

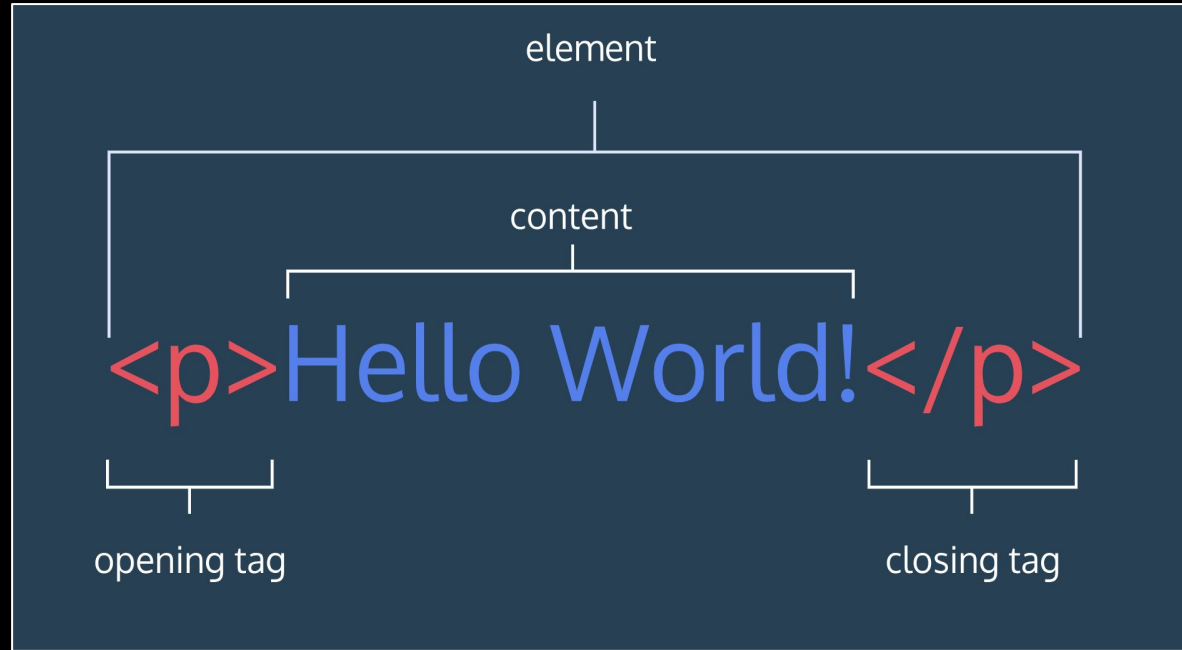
< HTML >

# It's a markup language

but not programming language

Used to tell **browser** how to **structure** web pages

# HTML element anatomy



# HTML document structure

index.html

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4    <meta charset="UTF-8" />
5    <title>My web page title</title>
6  </head>
7  <body>
8    <h1>My first heading</h1>
9    <p>My first paragraph</p>
10 </body>
11 </html>
```

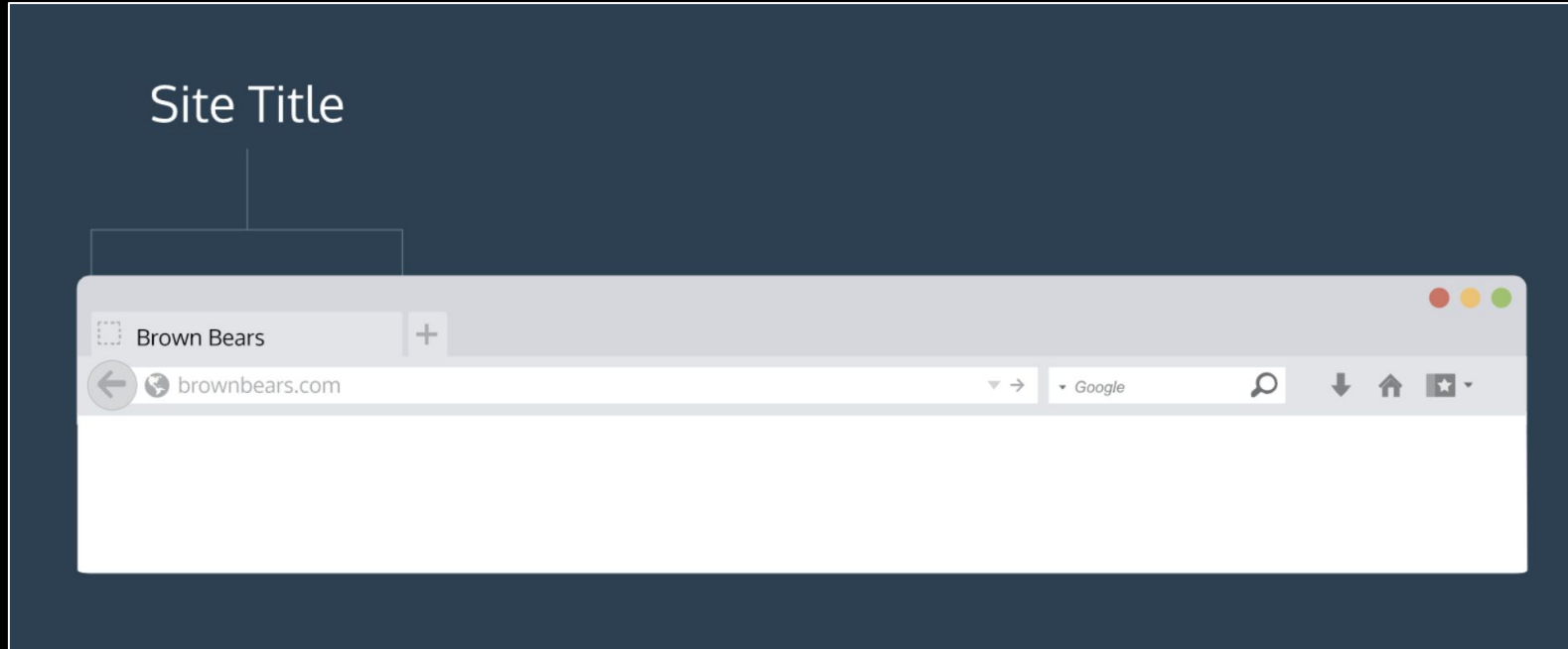


https://localhost/

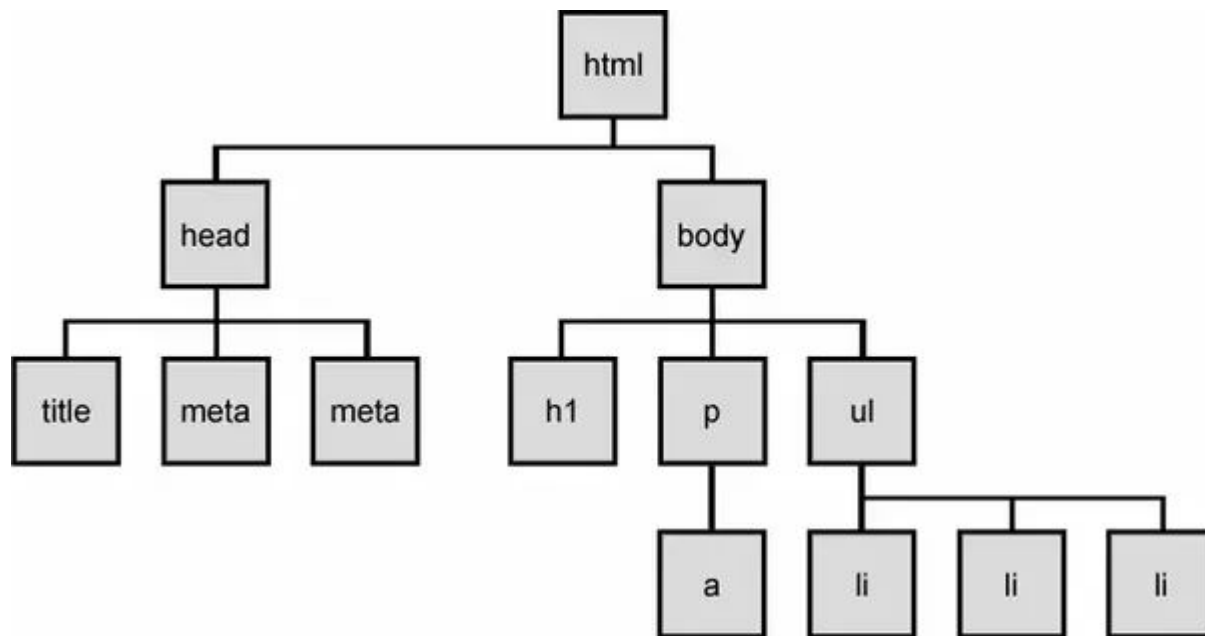
## My first heading

My first paragraph

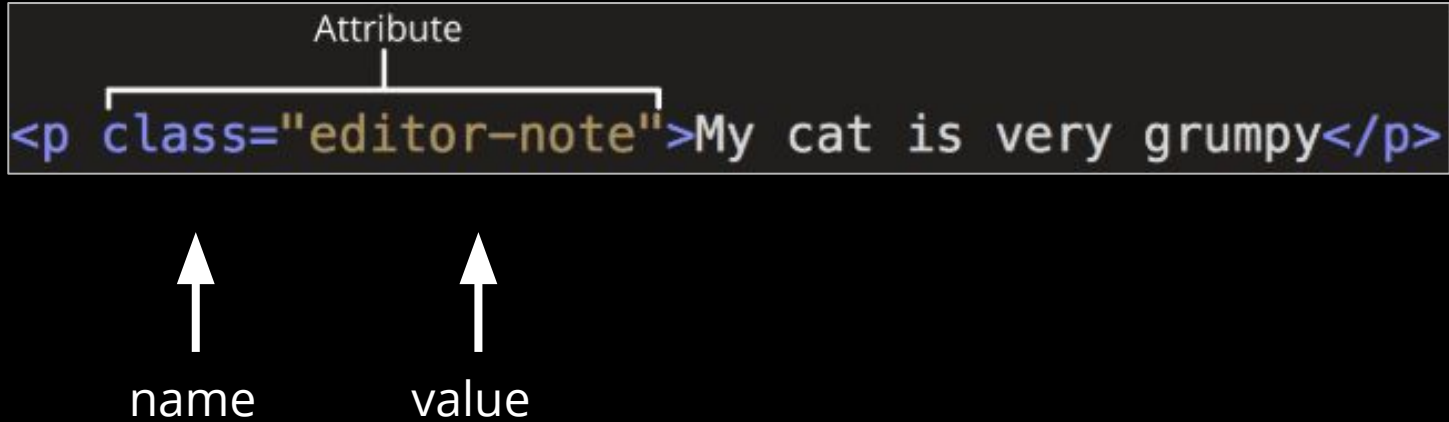
# HTML document structure



# DOM



# Attributes



# Headings



index.html



```
1 ▾ <h1>My first heading</h1>
2 ▾ <h2>My second heading</h2>
3 ▾ <h3>My third heading</h3>
4 ▾ <h4>My fourth heading</h4>
5 ▾ <h5>My fifth heading</h5>
6 ▾ <h6>My sixth heading</h6>
```



https://localhost/



# My first heading

## My second heading

### My third heading

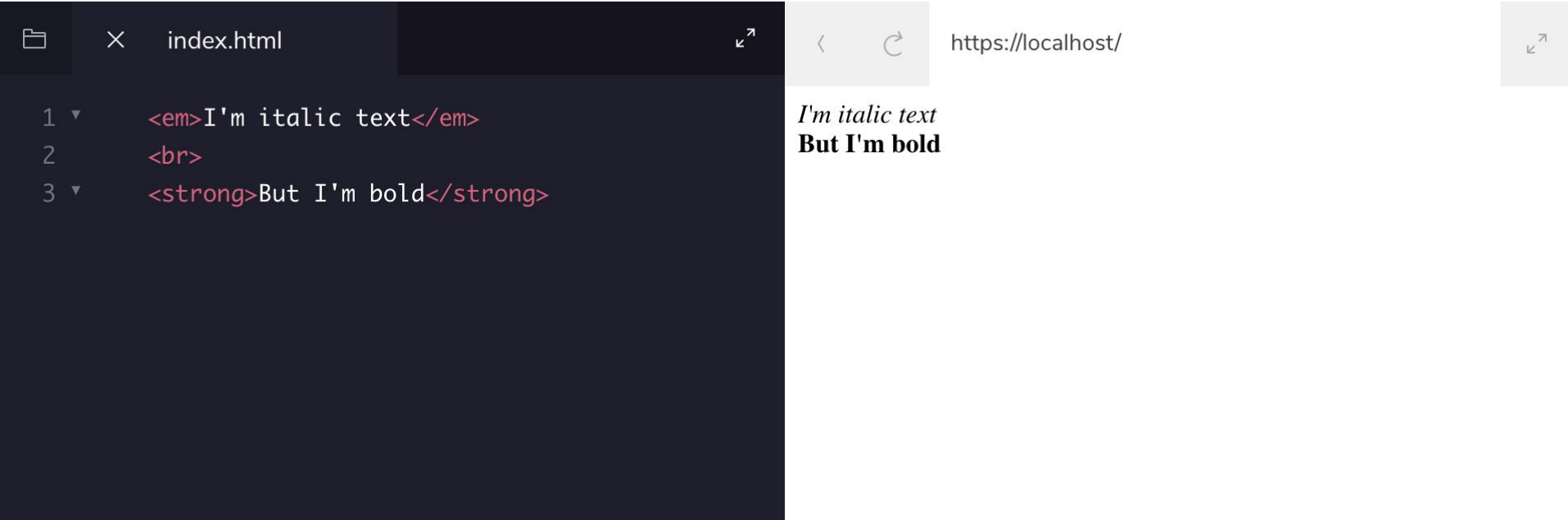
#### My fourth heading

##### My fifth heading

###### My sixth heading



# Text styling



The image shows a side-by-side comparison of HTML code and its rendered output. On the left, a code editor window titled 'index.html' displays three lines of HTML code. On the right, a web browser window shows the rendered result of this code. The browser's address bar indicates the page is loaded from 'https://localhost/'. The rendered text consists of two lines: the first line is italicized, and the second line is bold.

```
1 <em>I'm italic text</em>  
2 <br>  
3 <strong>But I'm bold</strong>
```

*I'm italic text*  
**But I'm bold**

# Divs

index.html

```
1 <body>
2   <div>
3     <h1>Why use divs?</h1>
4     <p>Great for grouping elements!</p>
5   </div>
6 </body>
```

https://localhost/

## Why use divs?

Great for grouping elements!

# Categories of HTML elements

## Display: inline

display: inline	display:
inline	display: inline

## Display: block

display: block
display: block
display: block
display: block

## Display: inline-block

display: inline-block	display: inline-block	display: inline-block
-----------------------	-----------------------	-----------------------

## Block `<div>`

- they will appear on a new line from whatever content went before it, and any content that goes after it will also appear on a new line
- paragraphs, lists, navigation menus, footers etc.

## Inline `<span>`

- they will not cause a new line to appear in the document
- surrounds only small parts of the document's content, not entire paragraphs; they would normally appear inside a paragraph of text
- `<a>` (hyperlink), emphasis elements (`<em>`, `<strong>`)

# Comments

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

# Lists (unordered)

index.html

```
1 <ul>
2   <li>Limes</li>
3   <li>Tortillas</li>
4   <li>Chicken</li>
5 </ul>
```

https://localhost/

- Limes
- Tortillas
- Chicken

# Lists (ordered)

index.html

```
1 <ol>
2   <li>Preheat the oven to 350 degrees.</li>
3   <li>Mix whole wheat flour, baking soda, and
    salt.</li>
4   <li>Cream the butter, sugar in separate bowl.
    </li>
5   <li>Add eggs and vanilla extract to bowl.</li>
6 </ol>
```

https://localhost/

1. Preheat the oven to 350 degrees.
2. Mix whole wheat flour, baking soda, and salt.
3. Cream the butter, sugar in separate bowl.
4. Add eggs and vanilla extract to bowl.

# Images



index.html



```
1 
```

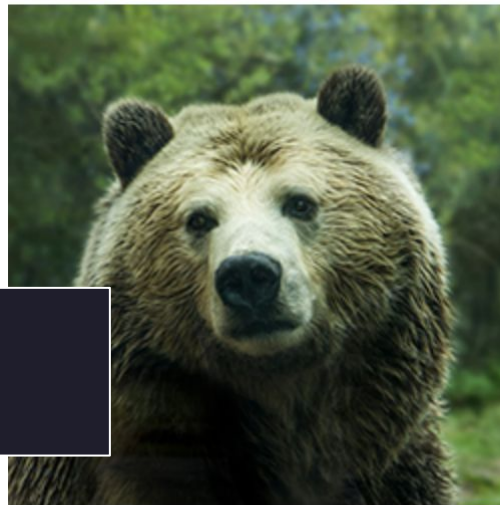
2

```

```



https://localhost/



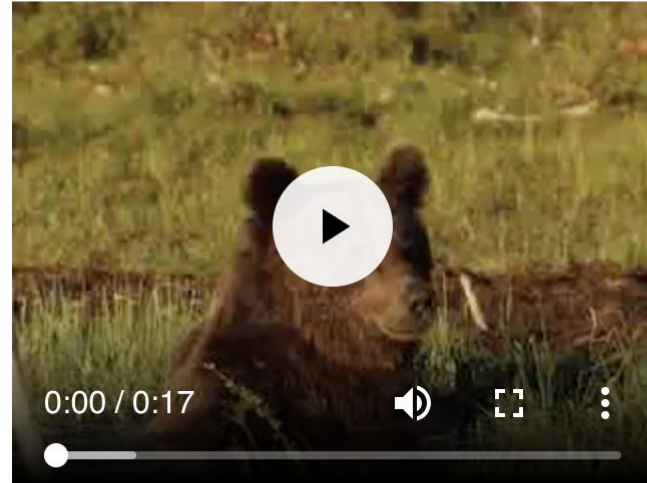


# Videos

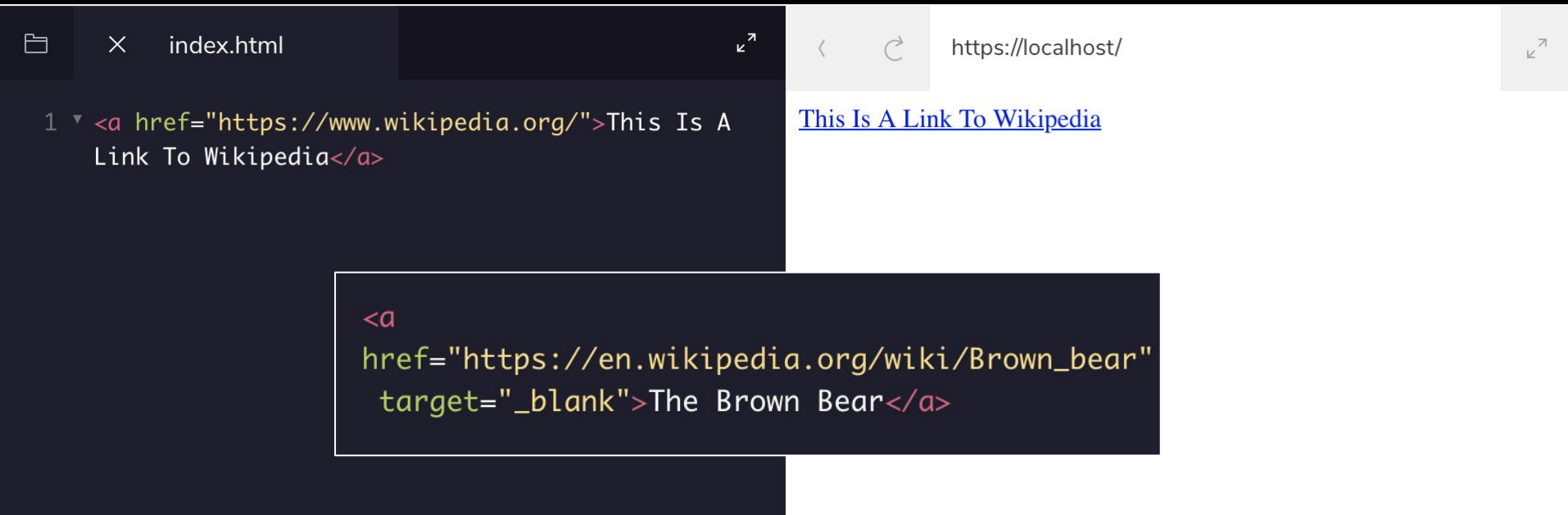
index.html

```
1 <video src="https://s3.amazonaws.com/codecademy-  
content/courses/freelance-1/unit-1/lesson-  
2/htmlcss1-vid_brown-bear.mp4  
2 " width="320" height="240" controls>  
3   Video not supported  
4 </video>
```

https://localhost/



# Linking to external page



The image shows a web browser window with a dark theme. The address bar displays 'https://localhost/'. The main content area shows a blue underlined link 'This Is A Link To Wikipedia'. A code editor on the left shows the HTML code for the link. A callout box highlights a more specific link example.

```
1 <a href="https://www.wikipedia.org/">This Is A  
  Link To Wikipedia</a>
```

```
<a  
  href="https://en.wikipedia.org/wiki/Brown_bear"  
  target="_blank">The Brown Bear</a>
```

# Linking to relative path

The image shows a web browser window with the address bar displaying `https://localhost/`. The browser tab is labeled `index.html`. The page content shows a blue underlined link labeled `Contact`. In the background, a code editor shows the HTML code for the link: `<a href='./contact.html'>Contact</a>`. A dark overlay box in the bottom right corner shows a directory structure:

```
project-folder/  
|-- about.html  
|-- contact.html  
|-- index.html
```

# Linking to same page

index.html

```
1 <ol>
2   <li><a href="#top">Top</a></li>
3   <li><a href="#bottom">Bottom</a></li>
4 </ol>
5
6 <p id="top">This is the top of the page!</p>
7 <h1 id="bottom">This is the bottom! </h1>
```

https://localhost/

1. [Top](#)
2. [Bottom](#)

This is the top of the page!

## This is the bottom!

# Tables

`<table>`

`<tr>` row `<td>` cell (data)

`<th>` header

`<tbody>` `<thead>` `<tfoot>`

`colspan` `rowspan` attributes

# Tables

```
index.html
1 <table>
2   <thead>
3     <tr>
4       <th>Quarter</th>
5       <th>Revenue</th>
6     </tr>
7   </thead>
8   <tbody>
9     <tr>
10      <th>Q1</th>
11      <td>$10M</td>
12    </tr>
13    <tr>
14      <th>Q2</th>
15      <td>$12M</td>
16    </tr>
17  </tbody>
18  <tfoot>
19    <tr>
20      <th>Total</th>
21      <td>$22M</td>
22    </tr>
23  </tfoot>
24 </table>
```

## Quarter Revenue

**Q1** \$10M

**Q2** \$12M

**Total** \$22M

# Forms elements

`<form>` action, method (attributes)

`<input>` type, name, value (attributes)

`<select>` `<option>`

`<textarea>`

`<fieldset>` `<legend>`

Personal information:

First name:

Mickey

Last name:

Mouse

Submit

# Forms name attribute

Each input field must have a name attribute to be submitted.

If the name attribute is omitted, the data of that input field will not be sent at all.

```
1 <input type="text"  
2   name="lastname"  
3   value="Mouse"/>
```



# Forms input types

`<input type = "text">`

`<input type = "radio">`

`<input type = "checkbox">`

`<input type = "button">`

`<input type = "password">`

`<input type = "submit">`

☒ Male  
☐ Female  
☐ Other

First name:

Mickey

Last name:

Mouse

Click Me!

Submit

☐ I have a bike

☐ I have a car

# Forms **input** attributes

## **action**

- specifies the URL of a file that will process the input control when the form is submitted
- overrides the action attribute of the <form> element
- is used with **type="submit"** and **type="image"**

# Forms **input** attributes

**list** - refers to a `<datalist>` with pre-defined options for an `<input>` element

index.html

```
1 <input list="browsers">
2
3 <datalist id="browsers">
4   <option value="Internet Explorer"/>
5   <option value="Firefox"/>
6   <option value="Chrome"/>
7   <option value="Opera"/>
8   <option value="Safari"/>
9 </datalist>
```

< > https://localhost/ ↗

Internet Explorer

Firefox

Chrome

Opera

Safari

# Forms **input** attributes

**value** - attribute specifies the **initial value** for an input field

**disabled** - specifies that the input field is **disabled**

**size** - specifies the size (**in characters**) for the input field

**maxlength** - specifies the **maximum allowed length** for the input field

**placeholder** - specifies a **hint** that describes the expected value

**required** - specifies that an input field **must be filled** out before submitting

# Forms

## GET

- The default method when submitting form data
- Visible in the page address field
- Appends form-data into the URL in name/value pairs

## POST

- If the form data contains sensitive or personal information
- Does not display the submitted form data in the page address field.

```
/action_page.php?firstname=Mickey&lastname=Mouse
```

# Responsive Web Design



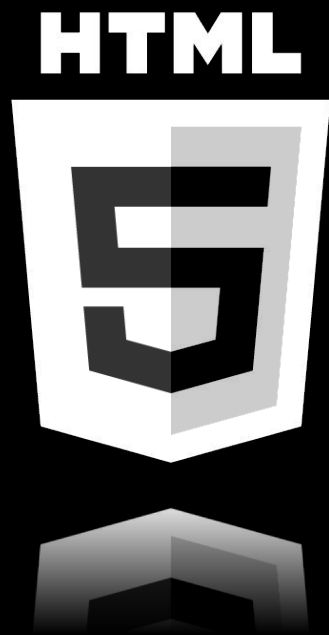
`<meta name="viewport" content="width=device-width, initial-scale=1.0">`

Without the viewport meta tag:



With the viewport meta tag:







# HTML5 API's

HTML Geolocation

HTML Drag and Drop

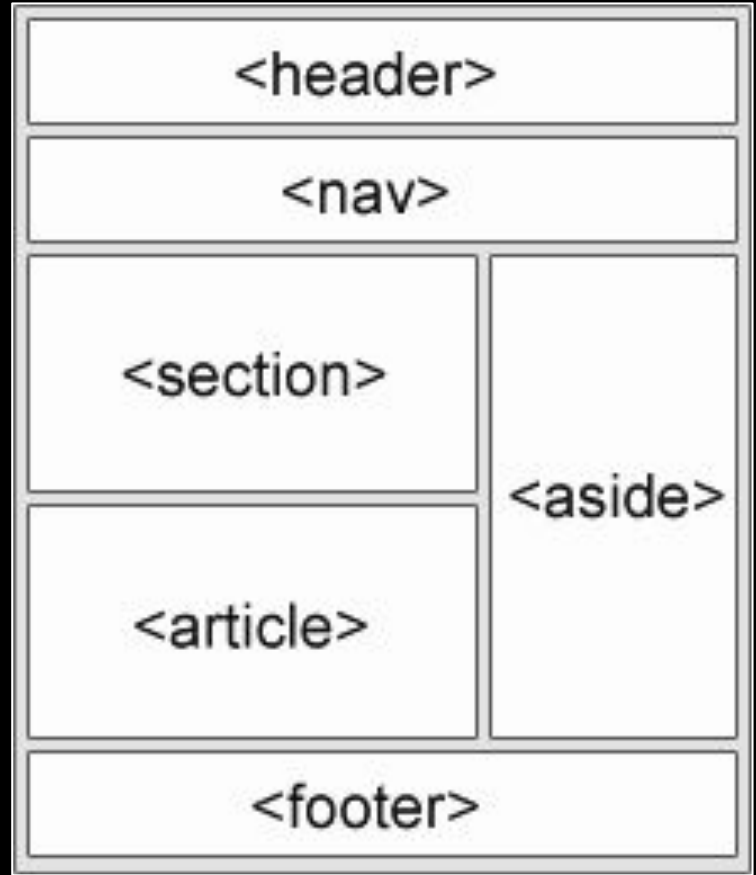
HTML Local Storage

HTML Application Cache

HTML Web Workers

HTML SSE

# Semantic elements



# Debugging

DevTools - wejit.jitsolutions.pl/employees/nicole.dix

Elements Console Sources Network Performance Memory Application Security Audits >>

Styles Computed Event Listeners >>

Filter :hov .cls +

element.style { }

div { *user agent stylesheet*  
**display: block;** }

Inherited from body

body { *<style>...</style>*  
background-color: #f2f2f2;  
font-family: Roboto, sans-serif;  
margin: 0; }

margin -  
border -  
padding -  
1903 x 2639.880

```
<!doctype html>
<html lang="pl">
  <head>...</head>
  <body cz-shortcut-listen="true">
    <noscript>...</noscript>
    <div id="app">
      <div class="container">
        <div class="_1SpZaD5xC-UXyQ_5eFkwvI">
          <nav class="_1woHHuEzstoTwv58Ft7D-B">...</nav>
          <div class="notifications-wrapper"></div>
          <div>...</div>
        </div>
      </div>
      <script type="text/javascript" src="/app.bundle.js?e0e9068..."></script>
      <style>...</style>
      <div>...</div>
      <div>...</div>
      <script type="text/javascript" src="chrome-extension://aalpplilappfakpmdfdkppndnhpgifn/build/installHook.js"></script>
    </body>
  </html>
```

html body div#app div.container div.\_1SpZaD5xC-UXyQ\_5eFkwvI div

Console What's New x Search

Highlights from the Chrome 70 update

Live Expressions in the Console  
Pin expressions to the top of the Console to monitor their values in real-time.

Highlight DOM nodes during Eager Evaluation

# Workshop #1

First page

navigation and postcards list

# Workshop #2

Second page

postcards share form