

HTML basics-1

Computer Science
SIUE

HTML



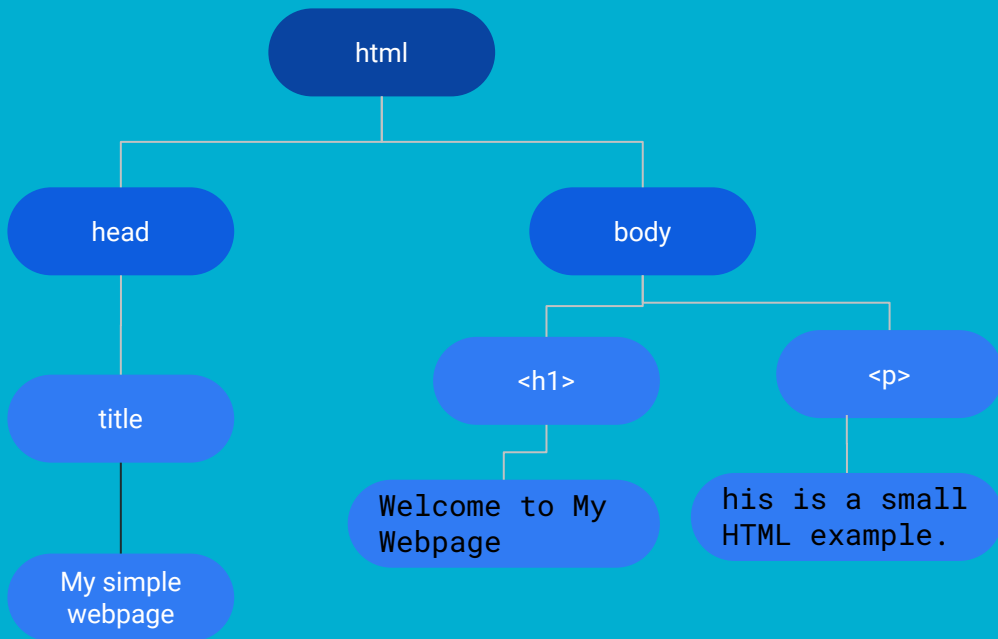
HTML

- A language to describe the structure of a webpage
- CSS describe the style
- Browser will parse this code and will display the content
- DOCTYPE is a way to tell the browser what version of html is the program is using
- May parse the page differently
- For html-5 <!DOCTYPE html>
- Nested structure
- Html tags
- Attribute, lang is an attribute specifying the language

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>My Simple Webpage</title>
</head>
<body>
  <h1>Welcome to My Webpage</h1>
  <p>This is a small HTML example.</p>
</body>
</html>
```

HTML

- `<head>` : Not the body, not part of webpage
- DOM : Document object model
- Indentation is not necessary but good programming skill
- `<h1>` to `<h6>`



HTML headers

- <h1> to <h6>

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Header Types Example</title>
</head>
<body>
  <h1>This is a Level 1 Heading (h1)</h1>
  <h2>This is a Level 2 Heading (h2)</h2>
  <h3>This is a Level 3 Heading (h3)</h3>
  <h4>This is a Level 4 Heading (h4)</h4>
  <h5>This is a Level 5 Heading (h5)</h5>
  <h6>This is a Level 6 Heading (h6)</h6>

  <p>This is a paragraph of text.</p>
</body>
</html>
```

HTML paragraph

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Paragraph Tag Examples</title>
</head>
<body>
  <h1>Various Uses of the Paragraph Tag</h1>

  <h2>Normal Paragraph</h2>
  <p>This is a normal paragraph with some text.</p>

  <h2>Paragraph with Line Breaks</h2>
  <p>This paragraph<br>has line<br>breaks.</p>

  <h2>Paragraph with Emphasis</h2>
  <p><em>This paragraph is emphasized.</em></p>

  <h2>Paragraph with Strong Emphasis</h2>
  <p><strong>This paragraph has strong emphasis.</strong></p>

  <h2>Indented Paragraph</h2>
  <p style="text-indent: 20px;">This paragraph has an indentation of 20 pixels.</p>
</body>
</html>
```

HTML break tag

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Emphasis on <br> Tag</title>
</head>
<body>
  <h1>Line Breaks with &lt;br> Tag</h1>

  <h2>Normal Paragraph</h2>
  <p>This is a normal paragraph with some text.</p>

  <h2>Using &lt;br> for Line Breaks</h2>
  <p>This paragraph<br>has line<br>breaks using the &lt;br> tag.</p>

  <h2>More Examples</h2>
  <p>This is<br>another example<br>of using line breaks<br>with the &lt;br> tag.</p>

  <h2>Line Breaks in Text</h2>
  <p>You can insert line breaks<br>anywhere in your text to<br>control the layout.</p>
</body>
</html>
```

HTML text formatting

- The `` tag indicates emphasized text, such as text having an emphasized pronunciation when spoken, and is italicized by default.
- The `` tag indicates text that has strong importance, and is bolded by default.
- The `<cite>` tag denotes a title, such as a book or song title, and is italicized by default. Ex: `<cite>Spaceballs</cite> is a parody of the <cite>Star Wars</cite> trilogy.` yields: *Spaceballs* is a parody of the *Star Wars* trilogy.
- The `<mark>` tag denotes important content that should be semantically highlighted and is rendered with a yellow background by default. Ex: `<mark>Highlight</mark> what is important.` yields: **Highlight** what is important.
- The `` tag indicates text that needs attention, like key words in a document abstract or product names in a review, and renders the text in bold. Ex: Mix the **flour** and **oil** together.
- The `<i>` tag indicates text in an alternative voice, such as a word or phrase in a foreign language, and is rendered using italics. Ex: *Dashi* is a stock used in Japanese cooking.
- The `<u>` tag denotes text that should appear differently from normal text, such as misspelled words, and is underlined by default. Ex: Misspelled is often misspelled as mispelled.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>HTML Program with Comments</title>
</head>
<body>
  <!-- This is a comment explaining the purpose of the heading -->
  <h1>Welcome to My Website</h1>

  <p>This is a paragraph of text.</p>

  <!-- Comment within a paragraph -->
  <p>Here's some text <!-- and here's an inline comment --> with comments.</p>

  <!--
  This is a multi-line comment.
  It can span multiple lines.
  Useful for longer explanations.
  -->

</body>
</html>
```

HTML lists

- Ordered list
- Unordered list

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Ordered List</title>
</head>
<body>
  <h1>Favorite Fruits</h1>
  <ul>
    <li>Apples</li>
    <li>Bananas</li>
    <li>Oranges</li>
    <li>Grapes</li>
  </ul>
</body>
</html>
```

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Ordered List</title>
</head>
<body>
  <h1>Favorite Fruits</h1>
  <ol>
    <li>Apples</li>
    <li>Bananas</li>
    <li>Oranges</li>
    <li>Grapes</li>
  </ol>
</body>
</html>
```

Nested lists

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Ordered List</title>
</head>
<body>
  <h1>Favorite Fruits</h1>
  <ol>
    <li>Apples</li>
    <ul>
      <li>Red</li>
      <li>Green</li>
      <li>Yellow</li>
      <li>Dead</li>
    </ul>
    <li>Bananas</li>
    <li>Oranges</li>
    <li>Grapes</li>
  </ol>
</body>
</html>
```

Ordered list attribute

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Ordered List</title>
</head>
<body>
  <h1>Favorite Fruits</h1>
  <ol type="A">
    <li>Apples</li>
    <li>Bananas</li>
    <li>Oranges</li>
    <li>Grapes</li>
  </ol>
</body>
</html>
```

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Ordered List</title>
</head>
<body>
  <h1>Favorite Fruits</h1>
  <ol type="I">
    <li>Apples</li>
    <li>Bananas</li>
    <li>Oranges</li>
    <li>Grapes</li>
  </ol>
</body>
</html>
```

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Ordered List</title>
</head>
<body>
  <h1>Favorite Fruits</h1>
  <ol type="i">
    <li>Apples</li>
    <li>Bananas</li>
    <li>Oranges</li>
    <li>Grapes</li>
  </ol>
</body>
</html>
```

Images

- `` tag no end tag
- Two mandatory attributes `src` and `alt`
- Image is in the same folder as the html file
- Width attribute (auto scale height)

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Image Example</title>
</head>
<body>
  <h1>Beautiful Landscape</h1>
  <p>Check out this beautiful landscape:</p>
  
</body>
</html>
```

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Image Example</title>
</head>
<body>
  <h1>Beautiful Landscape</h1>
  <p>Check out this beautiful landscape:</p>
  
</body>
</html>
```

Hyperlinks

- Tag is `<a>` and attribute is `href`

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Page 1</title>
</head>
<body>
  <h1>Welcome to Page 1</h1>
  <p>This is the first page.</p>
  <a href="page2.html">Go to Page 2</a>
</body>
</html>
```

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Page 2</title>
</head>
<body>
  <h1>Welcome to Page 2</h1>
  <p>This is the second page.</p>
  <a href="index.html">Go back to Page 1</a>
</body>
</html>
```

HTML tables

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Table with <thead>
Example</title>
</head>
<body>
  <h1>Product Inventory</h1>
  <table border="1">
    <thead>
      <tr>
        <th>Product ID</th>
        <th>Product Name</th>
        <th>Price</th>
      </tr>
    </thead>
    <tbody>
      <tr>
        <td>001</td>
        <td>Widget A</td>
        <td>$10.99</td>
      </tr>
    </tbody>
  </table>
</body>
</html>
```

```
<tr>
  <td>002</td>
  <td>Widget B</td>
  <td>$14.99</td>
</tr>
<tr>
  <td>003</td>
  <td>Widget C</td>
  <td>$9.99</td>
</tr>
</tbody>
</table>
```

- Tags <table>
- <thead> <tr> <th>
- <tbody> <tr> <td>

HTML table

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Ordered List</title>
</head>
<style>
  table, th, td {
    border: 2px solid gray;
  }
</style>
<body>
  <table>
    <caption>State Weather Extremes</caption>
    <tr>
      <th></th>
      <th>Lowest</th>
      <th>Highest</th>
    </tr>
```

```
      <th>Average Rainfall</th>
      <td>Nevada</td>
      <td>Hawaii</td>
    </tr>
  </table>
</body>
</html>
```


Spanning multiple columns and rows

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Ordered List</title>
</head>
<style>
  table, th, td {
    border: 2px solid gray; }
</style>
<body>
  <table>
    <caption>Team Schedule</caption>
    <tr>
      <th></th>
      <th>Mon</th>
      <th>Wed</th>
      <th>Fri</th>
    </tr>
```

```
<tr>
  <th>9:00</th>
  <td colspan="3">Warmup</td>
</tr>
<tr>
  <th>10:00</th>
  <td>Drills</td>
  <td>Skills Test</td>
  <td rowspan="2">Scrimmage</td>
</tr>
<tr>
  <th>11:00</th>
  <td>Film</td>
  <td>Weights</td>
</tr>
</table>
</body>
</html>
```