Web Programming #2 HTML

Herman Kabetta, M.T.

hermanka.github.io

- HTML stands for HyperText Markup Language.

- HTML is the skeleton of all web pages. It's often the first language learned by marketers and designers and is core to front-end development work.

- HTML provides structure to the content appearing on a website, such as images, text, or videos. Right-click on any page on the internet, choose "Inspect," and you'll see HTML in a panel of your screen.

- You can layer HTML with CSS and JavaScript to create visually compelling and dynamic websites

More tags :
https://w3schools.com/tags/

Headings

```
1 ▾ <body>
2 ▾     <h1>The Brown Bear</h1>
3 ▾     <h2>About Brown Bears</h2>
4 ▾     <h3>Species Features Habitat</h3>
5 ▾     <h4>Countries with Large Brown Bear Populations</h4>
6 ▾     <h5>Countries with Small Brown Bear Populations</h5>
7 ▾     <h6>Countries with Mini Brown Bear Populations</h6>
8   </body>
```

Division

```
 1    <body>
 2        <h1>The Brown Bear</h1>
 3        <div>
 4            <h2>About Brown Bears</h2>
 5            <h3>Species</h3>
 6            <h3>Features</h3>
 7        </div>
 8        <div>
 9            <h2>Habitat</h2>
10            <h3>Countries with Large Brown Bear Populations</h3>
11            <h3>Countries with Small Brown Bear Populations</h3>
12        </div>
13        <div><h2>Media</h2></div>
14    </body>
```

```html
 1 ▼ <body>
 2 ▼    <h1>The Brown Bear</h1>
 3 ▼    <div id="introduction">
 4 ▼        <h2>About Brown Bears</h2>
 5 ▼        <h3>Species</h3>
 6 ▼        <h3>Features</h3>
 7          </div>
 8 ▼    <div id="habitat">
 9 ▼        <h2>Habitat</h2>
10 ▼        <h3>Countries with Large Brown Bear Populations</h3>
11 ▼        <h3>Countries with Small Brown Bear Populations</h3>
12          </div>
13 ▼    <div id="media">
14 ▼        <h2>Media</h2>
15          </div>
16     </body>
```

`<div id="introduction">`

Attribute Name

Attribute Value

More attrbutes :
https://developer.mozilla.org/en-US/docs/Web/HTML/Attributes

```
3    <div id="introduction">
4        <h2>About Brown Bears</h2>
5        <p>The brown bear (Ursus arctos) is native to parts of
    northern Eurasia and North America. Its conservation status
    is currently Least Concern. There are many subspecies within
    the brown bear species, including the Atlas bear and the
    Himalayan brown bear.</p>
6        <h3>Species</h3>
7        <h3>Features</h3>
8        <p>Brown bears are not always completely brown. Some can
    be reddish or yellowish. They have very large, curved claws
    and huge paws. Male brown bears are often 30% larger than
    female brown bears. They can range from 5 feet to 9 feet from
    head to toe.</p>
9    </div>
```

```
1  ▼  <body>
2  ▼     <h1>The Brown Bear <em>Ursus arctos</em></h1>
3  ▼     <div id="introduction">
4  ▼        <h2>About Brown Bears</h2>
5  ▼        <strong>Least Concern</strong>
6  ▶        <p>•••</p>
7  ▼        <h3>Species</h3>
8  ▼        <h3>Features</h3>
9  ▶        <p>•••</p>
10         </div>
11 ▶     <div id="habitat">•••</div>
17 ▼     <div id="media">
18 ▼        <h2>Media</h2>
19         </div>
20      </body>
21
```

<b> - Bold text

<strong> - Important text

<i> - Italic text

<em> - Emphasized text

<mark> - Marked text

<small> - Small text

<del> - Deleted text

<ins> - Inserted text

<sub> - Subscript text

<sup> - Superscript text

```
1  <body>
2      <h1>The Brown Bear</h1>
3      <div id="introduction">
4          <h2>About Brown Bears</h2>
5          <p>The brown bear (<em>Ursus arctos</em>) is native to
   parts of northern Eurasia and North America. Its conservation
   status is currently <strong>Least Concern</strong>.<br><br>
   There are many subspecies within the brown bear species,
   including the Atlas bear and the Himalayan brown bear.</p>
```

```html
6    <h3>Species</h3>
7    <ul>
8        <li>Arctos</li>
9        <li>Collarus</li>
10       <li>Horribilis</li>
11       <li>Nelsoni (extinct)</li>
12   </ul>
```

```
18    <h3>Countries with Large Brown Bear Populations</h3>
19    <ol>
20        <li>Russia</li>
21        <li>United States</li>
22        <li>Canada</li>
23    </ol>
```

Gabungan List

- Spanish
    1. uno
    2. dos
    3. tres
- Japanese
    1. ichi
    2. ni
    3. san

Images

```
27   <div id="media">
28      <h2>Media</h2>
29      <img src="image_brownbear.jpg" alt="Brown Bear"/>
30   </div>
```

```
27    <div id="media">
28        <h2>Media</h2>
29        <img src="image_brownbear.jpg" alt="A Brown Bear"/>
30        <video src="vid_brown-bear.mp4" width="320" height="240"
      controls>Video not supported</video>
31    </div>
```

```
1    <!DOCTYPE html>
2    <html>
3      <head>
4        <title>Brown Bears</title>
5      </head>
6      <body>
7        <h1>The Brown Bear</h1>
8        <div id="introduction">···</div>
22       <div id="habitat">···</div>
33       <div id="media">···</div>
38     </body>
39   </html>
```

```
 9    <h2>About Brown Bears</h2>
10    <p>...</p>
11    <a href="https://en.wikipedia.org/wiki/Brown_bear">Learn More</a>
```

```
<a href="https://en.wikipedia.org/wiki/Brown_bear" target="_blank">
  Learn More</a>
```

```
 8 ▼ <body>
 9 ▼     <a href="./index.html">Brown Bear</a>
10 ▼     <a href="./aboutme.html">About Me</a>
11 ▼     <h1>The Brown Bear</h1>
```

- Bagaimana cara membuat sebuah gambar menjadi link yang dapat di klik.

Comments

```
<!-- This is a comment that the browser will
not display. -->
```

```
18   <table>
19     <tr>
20       <th>Company Name</th>
21       <th>Number of Items to Ship</th>
22       <th>Next Action</th>
23     </tr>
24     <tr>
25       <td>Adam's Greenworks</td>
26       <td>14</td>
27       <td>Package Items</td>
28     </tr>
29   </table>
```

```
 5      <style>
 6
 7          table {
 8              border-collapse: collapse;
 9          }
10          table, th, td {
11              border: 1px solid black;
12              padding: 5px;
13          }
14
15      </style>
```

place inside <head>

```
27  ▼    <table>

28  ▼    <tr>

29  ▼        <th>Monday</th>

30  ▼        <th>Tuesday</th>

31  ▼        <th rowspan="2">Wednesday</th>

32       </tr>

33  ▼    <tr>

34  ▼        <td colspan="2">Out of Town</td>

35       </tr>

36     </table>
```

Monday	Tuesday	Wednesday
Out of Town		

Hero		Nemesis
A1	A2	AB
B1	B2	

```html
<table>
  <thead>
    <tr>
        <th>Quarter</th>
        <th>Revenue</th>
        <th>Costs</th>
    </tr>
  </thead>
  <tbody>
    <tr>
        <th>Q1</th>
        <td>$10M</td>
        <td>$7.5M</td>
    </tr>
    <tr>
        <th>Q2</th>
        <td>$12M</td>
        <td>$5M</td>
    </tr>
  </tbody>
  <tfoot>
    <tr>
        <th>Total</th>
        <td>$22M</td>
        <td>$12.5M</td>
    </tr>
  </tfoot>
</table>
```

Forms

```html
<form>
  First name:<br>
  <input type="text" name="firstname"><br>
  Last name:<br>
  <input type="text" name="lastname"><br>
  <input type="radio" name="gender"> Male
  <input type="radio" name="gender"> Female<br>
  <textarea name="message" rows="5" cols="22">The cat was playing in the garden.</textarea><br>
  <select name="cars">
    <option value="volvo">Volvo</option>
    <option value="saab">Saab</option>
    <option value="fiat">Fiat</option>
    <option value="audi">Audi</option>
  </select>
  <br><br>
  <input type="submit" value="Submit">
</form>
```
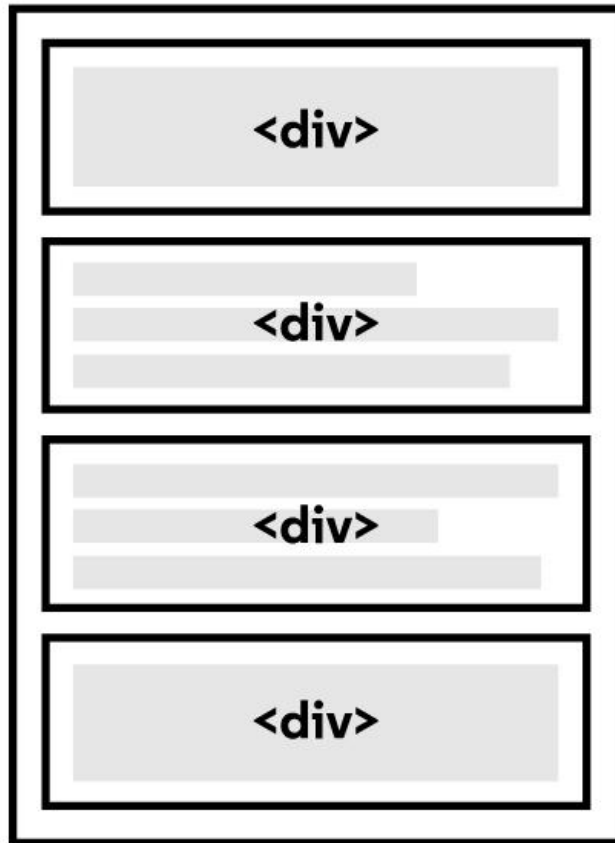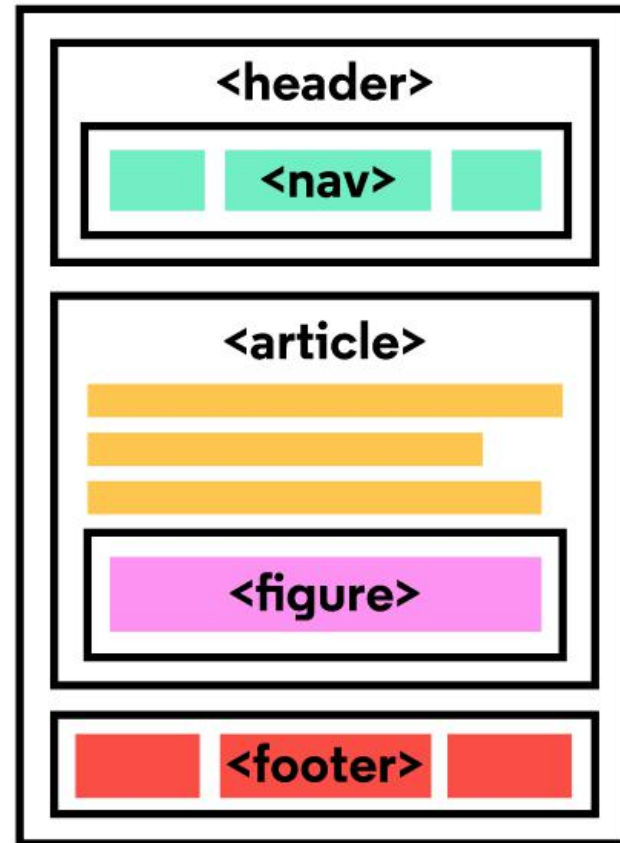
First name:

Last name:

◉ Male ◯ Female

The cat was playing in the garden.

Volvo ▼

Submit

Non-Semantic

<div>

<div>

<div>

<div>

Semantic

<header>

<nav>

<article>

<figure>

<footer>

The word semantic means "relating to meaning,"
so semantic elements provide information about the content
between the opening and closing tags.

Why use Semantic HTML?

- **Accessibility**: Semantic HTML makes webpages accessible for mobile devices and for people with disabilities as well. This is because screen readers and browsers are able to interpret the code better.

- **SEO**: It improves the website SEO, or Search Engine Optimization, which is the process of increasing the number of people that visit your webpage. With better SEO, search engines are better able to identify the content of your website and weight the most important content appropriately.

- **Easy to Understand**: Semantic HTML also makes the website's source code easier to read for other web developers.

Semantic HTML: Header & Nav

```html
1    <!DOCTYPE html>
2    <html>
3      <body>
4        <div id="header">                          <header>
5          <h1>Navigational Links</h1>
6          <div id="nav">                           <nav>
7            <ul>
8              <li><a href="#home">Home</a></li>
9              <li><a href="#posts">Posts</a></li>
10             <li><a href="#contact">Contact</a></li>
11           </ul>
12         </div>
13       </div>
14     </body>
15   </html>
```

```
1    <!DOCTYPE html>
2    <html>
3      <body>
4        <header>
5          <h1>Navigational Links</h1>
6          <nav>
7            <ul>
8              <li><a href="#home">Home</a></li>
9              <li><a href="#posts">Posts</a></li>
10             <li><a href="#contact">Contact</a></li>
11           </ul>
12         </nav>
13       </header>
14     </body>
15   </html>
```

Semantic HTML: Main & Footer

```html
1   <!DOCTYPE html>
2   <html>
3     <body>
4       <header>
5         <h1>Navigational Links</h1>
6         <nav>
7           <ul>
8             <li><a href="#home">Home</a></li>
9             <li><a href="#posts">Posts</a></li>
10            <li><a href="#contact">Contact</a></li>
11          </ul>
12        </nav>
13      </header>
14      <main>
15        <p>This is where the main content will go once the page is built out!</p>
16      </main>
17
18      <footer>
19        <p>Contact me at +1 234 567 8910 </p>
20      </footer>
21
22    </body>
23  </html>
```

```
15    <main>
16      <section>
17        <article>
18          <h2>Facts About Dogs</h2>
19          <p>
20            Dogs have a sense of time. It's been proven that they know the difference between a
      hour and five. If conditioned to, they can predict future events, such as regular walk times.
21          </p>
22        </article>
23        <aside>
24          <p>A study was conducted on dogs being away from their owners for varying hours and
      the studies show that dogs who were away from their owners the longest showed the greatest
      amount of affection!
25          </p>
26        </aside>
27      </section>
28    </main>
```

```
<figure>
   <img src="dogimage.jpeg"/>
   <figcaption>A cute dog.</figcaption>
</figure>
```