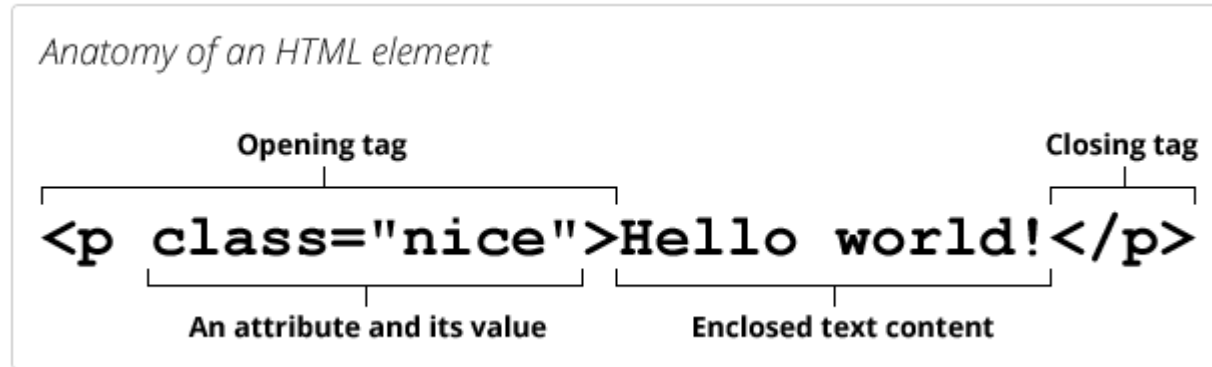


HTML

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HTML

HTML document consists of series of **elements**



Text content can be empty – **empty element**

Element may contain other elements – **nested element**

All HTML pages should have Page Title

```
<!DOCTYPE html>
<html>
<head>
  <title>My first web page</title>
</head>
<body>
  This is my first web page
</body>
</html>
```

Head element contains info about the page

Does not appear on the browser window

Title will be seen on the tab/title bar, bookmark

Paragraph

```
<!DOCTYPE html>
<html>
<head>
  <title>My first web page</title>
</head>
<body>
  This is my first web page
  How exciting
</body>
</html>
```

Does not appear as it is typed

Browsers ignore additional white spaces

 - italics

 - bold

 - line break; don't overuse

Paragraph

```
<!DOCTYPE html>
<html>
<head>
  <title>My first web page</title>
</head>
<body>
  <p>This is my first web page</p>
  <p>How exciting</p>
</body>
</html>
```

Use <p> tag for separate paragraphs

Heading

```
<body>  
  <h1>My first web page</h1>  
  
  <h2>What this is</h2>  
  <p>A simple page put together using HTML</p>  
  
  <h2>Why this is</h2>  
  <p>To learn HTML</p>  
</body>
```

h1 to h6 are for headings

Use h1 only once

h2-h6 can be used many times, but follow hierarchical order

Lists

Unordered list - bulleted

Ordered list - numbered

Use to list items

Lists can be nested

Link

```
<h2>Where to find the tutorial</h2>  
<p><a href="http://www.htmldog.com">HTML Dog</a></p>
```

Anchor tag <a> used to create link

The link can be absolute or relative to the current page

Link could be to any resource on the web

Link can be somewhere in the same page. Use id attribute

```
<h2 id="moss">Moss</h2>
```

```
<a href="#moss">Go to moss</a>
```


Images

```

```

src can be absolute or relative to the current page

Width and height attributes are necessary

Otherwise, browser will calculate the size while the images loads

Which makes the layout of the page to jump while loading

Alt attribute is for accessibility

Image can be turned into a link

Div and Span

```
<div id="scissors">  
  <p>This is <span class="paper">crazy</span></p>  
</div>
```

Unlike other tags, span and div apply no meaning

Used to group chunk of html

Mostly with attributes such as class and/or id

div is a block; span is inline

Table

```
<table>
  <tr>
    <td>Row 1, cell 1</td>
    <td>Row 1, cell 2</td>
    <td>Row 1, cell 3</td>
  </tr>
  <tr>
    <td>Row 2, cell 1</td>
    <td>Row 2, cell 2</td>
    <td>Row 2, cell 3</td>
  </tr>
</table>
```

The table element defines the table

The tr element defines a table row

The td element defines a data cell These must be enclosed in tr tags

Table – heading and span

`<th>` defines a header cell. Must be enclosed within `<tr>`

`colspan` spans across columns

`rowspan` across rows

```
<table>
  <tr>
    <th>Column 1 heading</th>
    <th>Column 2 heading</th>
    <th>Column 3 heading</th>
  </tr>
  <tr>
    <td>Row 2, cell 1</td>
    <td colspan="2">Row 2, cell 2, also spanning Row 2, cell 3</td>
  </tr>
  <tr>
    <td rowspan="2">Row 3, cell 1, also spanning Row 4, cell 1</td>
    <td>Row 3, cell 2</td>
    <td>Row 3, cell 3</td>
  </tr>
  <tr>
    <td>Row 4, cell 2</td>
    <td>Row 4, cell 3</td>
  </tr>
</table>
```

Web forms

One of the main points of interaction between a user and a webApp

Forms allow users to enter data,

- generally sent to a web server for processing and storage
- Or used on the client-side to immediately update the interface in some way

Forms – collect data from the user

`<form action="destination" method="post">`

`<input type="text" value="enter here">` or `<input>` is a standard textbox

`<input type="password">` is like the textbox, but typed characters are hidden

`<input type="checkbox" checked>` is a checkbox, toggled on and off

`<input type="radio">` is like a checkbox but can only select one radio button in a group. This can also have a checked attribute

`<input type="submit" value="submit">` is a button that when selected will submit the form

`<textarea rows="5" cols="20">`Large multiline textbox`</textarea>`

Select – creates a dropdown list

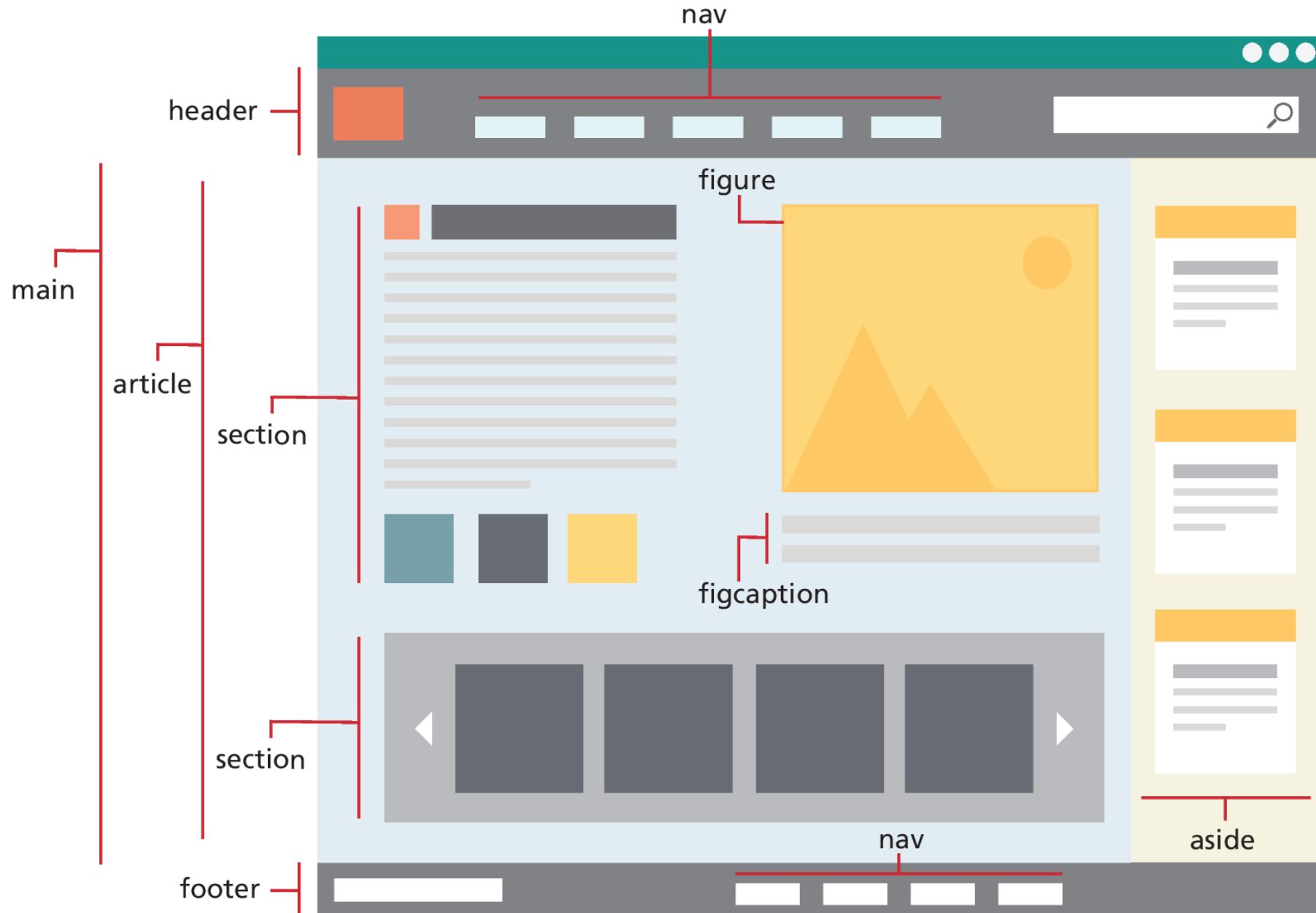
```
<select>
  <option>Option 1</option>
  <option>Option 2</option>
  <option value="third option">Option 3</option>
</select>
```

Value of selected option is sent when the form is submitted

Text between <option> tag will be sent unless value attribute is specified

HTML 5 Semantic elements to structure a page

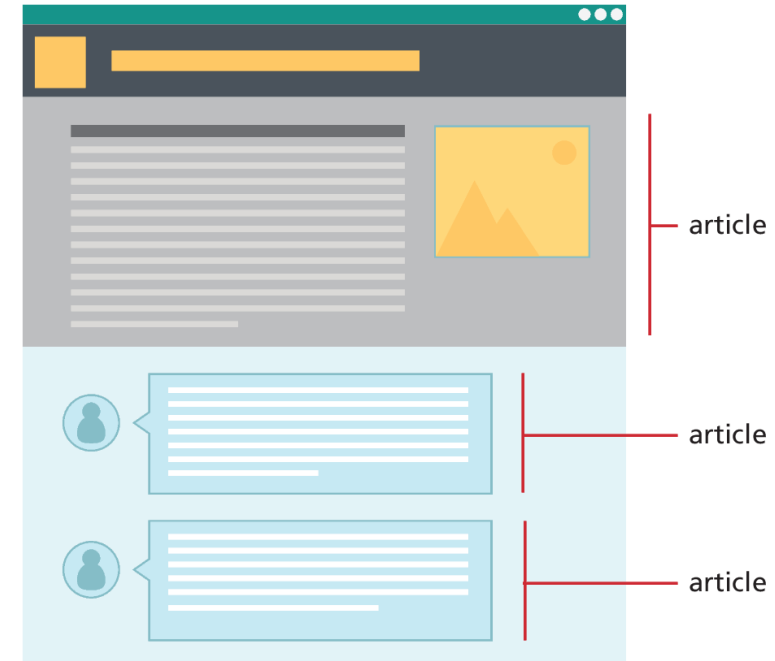
- <header>
- <nav>
- <main>
- <article>
- <section>
- <figure>
- <figcaption>
- <aside>
- <footer>



Using semantic elements

Semantic elements do not apply any special presentation giving them great flexibility

Article and section, for instance, can be used in many ways when designing your website



Meta

Represents HTML meta data

Has many types

If the charset attribute is set, the `<meta>` element is a charset declaration, giving the character encoding in which the document is encoded

Debugging your HTML

Browsers are permissive with syntax errors

Use the browser's DOM inspector

Validate your HTML using <https://validator.w3.org/>

Sources

1. [MDN Web docs - HTML](#)
2. Fundamentals of Web Development. 3rd Edition by Randy Connolly and Ricardo Hoar.
3. [`https://htmldog.com/guides/html/`](https://htmldog.com/guides/html/)