<h2>Relative URLs</h2>
<p><a href="html_images.asp">HTML Images</a></p>
<p><a href="/css/default.asp">CSS Tutorial</a></p>

</body>

</html>
```

Absolute and Relative URL

Absolute URL: Full web address in the href attribute

Relative URL: A local link – page within the same website

HTML Links

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Link 2</title>
</head>
<body>

<a href="default.asp">

</a>

<a href="mailto:someone@example.com">Send email</a>

<button onclick="document.location='default.asp'">Formatting Page</button>

</body>
</html>
```

Use an Image as a link

- To use an image as a link, just put the tag inside the <a> tag

Link to an Email Address

- Use mailto: inside the href attribute to create a link that opens the user's email program (to let them send a new mail)

Button as a link

- JavaScript allows you to specify what happens at certain events, such as a click of a button

HTML Links

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Link 2</title>
</head>
<body>

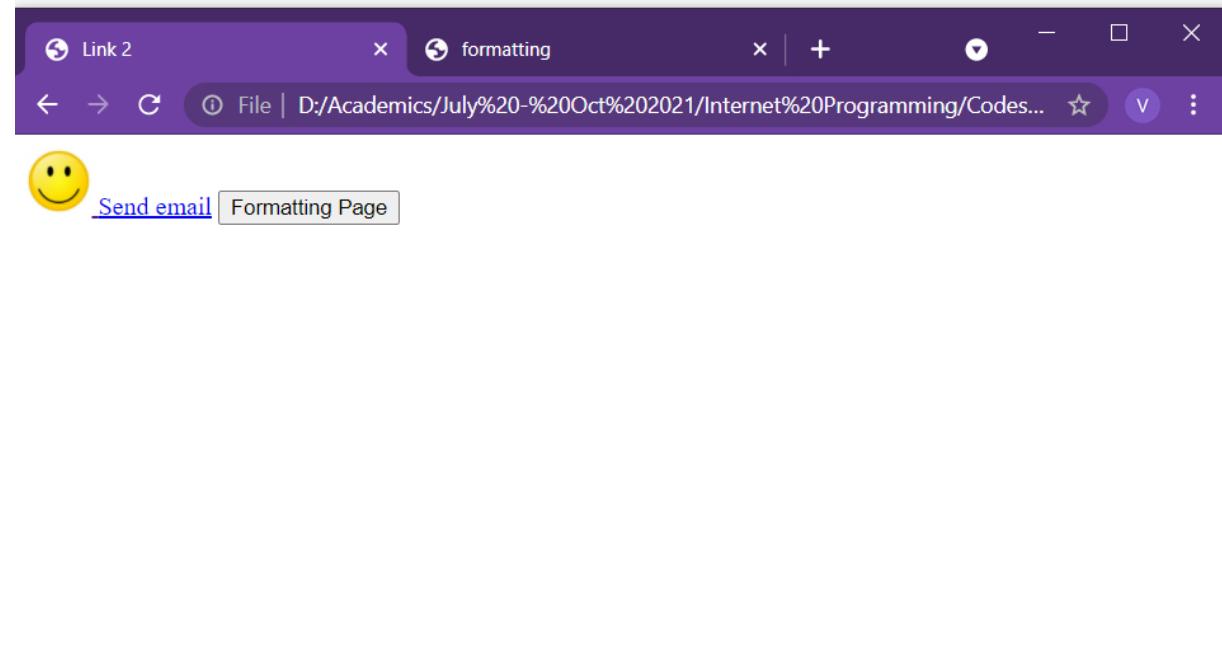
<a href="default.asp">

</a>

<a href="mailto:someone@example.com">Send email</a>

<button onclick="document.location='default.asp'">Formatting Page</button>

</body>
</html>
```



HTML Tables

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Table</title>
</head>
<body>

<table style="width:100%">
  <tr>
    <th>Firstname</th>
    <th>Lastname</th>
    <th>Age</th>
  </tr>
  <tr>
    <td>Suresh</td>
    <td>Kumar</td>
    <td>50</td>
  </tr>
  <tr>
    <td>Nageshwar</td>
    <td>Rao</td>
    <td>65</td>
  </tr>
</table>

</body>
</html>
```

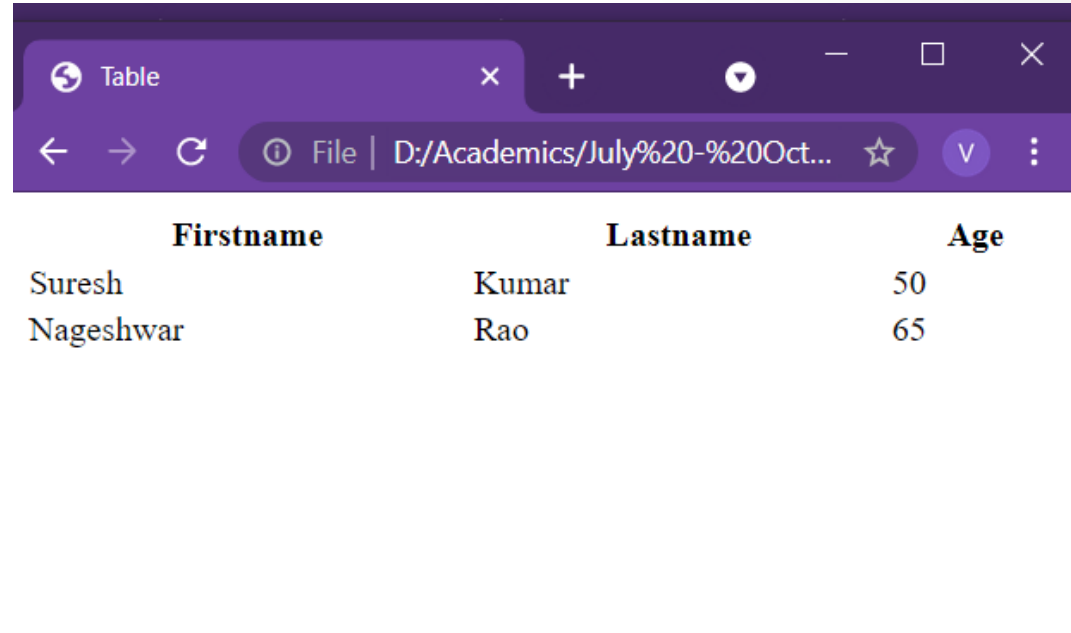
- It allows web developers to arrange data into rows and columns
- **<table>** tag: defines an HTML table.
- **<tr>** tag: It defines row in the table
- **<th>** tag: It defines table header
- **<td>** tag: It defines table data/cell
- By default, the text in <th> elements are bold and centered.
- By default, the text in <td> elements are regular and left-aligned.

HTML Tables

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Table</title>
</head>
<body>

<table>
  <tr>
    <th>Firstname</th>
    <th>Lastname</th>
    <th>Age</th>
  </tr>
  <tr>
    <td>Suresh</td>
    <td>Kumar</td>
    <td>50</td>
  </tr>
  <tr>
    <td>Nageshwar</td>
    <td>Rao</td>
    <td>65</td>
  </tr>
</table>

</body>
</html>
```

A screenshot of a web browser window with a dark purple theme. The browser has a single tab titled 'Table'. The address bar shows the file path 'D:/Academics/July%20-%20Oct...'. The table displayed has three columns: 'Firstname', 'Lastname', and 'Age'. The first row contains 'Suresh', 'Kumar', and '50'. The second row contains 'Nageshwar', 'Rao', and '65'.

Firstname	Lastname	Age
Suresh	Kumar	50
Nageshwar	Rao	65

HTML Tables

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Table</title>

<style>
table, th, td {
  border: 1px solid black;
}
</style>

</head>
<body>

<table>
  <tr>
    <th>Firstname</th>
    <th>Lastname</th>
    <th>Age</th>
  </tr>
  <tr>
    <td>Suresh</td>
    <td>Kumar</td>
    <td>50</td>
  </tr>
  <tr>
    <td>Nageshwar</td>
    <td>Rao</td>
    <td>65</td>
  </tr>
</table>

</body>
</html>
```

Border for Table

To add a border to a table, use the CSS border property

Put the following code in head tag

```
<style>
```

```
table, th, td {
```

```
  border: 1px solid black;
```

```
}
```

```
</style>
```

HTML Tables

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Table</title>

<style>
table, th, td {
  border: 1px solid black;
  border-collapse: collapse;
}
</style>

</head>
<body>

<table>
  <tr>
    <th>Firstname</th>
    <th>Lastname</th>
    <th>Age</th>
  </tr>
  <tr>
    <td>Suresh</td>
    <td>Kumar</td>
    <td>50</td>
  </tr>
  <tr>
    <td>Nageshwar</td>
    <td>Rao</td>
    <td>65</td>
  </tr>
</table>

</body>
</html>
```

Collapsed Border

To let the borders collapse into one border, add the CSS border-collapse property:

<style>

table, th, td {

border: 1px solid black;

border-collapse: collapse;

}

</style>

HTML Tables

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Table</title>

<style>
table, th, td {
    border: 1px solid black;
    border-collapse: collapse;
}
th, td {
    padding: 15px;
}
</style>

</head>
<body>

<table>
  <tr>
    <th>Firstname</th>
    <th>Lastname</th>
    <th>Age</th>
  </tr>
  <tr>
    <td>Suresh</td>
    <td>Kumar</td>
    <td>50</td>
  </tr>
  <tr>
    <td>Nageshwar</td>
    <td>Rao</td>
    <td>65</td>
  </tr>
</table>

</body>
</html>
```

Cell Padding

- Cell padding specifies the space between the cell content and its borders.
- If padding is not specified, the table cells will be displayed without padding.
- To set the padding, use the CSS padding property:

```
th, td {
    padding: 15px;
}
```

Left Align Headings

- By default, table headings are bold and centered.
- To left-align the table headings, use the CSS text-align property:

```
th {
    text-align: left;
}
```

Border Spacing

- Border spacing specifies the space between the cells.
- If the table has collapsed borders, border-spacing has no effect.
- To set the border spacing for a table, use the CSS border-spacing property:

```
table {
    border-spacing: 5px;
}
```

HTML Tables

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Table</title>

<style>
table, th, td {
  border: 1px solid black;
  border-collapse: collapse;
}
th, td {
  padding: 5px;
  text-align: left;
}
</style>

</head>
<body>

<table style="width:100%">
  <tr>
    <th>Name</th>
    <th colspan="2">Telephone</th>
  </tr>
  <tr>
    <td>Bill Gates</td>
    <td>55577854</td>
    <td>55577855</td>
  </tr>
</table>

</body>
</html>
```

Cell that spans many columns

To make a cell span more than one column, use the colspan attribute:

Cell that spans two columns

To make a cell span more than one column, use the colspan attribute.

Name	Telephone	
Bill Gates	55577854	55577855

HTML Tables

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Table</title>

<style>
table, th, td {
    border: 1px solid black;
    border-collapse: collapse;
}
th, td {
    padding: 5px;
    text-align: left;
}
</style>

</head>
<body>

<table style="width:100%">
    <tr>
        <th>Name:</th>
        <td>Bill Gates</td>
    </tr>
    <tr>
        <th rowspan="2">Telephone:</th>
        <td>55577854</td>
    </tr>
    <tr>
        <td>55577855</td>
    </tr>
</table>

</body>
</html>
```

Cell that spans many rows

To make a cell span more than one column, use the rowspan attribute

Cell that spans two rows

To make a cell span more than one row, use the rowspan attribute.

Name:	Bill Gates
Telephone:	55577854
	55577855

HTML Tables

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Table</title>

<style>
table, th, td {
  border: 1px solid black;
  border-collapse: collapse;
}
th, td {
  padding: 5px;
  text-align: left;
}
</style>

</head>
<body>

<table style="width:100%">
  <caption>Monthly savings</caption>
  <tr>
    <th>Month</th>
    <th>Savings</th>
  </tr>
  <tr>
    <td>January</td>
    <td>$100</td>
  </tr>
  <tr>
    <td>February</td>
    <td>$50</td>
  </tr>
</table>

</body>
</html>
```

Caption for the table

Use <caption> tag to add caption for table

Month	Savings
January	\$100
February	\$50

HTML Lists

- HTML lists allow web developers to group a set of related items in lists.
- There are three types
 - Unordered lists
 - Ordered lists
 - Other lists

HTML Lists

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>List</title>

</head>
<body>

<ul>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ul>

<ul style="list-style-type:disc;">
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ul>

<ul style="list-style-type:none;">
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ul>

</body>
</html>
```

Unordered list

- An unordered list starts with the tag.
- Each list item starts with the tag.
- The list items will be marked with bullets (small black circles) by default

The CSS list-style-type property is used to define the style of the list item marker.

It can have one of the following values:

Value	Description
disc	Sets the list item marker to a bullet (default)
circle	Sets the list item marker to a circle
square	Sets the list item marker to a square
none	The list items will not be marked

HTML Lists

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>List</title>

</head>
<body>

<ul>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ul>

<ul style="list-style-type:disc;">
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ul>

<ul style="list-style-type:none;">
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ul>

</body>
</html>
```

- Coffee
- Tea
- Milk

- Coffee
- Tea
- Milk

Coffee
Tea
Milk

HTML Lists

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>List</title>

</head>
<body>

<ul>
  <li>Coffee</li>
  <li>Tea
    <ul>
      <li>Black tea</li>
      <li>Green tea</li>
    </ul>
  </li>
  <li>Milk</li>
</ul>

</body>
</html>
```

Nested list

Lists can be nested

-
- Coffee
 - Tea
 - Black tea
 - Green tea
 - Milk

HTML Lists

Ordered list

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>List</title>

</head>
<body>

<ol>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ol>

<ol type="A">
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ol>

<ol type="I">
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ol>

</body>
</html>
```

- The HTML tag defines an ordered list.
- An ordered list can be numerical or alphabetical.
- An ordered list starts with the tag.
- Each list item starts with the tag.
- The list items will be marked with numbers by default

The type attribute of the tag, defines the type of the list item marker:

Type	Description
type="1"	The list items will be numbered with numbers (default)
type="A"	The list items will be numbered with uppercase letters
type="a"	The list items will be numbered with lowercase letters
type="I"	The list items will be numbered with uppercase roman numbers
type="i"	The list items will be numbered with lowercase roman numbers

HTML Lists

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>List</title>

</head>
<body>

<ol>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ol>

<ol type="A">
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ol>

<ol type="I">
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ol>

</body>
</html>
```

1. Coffee
2. Tea
3. Milk

- A. Coffee
- B. Tea
- C. Milk

- I. Coffee
- II. Tea
- III. Milk

HTML Lists

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>List</title>

</head>
<body>

<ol start="50">
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ol>

</body>
</html>
```

Control List counting

- By default, an ordered list will start counting from 1.
- If counting has to be started from a specified number, use the start attribute

50. Coffee
51. Tea
52. Milk

HTML Lists

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>List</title>

</head>
<body>

<dl>
  <dt>Coffee</dt>
  <dd>- black hot drink</dd>
  <dt>Milk</dt>
  <dd>- white cold drink</dd>
</dl>

</body>
</html>
```

Description list

- A description list is a list of terms, with a description of each term.
- The <dl> tag defines the description list
- The <dt> tag defines the term (name)
- The <dd> tag describes each term

```
Coffee
  - black hot drink
Milk
  - white cold drink
```

HTML5

Content

- Image
- Control Elements

HTML Images

- Images can improve the design and the appearance of a web page.
- The HTML `` tag is used to embed an image in a web page.
- Images are not technically inserted into a web page; images are linked to web pages.
- The `` tag creates a holding space for the referenced image.
- The `` tag is empty, it contains attributes only, and does not have a closing tag.
- The `` tag has two required attributes:
 - `src` - Specifies the path to the image
 - `alt` - Specifies an alternate text for the image
- The broken link icon and the alt text are shown if the browser cannot find the image.

HTML Images

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Images</title>
</head>
<body>





</body>
</html>
```

- Style attribute can be used to specify width and height of the image
- Another alternative: Use width and height attribute.
- Values are always mentioned in pixels
- If images are in subfolder then include folder name in src attribute
- Some web sites point to an image on another server.
- To point to an image on another server, specify an absolute (full) URL in the src attribute
- Animated images are also supported such as gif

HTML Images

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Images</title>
</head>
<body>





</body>
</html>
```

Common Image Formats

The most common image file types, which are supported in all browsers:

Abbreviation	File Format	File Extension
APNG	Animated Portable Network Graphics	.apng
GIF	Graphics Interchange Format	.gif
ICO	Microsoft Icon	.ico, .cur
JPEG	Joint Photographic Expert Group image	.jpg, .jpeg, .jfif, .pjpeg, .jpp
PNG	Portable Network Graphics	.png
SVG	Scalable Vector Graphics	.svg

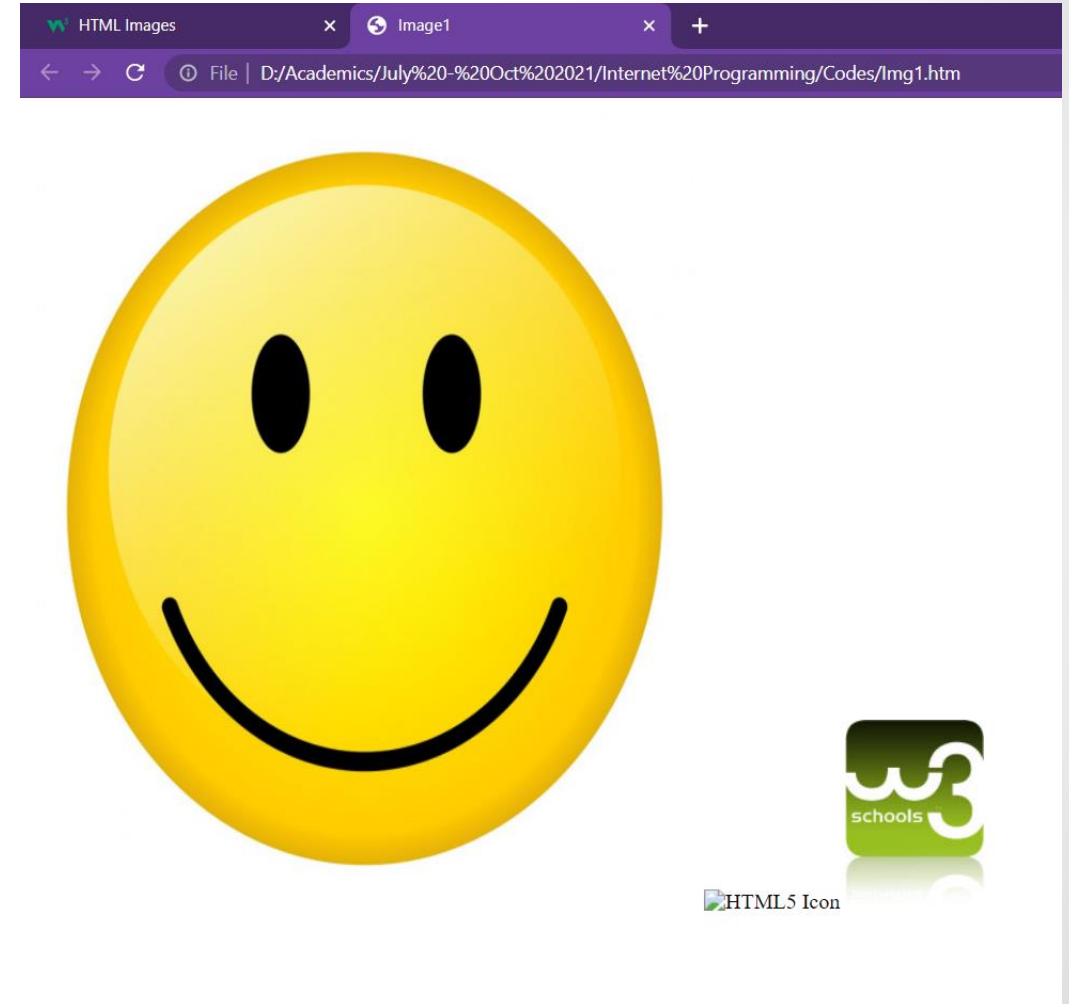
HTML Images

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Images</title>
</head>
<body>





</body>
</html>
```



HTML Images

```
<!DOCTYPE html>
<html>
<head>
<style>
img {
  width: 100%;
}
</style>
</head>
<body>





</body>
</html>
```

- The width, height, and style attributes are all valid in HTML.
- Using the style attribute is always preferable.
- It prevents styles sheets from changing the size of images

HTML Images

```
<!DOCTYPE html>
<html>
<head>
<style>
img {
  width: 100%;
}
</style>
</head>
<body>





</body>
</html>
```



HTML Forms

- An HTML form is used to collect user input.
- The user input is most often sent to a server for processing.

The <form> Element

- The HTML <form> element is used to create an HTML form for user input:

<form>

...

form elements

...

</form>

- The <form> element is a container for different types of input elements, such as: text fields, checkboxes, radio buttons, submit buttons, etc.

HTML Form Elements

The HTML `<form>` element can contain one or more of the following form elements:

1. `<input>`
2. `<label>`
3. `<select>`
4. `<textarea>`
5. `<button>`
6. `<fieldset>`
7. `<legend>`
8. `<datalist>`
9. `<output>`
10. `<option>`
11. `<optgroup>`

HTML Form Elements

```
<!DOCTYPE html>
<html>
<head>
</head>
<body>

<form>
  <label for="fname">First name:</label><br>
  <input type="text" id="fname" name="fname"><br>
  <label for="lname">Last name:</label><br>
  <input type="text" id="lname" name="lname">
</form>
</body>
</html>
```

The <input> Element

- One of the most used form element is the <input> element.
- The <input> element can be displayed in several ways, depending on the type attribute.

The <label> Element

- It defines a label for several form elements.
- It is useful for screen-reader users
- The <label> element also help users who have difficulty clicking on very small regions
- The for attribute of the <label> tag should be equal to the id attribute of the <input> element to bind them together.

HTML Form Elements

```
<!DOCTYPE html>
<html>
<head>
</head>
<body>

<form>
  <label for="fname">First name:</label><br>
  <input type="text" id="fname" name="fname"><br>
  <label for="lname">Last name:</label><br>
  <input type="text" id="lname" name="lname">
</form>
</body>
</html>
```

First name:

Last name:

HTML Form Elements

```
<!DOCTYPE html>
<html>
<head>
</head>
<body>

<form>
  <label for="fname">First name:</label><br>
  <input type="text" id="fname" name="fname"><br>
  <label for="lname">Last name:</label><br>
  <input type="text" id="lname" name="lname"><br>
</p>
<label for="cars">Choose a car:</label>
<select id="cars" name="cars" size="1">
  <option value="volvo">Volvo</option>
  <option value="saab">Saab</option>
  <option value="fiat">Fiat</option>
  <option value="audi">Audi</option>
</select>
</p>
</form>
</body>
</html>
```

The <select> Element

- It defines drop-down list

The <option> elements

- It defines an option that can be selected.
- By default, the first item in the drop-down list is selected.
- To define a pre-selected option, add the **selected** attribute to the option
- Use the **multiple** attribute to allow the user to select more than one value:
- attribute of the <input> element to bind them together.

HTML Form Elements

```
<!DOCTYPE html>
<html>
<head>
</head>
<body>

<form>
  <label for="fname">First name:</label><br>
  <input type="text" id="fname" name="fname"><br>
  <label for="lname">Last name:</label><br>
  <input type="text" id="lname" name="lname"><br>
<p>
<label for="cars">Choose a car:</label>
<select id="cars" name="cars" size="1">
  <option value="volvo">Volvo</option>
  <option value="saab">Saab</option>
  <option value="fiat">Fiat</option>
  <option value="audi">Audi</option>
</select>
</p>
</form>
</body>
</html>
```

First name:

Last name:

Choose a car: Volvo ▾

- Volvo
- Saab
- Fiat
- Audi

HTML Form Elements

```
<!DOCTYPE html>
<html>
<head>
</head>
<body>

<form>
  <fieldset>
    <legend>Personalia:</legend>
    <label for="name">Name:</label><br>
    <input type="text" id="name" name="name" value="John"><br>
    <label for="address">Address:</label><br>
    <textarea name="message" style="width:200px; height:200px;">
      Mumbai
    </textarea><br>
    <button type="button" onclick="alert('Hello World!')">Click
Me!</button>
  </fieldset>
</form>
</body>
</html>
```

The <textarea> Element

- The <textarea> element defines a multi-line input field (a text area)
- The rows attribute specifies the visible number of lines in a text area.
- The cols attribute specifies the visible width of a text area.

The <button> element

- It defines a clickable button

The <fieldset> and <legend> element

- The <fieldset> element is used to group related data in a form.
- The <legend> element defines a caption for the <fieldset> element.

HTML Form Elements

```
<!DOCTYPE html>
<html>
<head>
</head>
<body>

<form>
  <fieldset>
    <legend>Personalia:</legend>
    <label for="name">Name:</label><br>
    <input type="text" id="name" name="name" value="John"><br>
    <label for="address">Address:</label><br>
    <textarea name="message" style="width:200px; height:200px;">
      Mumbai
    </textarea><br>
    <button type="button" onclick="alert('Hello World!')">Click
Me!</button>
  </fieldset>
</form>
</body>
</html>
```

Personalia:

Name:

Address:

Mumbai

HTML Form Elements

```
<!DOCTYPE html>
<html>
<head>
</head>
<body>
<form>
  <label for="fname">First name:</label><br>
  <input type="text" id="fname" name="fname"><br>
  <label for="lname">Last name:</label><br>
  <input type="text" id="lname" name="lname"><br>

<p><label for="browser">Browser</label><br>
<input list="browsers">
  <datalist id="browsers">
    <option value="Internet Explorer">
    <option value="Firefox">
    <option value="Chrome">
    <option value="Opera">
    <option value="Safari">
  </datalist>
</p>
</form>
</body>
</html>
```

The <datalist> Element

- It specifies a list of pre-defined options for an <input> element.
- Users will see a drop-down list of the pre-defined options as they input data.
- The list attribute of the <input> element, must refer to the id attribute of the <datalist> element.

HTML Form Elements

```
<!DOCTYPE html>
<html>
<head>
</head>
<body>
<form>
  <label for="fname">First name:</label><br>
  <input type="text" id="fname" name="fname"><br>
  <label for="lname">Last name:</label><br>
  <input type="text" id="lname" name="lname"><br>

  <p><label for="browser">Browser</label><br>
  <input list="browsers">
    <datalist id="browsers">
      <option value="Internet Explorer">
      <option value="Firefox">
      <option value="Chrome">
      <option value="Opera">
      <option value="Safari">
    </datalist>
  </p>
</form>
</body>
</html>
```

First name:

Last name:

Browser

Internet Explorer

Firefox

Chrome

Opera

Safari

HTML Form Input Types

There are different input types can be used in HTML

`<input type="button">`

`<input type="color">`

`<input type="datetime-local">`

`<input type="file">`

`<input type="image">`

`<input type="number">`

`<input type="radio">`

`<input type="reset">`

`<input type="submit">`

`<input type="text">`

`<input type="url">`

`<input type="checkbox">`

`<input type="date">`

`<input type="email">`

`<input type="hidden">`

`<input type="month">`

`<input type="password">`

`<input type="range">`

`<input type="search">`

`<input type="tel">`

`<input type="time">`

`<input type="week">`

The default value of the type attribute is "text".

HTML Form Input Types

```
<!DOCTYPE html>
<html>
<head>
</head>
<body>

<form>
  <label for="fname">First name: </label><br>
  <input type="text" id="fname" name="fname"> <br>
  <label for="pwd">Password: </label><br>
  <input type="password" id="pwd" name="pwd"> <br><br>
  <input type="submit" value="Submit">
  <input type="reset">
</form>
</body>
</html>
```

Input type Text

- `<input type="text">` defines a single-line text input field

Input type Password

- `<input type="password">` defines a password field
- The characters in a password field are masked (shown as asterisks or circles)

Input type Submit

- `<input type="submit">` defines a button for submitting form data to a form-handler.
- The form-handler is typically a server page with a script for processing input data.
- The form-handler is specified in the form's action attribute
- If you omit the submit button's value attribute, the button will get a default text

Input type Reset

- `<input type="reset">` defines a reset button that will reset all form values to their default values

HTML Form Input Types

```
<!DOCTYPE html>
<html>
<head>
</head>
<body>

<form>
  <label for="fname">First name:</label><br>
  <input type="text" id="fname" name="fname"><br>
  <label for="pwd">Password:</label><br>
  <input type="password" id="pwd" name="pwd"><br><br>
  <input type="submit" value="Submit">
  <input type="reset">
</form>
</body>
</html>
```

First name:

Password:

HTML Form Input Types

```
<!DOCTYPE html>
<html>
<head>
</head>
<body>

<form>
  <input type="radio" id="html" name="fav_language" value="HTML">
  <label for="html">HTML</label><br>
  <input type="radio" id="css" name="fav_language" value="CSS">
  <label for="css">CSS</label><br>
  <input type="radio" id="javascript" name="fav_language" value="JavaScript">
  <label for="javascript">JavaScript</label> <hr>

  <input type="checkbox" id="vehicle1" name="vehicle1" value="Bike">
  <label for="vehicle1"> I have a bike</label><br>
  <input type="checkbox" id="vehicle2" name="vehicle2" value="Car">
  <label for="vehicle2"> I have a car</label><br>
  <input type="checkbox" id="vehicle3" name="vehicle3" value="Boat">
  <label for="vehicle3"> I have a boat</label>

</form>
</body>
</html>
```

Input type Radio

- <input type="radio"> defines a radio button.
- Radio buttons let a user select ONLY ONE of a limited number of choices

Input type Checkbox

- <input type="checkbox"> defines a checkbox.
- Checkboxes let a user select ZERO or MORE options of a limited number of choices.

HTML Form Input Types

```
<!DOCTYPE html>
<html>
<head>
</head>
<body>

<form>
  <input type="radio" id="html" name="fav_language" value="HTML">
  <label for="html">HTML</label><br>
  <input type="radio" id="css" name="fav_language" value="CSS">
  <label for="css">CSS</label><br>
  <input type="radio" id="javascript" name="fav_language" value="JavaScript">
  <label for="javascript">JavaScript</label> <hr>

  <input type="checkbox" id="vehicle1" name="vehicle1" value="Bike">
  <label for="vehicle1"> I have a bike</label><br>
  <input type="checkbox" id="vehicle2" name="vehicle2" value="Car">
  <label for="vehicle2"> I have a car</label><br>
  <input type="checkbox" id="vehicle3" name="vehicle3" value="Boat">
  <label for="vehicle3"> I have a boat</label>

</form>
</body>
</html>
```

- ☐ HTML
- ☐ CSS
- ☐ JavaScript

- ☐ I have a bike
- ☐ I have a car
- ☐ I have a boat

HTML Form Input Types

```
<!DOCTYPE html>
<html>
<head>
</head>
<body>
<form>
  <input type="button" onclick="alert('Hello World!')" value="Click Me!"> <hr>

  <label for="favcolor">Select your favorite color:</label>
  <input type="color" id="favcolor" name="favcolor"> <hr>

  <label for="datemax">Enter a date before 1980-01-01:</label>
  <input type="date" id="datemax" name="datemax" max="1979-12-31"><br><br>
  <label for="datemin">Enter a date after 2000-01-01:</label>
  <input type="date" id="datemin" name="datemin" min="2000-01-02"> <hr>

  <label for="myfile">Select a file:</label>
  <input type="file" id="myfile" name="myfile"> <hr>

  <label for="email">Enter your email:</label>
  <input type="email" id="email" name="email">
</form>
</body>
</html>
```

Input type Button

- `<input type="button">` defines a button

Input type Color

- The `<input type="color">` is used for input fields that should contain a color.
- Depending on browser support, a color picker can show up in the input field.

Input type Date

- The `<input type="date">` is used for input fields that should contain a date.
- Depending on browser support, a date picker can show up in the input field.
- You can also use the `min` and `max` attributes to add restrictions to dates

Input type File

- The `<input type="file">` defines a file-select field and a "Browse" button for file uploads.

Input type Email

- The `<input type="email">` is used for input fields that should contain an e-mail address.
- The e-mail address can be automatically validated when submitted.
- Some smartphones recognize the email type, and add ".com" to the keyboard to match email input.

HTML Form Input Types

```
<!DOCTYPE html>
<html>
<head>
</head>
<body>
<form>
  <input type="button" onclick="alert('Hello World!')" value="Click Me!"> <hr>

  <label for="favcolor">Select your favorite color:</label>
  <input type="color" id="favcolor" name="favcolor"> <hr>


  <label for="datemax">Enter a date before 1980-01-01:</label>
  <input type="date" id="datemax" name="datemax" max="1979-12-31"><br><br>
  <label for="datemin">Enter a date after 2000-01-01:</label>
  <input type="date" id="datemin" name="datemin" min="2000-01-02"> <hr>


  <label for="myfile">Select a file:</label>
  <input type="file" id="myfile" name="myfile"> <hr>

  <label for="email">Enter your email:</label>
  <input type="email" id="email" name="email">
</form>
</body>
</html>
```

Click Me!

Select your favorite color:

Enter a date before 1980-01-01: 

Enter a date after 2000-01-01: 

Select a file: No file chosen

Enter your email:

HTML Form Input Types

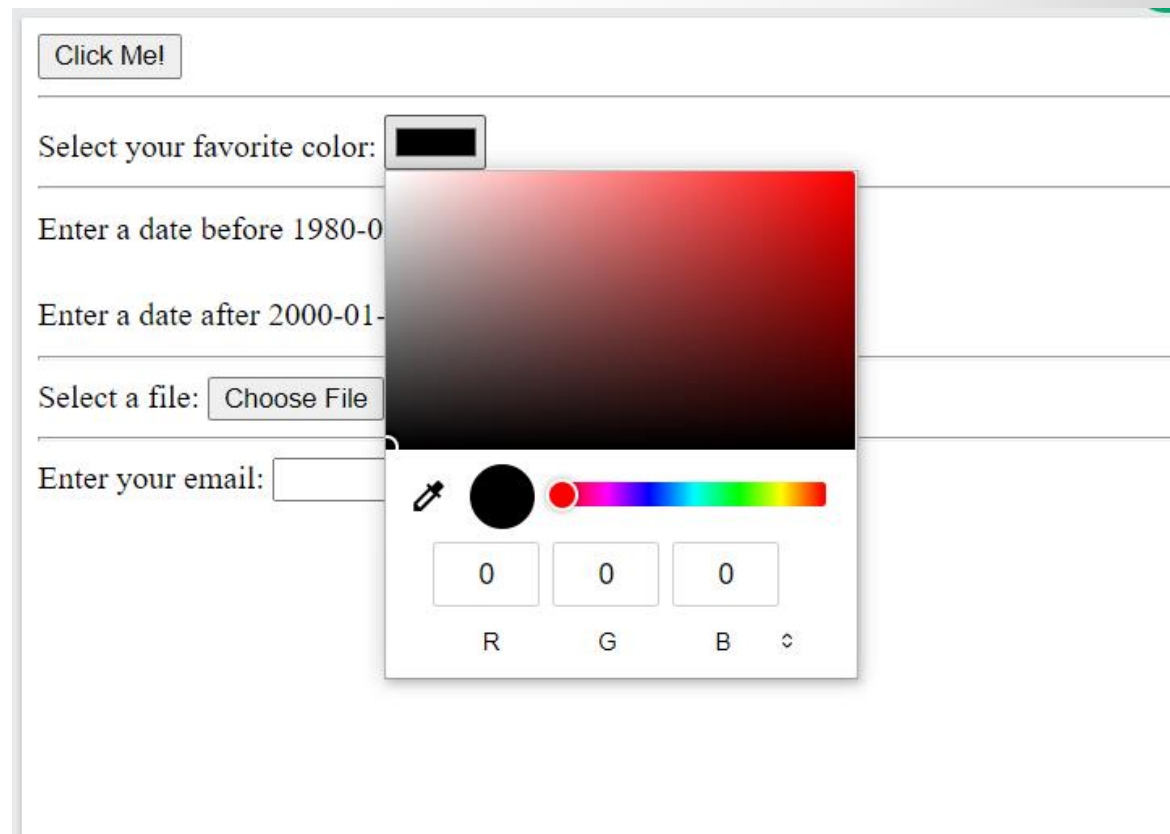
```
<!DOCTYPE html>
<html>
<head>
</head>
<body>
<form>
  <input type="button" onclick="alert('Hello World!')" value="Click Me!"> <hr>

  <label for="favcolor">Select your favorite color:</label>
  <input type="color" id="favcolor" name="favcolor"> <hr>

  <label for="datemax">Enter a date before 1980-01-01:</label>
  <input type="date" id="datemax" name="datemax" max="1979-12-31"><br><br>
  <label for="datemin">Enter a date after 2000-01-01:</label>
  <input type="date" id="datemin" name="datemin" min="2000-01-02"> <hr>

  <label for="myfile">Select a file:</label>
  <input type="file" id="myfile" name="myfile"> <hr>

  <label for="email">Enter your email:</label>
  <input type="email" id="email" name="email">
</form>
</body>
</html>
```



The screenshot displays a web form with several input fields and a color picker overlay. At the top is a button labeled "Click Me!". Below it are three text input fields with labels: "Select your favorite color:", "Enter a date before 1980-01-01:", and "Enter a date after 2000-01-01:". The first field has a small black square next to it. The second field has a date input field. The third field has a date input field. Below these is a file input field with the label "Select a file:" and a "Choose File" button. At the bottom is an email input field with the label "Enter your email:". A color picker overlay is visible, showing a large color selection area with a gradient from black to red. Below the color area is a color bar with a red dot, and three input fields for RGB values (0, 0, 0) with labels R, G, and B. A small icon of a paintbrush is also visible.

HTML Form Input Types

```
<!DOCTYPE html>
<html>
<head>
</head>
<body>
<form>
  <input type="button" onclick="alert('Hello World!')" value="Click Me!"> <hr>

  <label for="favcolor">Select your favorite color:</label>
  <input type="color" id="favcolor" name="favcolor"> <hr>

  <label for="datemax">Enter a date before 1980-01-01:</label>
  <input type="date" id="datemax" name="datemax" max="1979-12-31"><br><br>
  <label for="datemin">Enter a date after 2000-01-01:</label>
  <input type="date" id="datemin" name="datemin" min="2000-01-02"> <hr>


  <label for="myfile">Select a file:</label>
  <input type="file" id="myfile" name="myfile"> <hr>

  <label for="email">Enter your email:</label>
  <input type="email" id="email" name="email">

</form>
</body>
</html>
```

Click Me!

Select your favorite color:

Enter a date before 1980-01-01: 

Enter a date after 2000-01-01:

Select a file: No file selected

Enter your email:

December, 1979 ▾ ↑ ↓

Mo	Tu	We	Th	Fr	Sa	Su
26	27	28	29	30	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6
Today						

HTML Form Input Types

```
<!DOCTYPE html>
<html>
<head>
</head>
<body>
<form>
  <input type="button" onclick="alert('Hello World!')" value="Click Me!"> <hr>

  <label for="favcolor">Select your favorite color:</label>
  <input type="color" id="favcolor" name="favcolor"> <hr>

  <label for="datemax">Enter a date before 1980-01-01:</label>
  <input type="date" id="datemax" name="datemax" max="1979-12-31"><br><br>
  <label for="datemin">Enter a date after 2000-01-01:</label>
  <input type="date" id="datemin" name="datemin" min="2000-01-02"> <hr>

  <label for="myfile">Select a file:</label>
  <input type="file" id="myfile" name="myfile"> <hr>

  <label for="email">Enter your email:</label>
  <input type="email" id="email" name="email">

</form>
</body>
</html>
```

Click Me!

Select your favorite color:

Enter a date before 1980-01-01:

Enter a date after 2000-01-01:

Select a file: No file chosen

Enter your email:

Open

« Internet Pro... » Lectures

Search Lectures

Organize New folder

	Name	Date modified	Type
OneDrive	HTML	29-07-2021 14:32	Te
This PC	HTML5 Part2	02-08-2021 10:14	Mi
3D Objects	HTML5 Part3	04-08-2021 09:50	Mi
Desktop			

File name:

All Files

Open Cancel

HTML Form Attributes

The Action Attribute

- The action attribute defines the action to be performed when the form is submitted.
- Usually, the form data is sent to a file on the server when the user clicks on the submit button.

The Target Attribute

- The target attribute specifies where to display the response that is received after submitting the form.

The target attribute can have one of the following values:

Value	Description
_blank	The response is displayed in a new window or tab
_self	The response is displayed in the current window
_parent	The response is displayed in the parent frame
_top	The response is displayed in the full body of the window
framename	The response is displayed in a named iframe

HTML Form Attributes

The Method Attribute

- The method attribute specifies the HTTP method to be used when submitting the form data.
- The form-data can be sent as URL variables (with method="get") or as HTTP post transaction (with method="post").
- The default HTTP method when submitting form data is GET.

Example: `<form action="/action_page.php" method="get">`

Important points about GET:

- Appends the form data to the URL, in name/value pairs
- NEVER use GET to send sensitive data! (the submitted form data is visible in the URL!)
- The length of a URL is limited (2048 characters)
- Useful for form submissions where a user wants to bookmark the result
- GET is good for non-secure data, like query strings in Google

HTML Form Attributes

The Method Attribute

- The method attribute specifies the HTTP method to be used when submitting the form data.
- The form-data can be sent as URL variables (with method="get") or as HTTP post transaction (with method="post").
- The default HTTP method when submitting form data is GET.

Example: `<form action="/action_page.php" method="POST">`

Important points on POST:

- Appends the form data inside the body of the HTTP request (the submitted form data is not shown in the URL)
- POST has no size limitations, and can be used to send large amounts of data.
- Form submissions with POST cannot be bookmarked
- Always use POST if the form data contains sensitive or personal information!

HTML Form Attributes

The Autocomplete Attribute

- The autocomplete attribute specifies whether a form should have autocomplete on or off.
- When autocomplete is on, the browser automatically complete values based on values that the user has entered before.
- **Example:** `<form action="/action_page.php" autocomplete="on">`

The Novalidate attribute

- The novalidate attribute is a boolean attribute.
- When present, it specifies that the form-data (input) should not be validated when submitted.

HTML5

Content

- Semantic Elements
- Control Elements
- Semantic Elements

HTML Semantic Elements

- Semantic Elements – Element with meaning
- A semantic element clearly describes its meaning to both the browser and the developer.
- Examples of non-semantic elements: `<div>` and `` - Tells nothing about its content.
- Examples of semantic elements: `<form>`, `<table>`, and `<article>` - Clearly defines its content.
- Many web sites contain HTML code like:

`<div id="nav">`

`<div class="header">`

`<div id="footer">`

to indicate navigation, header, and footer.

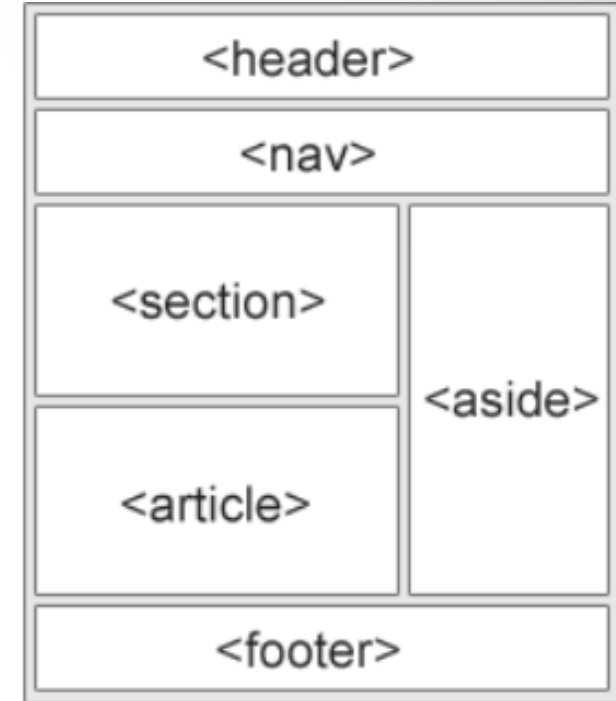
- In HTML there are some semantic elements that can be used to define different parts of a web page

HTML Semantic Elements

A semantic Web allows data to be shared and reused across applications, enterprises, and communities.

Some of the examples:

Tag	Description
<code><article></code>	Defines independent, self-contained content
<code><aside></code>	Defines content aside from the page content
<code><details></code>	Defines additional details that the user can view or hide
<code><figcaption></code>	Defines a caption for a <code><figure></code> element
<code><figure></code>	Specifies self-contained content, like illustrations, diagrams, photos, code
<code><footer></code>	Defines a footer for a document or section
<code><header></code>	Specifies a header for a document or section
<code><main></code>	Specifies the main content of a document
<code><mark></code>	Defines marked/highlighted text
<code><nav></code>	Defines navigation links
<code><section></code>	Defines a section in a document
<code><summary></code>	Defines a visible heading for a <code><details></code> element
<code><time></code>	Defines a date/time



HTML Semantic Element

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Images</title>
</head>
<body>

<section>
<h1>WWF</h1>
<p>The World Wide Fund for Nature (WWF) is an international organization
working on issues regarding the conservation, research and restoration of the
environment, formerly named the World Wildlife Fund. WWF was founded in
1961.</p>
</section>

<section>
<h1>WWF's Panda symbol</h1>
<p>The Panda has become the symbol of WWF. The well-known panda logo of WWF
originated from a panda named Chi Chi that was transferred from the Beijing
Zoo to the London Zoo in the same year of the establishment of WWF.</p>
</section>
</body>
</html>
```

HTML <section> Element

- The <section> element defines a section in a document.
- "A section is a thematic grouping of content, typically with a heading."
- A web page could normally be split into sections for introduction, content, and contact information.

Example:

Two sections in a document

HTML Semantic Element

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Images</title>
</head>
<body>
<article>
<h2>Google Chrome</h2>
<p>Google Chrome is a web browser developed by Google, released in 2008.
Chrome is the world's most popular web browser today!</p>
</article>

<article>
<h2>Mozilla Firefox</h2>
<p>Mozilla Firefox is an open-source web browser developed by Mozilla. Firefox
has been the second most popular web browser since January, 2018.</p>
</article>

<article>
<h2>Microsoft Edge</h2>
<p>Microsoft Edge is a web browser developed by Microsoft, released in 2015.
Microsoft Edge replaced Internet Explorer.</p>
</article>
</body>
</html>
```

HTML <article> Element

- The <article> element specifies independent, self-contained content.
- An article should make sense on its own, and it should be possible to distribute it independently from the rest of the web site.
- Examples of where an <article> element can be used:
 - Forum post
 - Blog post
 - Newspaper article

Example:

Three articles with independent, self-contained content:

HTML Semantic Element

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Images</title>
</head>
<body>
<article>
<h2>Google Chrome</h2>
<p>Google Chrome is a web browser developed by Google, released in 2008.
Chrome is the world's most popular web browser today!</p>
</article>

<article>
<h2>Mozilla Firefox</h2>
<p>Mozilla Firefox is an open-source web browser developed by Mozilla. Firefox
has been the second most popular web browser since January, 2018.</p>
</article>

<article>
<h2>Microsoft Edge</h2>
<p>Microsoft Edge is a web browser developed by Microsoft, released in 2015.
Microsoft Edge replaced Internet Explorer.</p>
</article>
</body>
</html>
```

HTML <article> Element

- The <article> element specifies independent, self-contained content.
- The <section> element defines section in a document.
- We can't use the definitions to decide how to nest those elements
- So, we can find HTML pages with <section> elements containing <article> elements, and <article> elements containing <section> elements.

HTML Semantic Element

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Images</title>
</head>
<body>

<article>
  <header>
    <h1>What Does WWF Do?</h1>
    <p>WWF's mission:</p>
  </header>
  <p>WWF's mission is to stop the degradation of our planet's natural
environment,
  and build a future in which humans live in harmony with nature.</p>
</article>

</body>
</html>
```

HTML <header> Element

- The <header> element represents a container for introductory content or a set of navigational links.
- A <header> element typically contains:
 - one or more heading elements (<h1> - <h6>)
 - logo or icon
 - authorship information
- We can have several <header> elements in one HTML document.
- <header> cannot be placed within a <footer>, <address> or another <header> element.

HTML Semantic Element

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Images</title>
</head>
<body>

<article>
  <header>
    <h1>What Does WWF Do?</h1>
    <p>WWF's mission:</p>
  </header>
  <p>WWF's mission is to stop the degradation of our planet's natural
environment,
  and build a future in which humans live in harmony with nature.</p>
</article>

</body>
</html>
```

What Does WWF Do?

WWF's mission:

WWF's mission is to stop the degradation of our planet's natural environment, and build a future in which humans live in harmony with nature.

HTML Semantic Element

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Images</title>
</head>
<body>

<article>
  <header>
    <h1>What Does WWF Do?</h1>
    <p>WWF's mission:</p>
  </header>
  <p>WWF's mission is to stop the degradation of our planet's natural
environment,
  and build a future in which humans live in harmony with nature.</p>
</article>
<footer>
  <p>Author: Hege Refsnes</p>
  <p><a href="mailto:hege@example.com">hege@example.com</a></p>
</footer>
</body>
</html>
```

HTML <footer> Element

- The <footer> element defines a footer for a document or section.
- A <footer> element typically contains:
 - authorship information
 - copyright information
 - contact information
 - sitemap
 - back to top links
 - related documents
- We can have several <footer> elements in one document.

HTML Semantic Element

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Images</title>
</head>
<body>

<article>
  <header>
    <h1>What Does WWF Do?</h1>
    <p>WWF's mission:</p>
  </header>
  <p>WWF's mission is to stop the degradation of our planet's natural
environment,
  and build a future in which humans live in harmony with nature.</p>
</article>
<footer>
  <p>Author: Hege Refsnes</p>
  <p><a href="mailto:hege@example.com">hege@example.com</a></p>
</footer>
</body>
</html>
```

What Does WWF Do?

WWF's mission:

WWF's mission is to stop the degradation of our planet's natural environment, and build a future in which humans live in harmony with nature.

Author: Hege Refsnes

hege@example.com

HTML Semantic Element

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Images</title>
</head>
<body>
<nav>
  <a href="/html/">HTML</a> |
  <a href="/css/">CSS</a> |
  <a href="/js/">JavaScript</a> |
  <a href="/jquery/">jQuery</a>
</nav>
<article>
  <header>
    <h1>What Does WWF Do?</h1>
    <p>WWF's mission:</p>
  </header>
  <p>WWF's mission is to stop the degradation of our planet's
natural environment,
  and build a future in which humans live in harmony with
nature.</p>
</article>
<footer>
  <p>Author: Hege Refsnes</p>
  <p><a href="mailto:hege@example.com">hege@example.com</a></p>
</footer>
</body>
</html>
```

HTML <nav> Element

- The <nav> element defines a set of navigation links.
- Notice that NOT all links of a document should be inside a <nav> element.
- The <nav> element is intended only for major block of navigation links.

HTML Semantic Element

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Images</title>
</head>
<body>
<nav>
  <a href="/html/">HTML</a> |
  <a href="/css/">CSS</a> |
  <a href="/js/">JavaScript</a> |
  <a href="/jquery/">jQuery</a>
</nav>
<article>
  <header>
    <h1>What Does WWF Do?</h1>
    <p>WWF's mission:</p>
  </header>
  <p>WWF's mission is to stop the degradation of our planet's natural
environment,
  and build a future in which humans live in harmony with nature.</p>
</article>
<footer>
  <p>Author: Hege Refsnes</p>
  <p><a href="mailto:hege@example.com">hege@example.com</a></p>
</footer>
</body>
</html>
```

[HTML](#) | [CSS](#) | [JavaScript](#) | [jQuery](#)

What Does WWF Do?

WWF's mission:

WWF's mission is to stop the degradation of our planet's natural environment, and build a future in which humans live in harmony with nature.

Author: Hege Refsnes

hege@example.com

HTML Semantic Element

```
<html>
<head>
<style>
aside {
  width: 30%;
  padding-left: 15px;
  margin-left: 15px;
  float: right;
  font-style: italic;
  background-color: lightgray;
}
</style>
</head>
<body>
```

```
<p>My family and I visited The Epcot center this summer. The
weather was nice, and Epcot was amazing! I had a great summer
together with my family!</p>
```

```
<aside>
<p>The Epcot center is a theme park at Walt Disney World Resort
featuring exciting attractions, international pavilions, award-
winning fireworks and seasonal special events.</p>
</aside>
```

```
<p>My family and I visited The Epcot center this summer. The
weather was nice, and Epcot was amazing! I had a great summer
together with my family!</p>
```

```
</body>
</html>
```

HTML <aside> Element

- The <aside> element defines some content aside from the content it is placed in (like a sidebar).
- The <aside> content should be indirectly related to the surrounding content.

HTML Semantic Element

```
<html>
<head>
<style>
aside {
  width: 30%;
  padding-left: 15px;
  margin-left: 15px;
  float: right;
  font-style: italic;
  background-color: lightgray;
}
</style>
</head>
<body>
```

```
<p>My family and I visited The Epcot center this summer. The weather was
nice, and Epcot was amazing! I had a great summer together with my
family!</p>
```

```
<aside>
<p>The Epcot center is a theme park at Walt Disney World Resort featuring
exciting attractions, international pavilions, award-winning fireworks and
seasonal special events.</p>
</aside>
```

```
<p>My family and I visited The Epcot center this summer. The weather was
nice, and Epcot was amazing! I had a great summer together with my
family!</p>
```

```
</body>
```

```
</html>
```

My family and I visited The Epcot center this summer. The weather was nice, and Epcot was amazing! I had a great summer together with my family!

My family and I visited The Epcot center this summer. The weather was nice, and Epcot was amazing! I had a great summer together with my family!

The Epcot center is a theme park at Walt Disney World Resort featuring exciting attractions, international pavilions, award-winning fireworks and seasonal special events.

HTML Semantic Element

```
<html>
<head>
<title>Images</title>
</head>
<body>

<figure>
  
  <figcaption>Fig1. - Trulli, Puglia, Italy.</figcaption>
</figure>
</body>
</html>
```

HTML **<figure>** and **<figcaption>** Element

- The **<figure>** tag specifies self-contained content, like illustrations, diagrams, photos, code listings, etc.
- The **<figcaption>** tag defines a caption for a **<figure>** element.
- The **<figcaption>** element can be placed as the first or as the last child of a **<figure>** element.
- The **** element defines the actual image/illustration.

HTML Semantic Element

```
<html>
<head>
<title>Images</title>
</head>
<body>

<figure>
  
  <figcaption>Fig1. - Trulli, Puglia, Italy.</figcaption>
</figure>
</body>
</html>
```



Fig.1 - Trulli, Puglia, Italy.

HTML Audio

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Images</title>
</head>
<body>

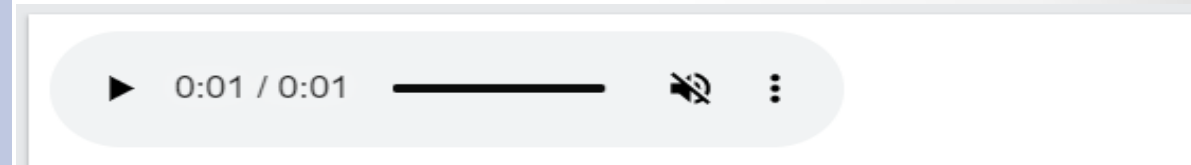
<audio controls autoplay muted>
  <source src="horse.ogg" type="audio/ogg">
  <source src="horse.mp3" type="audio/mpeg">
Your browser does not support the audio element.
</audio>
</body>
</html>
```

- The HTML <audio> element is used to play an audio file on a web page.
- The controls attribute adds audio controls, like play, pause, and volume.
- The <source> element allows you to specify alternative audio files which the browser may choose from.
- The browser will use the first recognized format.
- The text between the <audio> and </audio> tags will only be displayed in browsers that do not support the <audio> element.
- To start an audio file automatically, use the autoplay attribute
- Add muted after autoplay to let your audio file start playing automatically (but muted)

HTML Audio

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Images</title>
</head>
<body>

<audio controls autoplay muted>
  <source src="horse.ogg" type="audio/ogg">
  <source src="horse.mp3" type="audio/mpeg">
Your browser does not support the audio element.
</audio>
</body>
</html>
```



HTML Audio

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Images</title>
</head>
<body>

<audio controls autoplay muted>
  <source src="horse.ogg" type="audio/ogg">
  <source src="horse.mp3" type="audio/mpeg">
Your browser does not support the audio element.
</audio>
</body>
</html>
```

HTML Audio - Media Types

- | File Format | Media Type |
|-------------|------------|
| • MP3 | audio/mpeg |
| • OGG | audio/ogg |
| • WAV | audio/wav |

HTML Video

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Images</title>
</head>
<body>

<video width="320" height="240" autoplay muted>
  <source src="movie.mp4" type="video/mp4">
  <source src="movie.ogg" type="video/ogg">
Your browser does not support the video tag.
</video>
</body>
</html>
```

- The HTML <video> element is used to show a video on a web page.
- The controls attribute adds video controls, like play, pause, and volume.
- It is a good idea to always include width and height attributes.
- If height and width are not set, the page might flicker while the video loads.
- The <source> element allows you to specify alternative video files which the browser may choose from.
- The browser will use the first recognized format.
- The text between the <video> and </video> tags will only be displayed in browsers that do not support the <video> element.
- Add muted after autoplay to let your video start playing automatically (but muted)

HTML Video

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Images</title>
</head>
<body>

<video width="320" height="240" autoplay muted>
  <source src="movie.mp4" type="video/mp4">
  <source src="movie.ogg" type="video/ogg">
Your browser does not support the video tag.
</video>
</body>
</html>
```



HTML Video

```
<!DOCTYPE html>
<html lang = "en-US">
<head>
<title>Images</title>
</head>
<body>

<video width="320" height="240" autoplay muted>
  <source src="movie.mp4" type="video/mp4">
  <source src="movie.ogv" type="video/ogg">
  Your browser does not support the video tag.
</video>
</body>
</html>
```

HTML Video - Media Types

- File Format Media Type
- MP4 video/mp4
- WebM video/webm
- Ogg video/ogg

HTML Video

HTML Video - Methods, Properties, and Events

- The HTML DOM defines methods, properties, and events for the <video> element.
- This allows you to load, play, and pause videos, as well as setting duration and volume.
- There are also DOM events that can notify you when a video begins to play, is paused, etc.

HTML Audio/Video Methods

Method	Description
<code>addTextTrack()</code>	Adds a new text track to the audio/video
<code>canPlayType()</code>	Checks if the browser can play the specified audio/video type
<code>load()</code>	Re-loads the audio/video element
<code>play()</code>	Starts playing the audio/video
<code>pause()</code>	Pauses the currently playing audio/vide

HTML Drag and Drop

- In HTML, any element can be dragged and dropped.
- Drag and drop is a very common feature.
- It is when you "grab" an object and drag it to a different location.

```

<!DOCTYPE HTML>
<html>
<head>
<script>
function allowDrop(ev) {
    ev.preventDefault();
}

function drag(ev) {
    ev.dataTransfer.setData("text", ev.target.id);
}

function drop(ev) {
    ev.preventDefault();
    var data = ev.dataTransfer.getData("text");
    ev.target.appendChild(document.getElementById(data));
}
</script>
</head>
<body>

<div id="div1" ondrop="drop(event)" ondragover="allowDrop(event)"></div>



</body>

```

HTML Drag and Drop

Make an Element Draggable

- To make an element draggable, set the draggable attribute to true:

```
<img draggable="true">
```

What to Drag - ondragstart and setData()

- Specify what should happen when the element is dragged.
- In the example, the ondragstart attribute calls a function, drag(event), that specifies what data to be dragged.
- The dataTransfer.setData() method sets the data type and the value of the dragged data:

```

function drag(ev) {
    ev.dataTransfer.setData("text", ev.target.id);
}

```

In this case, the data type is "text" and the value is the id of the draggable element ("drag1").

```

<!DOCTYPE HTML>
<html>
<head>
<script>
function allowDrop(ev) {
    ev.preventDefault();
}

function drag(ev) {
    ev.dataTransfer.setData("text", ev.target.id);
}

function drop(ev) {
    ev.preventDefault();
    var data = ev.dataTransfer.getData("text");
    ev.target.appendChild(document.getElementById(data));
}
</script>
</head>
<body>

<div id="div1" ondrop="drop(event)" ondragover="allowDrop(event)"></div>



</body>

```

HTML Drag and Drop

Where to Drop - ondragover

- The ondragover event specifies where the dragged data can be dropped.
- By default, data/elements cannot be dropped in other elements.
- To allow a drop, we must prevent the default handling of the element.
- This is done by calling the event.preventDefault()
- method for the ondragover event:

event.preventDefault()

```

<!DOCTYPE HTML>
<html>
<head>
<script>
function allowDrop(ev) {
    ev.preventDefault();
}

function drag(ev) {
    ev.dataTransfer.setData("text", ev.target.id);
}

function drop(ev) {
    ev.preventDefault();
    var data = ev.dataTransfer.getData("text");
    ev.target.appendChild(document.getElementById(data));
}
</script>
</head>
<body>

<div id="div1" ondrop="drop(event)" ondragover="allowDrop(event)"></div>



</body>

```

HTML Drag and Drop

Do the Drop - ondrop

- When the dragged data is dropped, a drop event occurs.
- In the example above, the ondrop attribute calls a function, drop(event):

```

function drop(ev) {
    ev.preventDefault();
    var data = ev.dataTransfer.getData("text");
    ev.target.appendChild(document.getElementById(data));
}

```

HTML Drag and Drop

Explanation of Code

- Call `preventDefault()` to prevent the browser default handling of the data (**default is open as link on drop**)
- Get the dragged data with the **`dataTransfer.getData()`** method. This method will return any data that was set to the same type in the `setData()` method
- The dragged data is the id of the dragged element ("drag1")
- Append the dragged element into the drop element

```
<!DOCTYPE HTML>
<html>
<head>
<script>
function allowDrop(ev) {
    ev.preventDefault();
}

function drag(ev) {
    ev.dataTransfer.setData("text", ev.target.id);
}

function drop(ev) {
    ev.preventDefault();
    var data = ev.dataTransfer.getData("text");
    ev.target.appendChild(document.getElementById(data));
}
</script>
</head>
<body>

<div id="div1" ondrop="drop(event)" ondragover="allowDrop(event)"></div>



</body>
```