

Introduction to HTML

HTML Files

Overview

- You don't need a server
- Must end in .html
- Runs in a browser

Structure of a HTML Document

```
<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>
```

Example

```
<!DOCTYPE html>
<html>
  <head>
    <title>Page Title</title>
  </head>
  <body>
    <h1>My First Heading</h1>
    <p>My first paragraph.</p>
  </body>
</html>
```

Contents can be plain text or elements (shown below)

- Element names surrounded by angle brackets
 - Normally come in pairs (start tag and end tag)
 - End tag is usually the same but with a forward slash
 - Some tags close themselves (*Remnant of XHTML*)
- `<tagn>content</tagn>`
- `<h1>About Us</h1>`
- `<p>This is a paragraph</p>`
- `
` (self closing)
- `
` (Fine in HTML5)

Comments

```
<body>
|  <!-- This is a comment -->
</body>
```

Headings

```
<!-- Headings -->
<h1>Heading One</h1>
<h2>Heading Two</h2>
<h3>Heading Three</h3>
<h4>Heading Four</h4>
<h5>Heading Five</h5>
<h6>Heading Six</h6>
```

Paragraphs

```
<p>
  <!-- generate text... type lorem20 (tabkey) for 20 words -->
  Lorem ipsum dolor sit amet consectetur adipisicing elit. Cupiditate, ea.
</p>
<p>
  Lorem ipsum dolor sit amet consectetur adipisicing elit. Cupiditate, ea.
</p>
```

Inline and block elements

Inline Elements:

- Do not start on a new line
- Take only the necessary width

Block Elements:

- Start on a new line
- Take full width available

Block Level: <div>, <h1> - <h6>, <p>, <form>

Inline Level: , , <a>

Inline Examples (strong and em)

```
<p>
    Lorem ipsum dolor sit amet, consectetur
    adipisicing elit, sed do eiusmod
    tempor <strong>incididunt ut labore</strong>
    et dolore magna aliqua. Ut enim ad minim
    veniam,
    quis nostrud <em>exercitation ullamco</em>
    laboris nisi ut aliquip ex ea commodo
    consequat. Duis aute irure dolor in
    reprehenderit in voluptate velit esse
    cillum dolore eu fugiat nulla pariatur.
    Excepteur sint occaecat cupidatat non
```

Heading Four

Heading Five

Heading Six

```
Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor
incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud
exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure
dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur.
Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit
anim id est laborum.
```

```
Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor
incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud
exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure
dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur.
Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit
anim id est laborum.
```

Example of a link

```
<p>
    Lorem ipsum dolor sit amet, consectetur
    adipisicing elit, <a href="http://
    google.com" target="_blank">sed do eiusmod
    </a>
    tempor incididunt ut labore et dolore
    magna aliqua. Ut enim ad minim veniam.
```

Heading Six

```
lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor
incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud
exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure
dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur.
Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit
anim id est laborum.
```

```
lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor
incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud
exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure
```

The link (above) example has an attribute

What are attributes?

- All tags can have attributes
- Provide information about an element
- Placed within the start tag
- Key/value pairs (id="someId")

Attribute example

```
<h2 title="My Company">About Us</h2>
```

Lists

Unordered list

```
<!-- Lists -->
<ul>
    <li>List Item 1</li>
    <li>List Item 2</li>
    <li>List Item 3</li>
    <li>List Item 4</li>
</ul>
```

lorem ipsum dolor sit amet, con
incidunt ut labore et dolore ma
exercitation ullamco laboris nisi
dolor in reprehenderit in volunta
Excepteur sint occaecat cupiditat
anim id est laborum.

- List Item 1
- List Item 2
- List Item 3
- List Item 4

Ordered list

```
<ol>
    <li>List Item 1</li>
    <li>List Item 2</li>
    <li>List Item 3</li>
    <li>List Item 4</li>
</ol>
</body>
```

dolor in reprehenderit
Excepteur sint occaec
anim id est laborum.

- List Item 1
 - List Item 2
 - List Item 3
 - List Item 4
- ↳
1. List Item 1
 2. List Item 2
 3. List Item 3
 4. List Item 4

Tables

```
<!-- Table -->
<table>
    <thead>
        <tr>
            <th>Name</th>
            <th>Email</th>
            <th>Age</th>
        </tr>
    </thead>
    <tbody>
        <tr>
            <td>John Doe</td>
            <td>john.doe@example.com</td>
            <td>30</td>
        </tr>
    </tbody>
</table>
```

Name Email Age

3. List Item 3
4. List Item 4

```

<tbody>
  <tr>
    <td>Brad Traversy</td>
    <td>brad@something.com</td>
    <td>35</td>
  </tr>
  <tr>
    <td>John Doe</td>
    <td>jdoe@something.com</td>
    <td>45</td>
  </tr>
  <tr>
    <td>Sara Williams</td>
    <td>sara@something.com</td>
    <td>25</td>
  </tr>
</tbody>

```

| Name | Email | Age |
|---------------|--------------------|-----|
| Brad Traversy | brad@something.com | 35 |
| John Doe | jdoe@something.com | 45 |
| Sara Williams | sara@something.com | 25 |

Forms

```

<!-- Forms -->
<form action="process.php" method="POST">
  <label>First Name</label>
  <input type="text" name="firstName">

  <label>Last Name</label>
  <input type="text" name="lastName">
</form>

```

- List Item 4
- 1. List Item 1
- 2. List Item 2
- 3. List Item 3
- 4. List Item 4

| Name | Email | Age |
|---------------|--------------------|-----|
| Brad Traversy | brad@something.com | 35 |
| John Doe | jdoe@something.com | 45 |
| Sara Williams | sara@something.com | 25 |

First Name Last Name

*** labels and inputs are inline and why they are on the same line

<divs> are block ... so:

```
<!-- Forms -->
<form action="process.php" method="POST">
    <div>
        <label>First Name</label>
        <input type="text" name="firstName">
    </div>
    <br>
    <div>
        <label>Last Name</label>
        <input type="text" name="lastName">
    </div>
    <br>
    <div>
        <label>Email</label>      Email
        <input type="text" name="email">
    </div>
</form>
```

Excepteur sint occaecat cupidatat non proident, mollit anim id est laborum.

- List Item 1
- List Item 2
- List Item 3
- List Item 4

1. List Item 1
2. List Item 2
3. List Item 3
4. List Item 4

| Name | Email | Age |
|---------------|--------------------|-----|
| Brad Traversy | brad@something.com | 35 |
| John Doe | jdoe@something.com | 45 |
| Sara Williams | sara@something.com | 25 |

First Name

Last Name

Other inputs

```
<div>
    <label>Message</label>
    <textarea name="message"></textarea>
</div>
<br>
<div>
    <label>Gender</label>
    <select name="gender">
        <option value="male">Male</option>
        <option value="female">Female</option>
        <option value="other">Other</option>
    </select>
</div>
</form>
```

1. List Item 1
2. List Item 2
3. List Item 3
4. List Item 4

| Name | Email | Age |
|---------------|--------------------|-----|
| Brad Traversy | brad@something.com | 35 |
| John Doe | jdoe@something.com | 45 |
| Sara Williams | sara@something.com | 25 |

First Name

Last Name

Email

Message

Gender

Numbers and Dates

```

<br>
<div>
    <label>Age:</label>
    <input type="number" name="age"
        value="30">
</div>
<br>
<div>
    <label>Birthday:</label>
    <input type="date" name="birthday"
        >
</div>
<br>
<rm>

```

4. List Item 4

| Name | Email | Age |
|---------------|--------------------|-----|
| Brad Traversy | brad@something.com | 35 |
| John Doe | jdoe@something.com | 45 |
| Sara Williams | sara@something.com | 25 |

First Name

Last Name

Email July 2017 ▾

| | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|
| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
| 25 | 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 |

Message

Gender M

Age: 32

Birthday: mm/dd/yyyy ▾ ▾

Placeholders

```

<div>
    <label>First Name</label>
    <input type="text" name="firstName"
        placeholder="Enter first name">
</div>
<br>
<div>

```

4. List Item 4

| Name | Email | Age |
|---------------|--------------------|-----|
| Brad Traversy | brad@something.com | 35 |
| John Doe | jdoe@something.com | 45 |
| Sara Williams | sara@something.com | 25 |

First Name Enter first name

Last Name

Email

Message

Gender Male

Age: 30

Birthday: mm/dd/yyyy

Submit button

```

<input type="submit" name="submit"
    value="Submit">
>

```

```
</div>
```

Last Name

Email

Message

Gender Male

Age: 30

Birthday: mm/dd/yyyy

Buttons outside of a form

```
<!-- Button -->
<button>Click Me</button>
```



*** the button cannot do anything unless we use javascript to handle the click event

```
<!-- Button -->
<button |click="someFunction">Click Me</button>
```

Images (self closing tag)

```
<!-- Image -->

```



*** placed the image into a sub folder called 'images'

```
<!-- Image -->

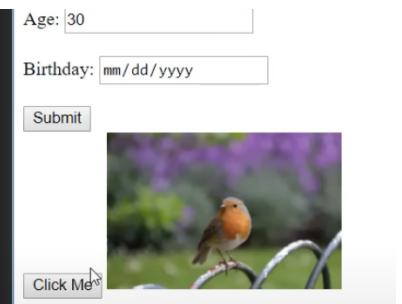
```



Changing the width and height

```
<!-- Image -->


<div style="margin-top:500px"></div>
<body>
```



*** images are inline

You can have the image as a link (in this example - we are making the link point to the image which then opens the image into the browser!!!

```
<!-- Image -->
<a href="images/sample.jpg">
  
</a>
```



Quotations

Blockquote (the citation is shown in the source code)

```
<!-- Quotations -->
<blockquote cite="http://traversymedia.com">
  Lorem ipsum dolor sit amet, consectetur
  adipisicing elit, sed do eiusmod
  tempor incididunt ut labore et dolore
  magna aliqua. Ut enim ad minim veniam,
  quis nostrud exercitation ullamco laboris
  nisi ut aliquip ex ea commodo
  consequat. Duis aute irure dolor in
  reprehenderit in voluptate velit esse
  cillum dolore eu fugiat nulla pariatur.
  Excepteur sint occaecat cupidatat non
  proident, sunt in culpa qui officia
  deserunt mollit anim id est laborum.
</blockquote>
```

```
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
```

```
</div>
<br>
<input type="submit" name="submit" value="Submit">

</form>

<!-- Button -->
<button>Click Me</button>

<br>

<!-- Image -->
<a href="images/sample.jpg">
  
</a>

<!-- Quotations -->
<blockquote cite="http://traversymedia.com">
  Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed
  do eiusmod
  tempor incididunt ut labore et dolore magna aliqua. Ut enim
  ad minim veniam,
  quis nostrud exercitation ullamco laboris nisi ut aliquip ex
  ea commodo
  consequat. Duis aute irure dolor in reprehenderit in
  voluptate velit esse
  cillum dolore eu fugiat nulla pariatur. Excepteur sint
  occaecat cupidatat non
  proident, sunt in culpa qui officia deserunt mollit anim id
  est laborum.
</blockquote>
```

```
<div style="margin-top:500px"></div>
```

Abbr (when you hover over it it shoulds the title text)

```
<p>The <abbr title="World Wide Web">WWW</abbr>
  is awesome</p>
```

velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

The WWW is awesome
World Wide Web

Cite (it makes it italicized)

```
<p><cite>HTML crash course</cite> by Brad
Traversy</p>
```

The WWW is awesome

HTML crash course by Brad Traversy

Semantic Tags (used to structure your document better)

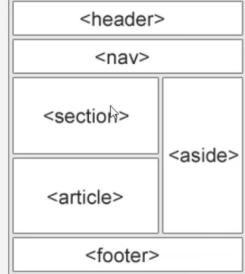
HTML5

Semantic

Tags

A semantic element clearly describes its meaning to both the browser and the developer.

```
<header></header>
<footer></footer>
<aside></aside>
<main></main>
<article></article>
<nav></nav>
<section></section>
<details></details>
```



*** in vscode .. type **html:5** then tab and it will create a html document as follows

```
<> blog.html > ...
1   <!DOCTYPE html>
2   <html lang="en">
3   <head>
4     <meta charset="UTF-8">
5     <meta http-equiv="X-UA-Compatible" content="IE=edge">
6     <meta name="viewport" content="width=device-width, initial-scale=1.0">
7     <title>Document</title>
8   </head>
9   <body>
10
11  </body>
12  </html>
```

Using Semantic Tags

```
<body>

    <header></header>
    <section>
        <article></article>
        <article></article>
        <article></article>
    </section>

    <aside>
        <nav>
            <ul>
                <li></li>
                <li></li>
                <li></li>
            </ul>
        </nav>
    </aside>

    <footer></footer>

</body>
```

Example content

```

<header><h1>My Blog</h1></header>
<section>
  <article>
    <h3>Blog One</h3>
    <p>Lorem ipsum dolor, sit amet consectetur adipisicing elit. Ips...
    <a href="fullblog.html">Read More</a>
  </article>
  <article></article>
  <article></article>
</section>

```

My Blog

Blog One

Lorem ipsum dolor, sit amet consectetur.

[Read More](#)

•
•
•

Add two other articles

```

<header><h1>My Blog</h1></header>
<section>
  <article>
    <h3>Blog One</h3>
    <p>Lorem ipsum dolor, sit amet consectetur adipisicing elit. Ips...
    <a href="fullblog.html">Read More</a>
  </article>
  <article>
    <h3>Blog Two</h3>
    <p>Lorem ipsum dolor, sit amet consectetur adipisicing elit. Ips...
    <a href="fullblog.html">Read More</a>
  </article>
  <article>
    <h3>Blog Three</h3>
    <p>Lorem ipsum dolor, sit amet consectetur adipisicing elit. Ips...
    <a href="fullblog.html">Read More</a>
  </article>
</section>

```

My Blog

Blog One

Lorem ipsum dolor, sit amet cons

[Read More](#)

Blog Two

Lorem ipsum dolor, sit amet cons

[Read More](#)

Blog Three

Lorem ipsum dolor, sit amet cons

[Read More](#)

•
•
•

Adding the aside and the footer

```

<aside>
  <nav>
    <h3>Categories</h3>
    <ul>
      <li>Category One</li>
      <li>Category Two</li>
      <li>Category Three</li>
    </ul>
  </nav>
</aside>

<footer>Copyright &copy;2023 Allan Levsen</footer>

```

Categories

- Category One
- Category Two
- Category Three

Copyright ©2023 Allan Levsen

Final version... yes, it's ugly and the semantic tags didn't do anything... they are there to help organize the content and help when we add CSS styling