New HTML5 semantic elements

We will elaborate on selected semantic elements in detail in the next unit.

Semantic Element	Description	Example
\<header\>	Introduction for the whole page or individual sections, article, nav, aside elements. Typically contains site name, logo, navigation. Does not have to be at the beginning of page.	\<header\> \<h1\>The Importance of Being Earnest\</h1\> \<h3\>A Quest for Truth and Beauty\</h3\> \<p\>The play was written in 1895 by playwright Oscar Wilde\</p\> \</header\>
\<footer\>	Includes typical footer information like authoring, copyrights, contact information and a footer menu.	\<footer\> \<p\>Written by: Oscar Wilde\</p\> \<p\>Contact information: \<a href="mailto:oscar@wilde.com"\> oscar@wilde.com\</a\>.\</p\> \</footer\>
\<nav\>	Navigation links for the document. A page can have more than one \<nav\> element like table of contents, horizontal navigation in header and footer navigation.	\<nav\>\<ol\> \<li\>\<a href="/act1/"\>Act 1\</a\>\</li\> \<li\>\<a href="/act2/"\>Act 2\</a\>\</li\> \<li\>\<a href="/act3/"\>Act 3\</a\>\</li\> \</ol\>\</nav\>
\<section\>	Defines sections in a document like chapters, headers, etc. Typically used on content that cannot make sense on its own.	\<section\> \<h1\>Act 1 - Scene 1\</h1\> \<p\>Set in the morning room of Algy's flat in Half Moon Street\</p\> \</section\>
\<article\>	Used to define independent content that should make sense on its own outside of the document like newspaper articles, blog posts, etc.	\<article\> \<h1\>A blogger's analysis of this brilliant satire\</h1\> \<p\>This witty, sometimes conscious play is Wilde's playground to raise his progressive sentiments...\</p\> \</article\>
\<aside\>	Side content other than main content, like a	\<p\>Algernon's flat is luxuriously and

	sidebar. These are not considered as part of the main page outline.	artistically furnished</p> <aside> <h3>Algernon Moncrieff</h3> <p>A wealthy bachelor who lives in a fashionable part of London. He has a good sense of humor and utter lack of respect for society.</p> </aside>
<details> *see example below	A way to provide additional information that the user can show or hide. Contains that is shown to user by default. Other content is hidden and can be expanded to view.	<details> <summary>Cast Members</summary> George Washington as Algernon Moncrieff Ronald Reagan as John Worthing </details>
<figcaption> *see example below	Used to provide a caption (explanation) of an image. To be used within <figure>.	<figure> <img src="img_cast.jpg" alt="The Importance of Being Earnest Cast"> <figcaption>Fig1. - The cast hard at work at dress rehearsal before opening night</figcaption> </figure>
<figure>	Contains an image and can be used to group with an image's caption	Refer to figcaption
<mark> *see example below	Defines a part of a text you want to highlight. The highlight styling is specified in CSS.	Lane: Yes sir. [<mark>Handing his master the sandwiches on a salver</mark>]
<summary>	Used within the <details> tag. Specifies the visible content. The rest of the content in details is shown/hidden by user.	<details> <summary>Cast Members</summary> George Washington as Algernon Moncrieff Ronald Reagan as John Worthing </details>

<DETAILS> ELEMENT

The `details` tag is very cool. It is used in conjunction with a nested `summary` tag and some other content. The result is that the `summary` is shown with a disclosure triangle alongside it, and the other content is initially hidden. By clicking the triangle, the other content is displayed to the user. This requires no JavaScript and is a simple way to get a powerful and desirable feature.
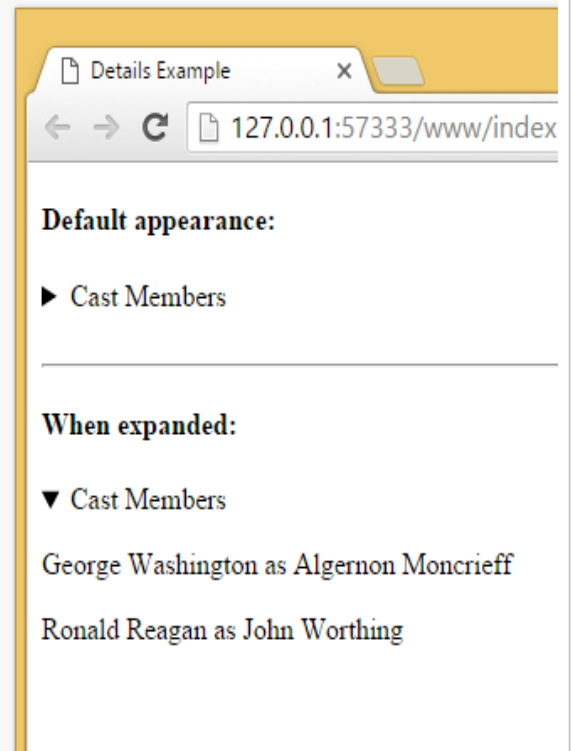
Below we see the HTML, and you can try it out for yourself! Note that the <details> tag only works in Chrome and Safari.

HTML	Result / Try It!

``html
1. <details>
2.   <summary>Cast Members</summary>
3.   George Washington as Algernon Moncrieff
4.   Ronald Reagan as John Worthing
5. </details>
``
	▶ Cast Members

```
1   <!DOCTYPE html>
2 ▼ <html>
3
4 ▼     <head>
5             <title>Details Example</title>
6       </head>
7
8 ▼     <body>
9
10            <h4>Default appearance:</h4>
11
12 ▼         <details>
13                <summary>Cast Members</summary>
14                <p>George Washington as Algernon Moncrieff</p>
15                <p>Ronald Reagan as John Worthing</p>
16            </details>
17
18            <br><hr>
19
20            <h4>When expanded:</h4>
21
22 ▼         <details>
23                <summary>Cast Members</summary>
24                <p>George Washington as Algernon Moncrieff</p>
25                <p>Ronald Reagan as John Worthing</p>
26            </details>
27
28      </body>
29
30  </html>
```

See also the current browser support (on caniuse).

<FIGCAPTION> ELEMENT

Used to provide a caption or explanation of the image (figure). While the alt attribute explains the image for assistive technology, <figcaption> can be used to provide additional information for all users.

```
1. <figure>
2.     <img src="img_cast.jpg" alt="The Importance of Being Earnest
   Cast">
3.     <figcaption>Fig1. - The cast hard at work at dress rehearsal
   before opening night</figcaption>
4. </figure>
```

Result:

Fig1. - The cast hard at work at dress rehearsal before opening night

<MARK> ELEMENT

This element is used to specify content that you want to highlight.

1. **<h3>**Lane: **</h3><p>**Yes sir. [**<mark>**Handing his master the sandwiches on a salver**</mark>**]**</p>**

DEVELOP   EMULATE ⓐ   TEST   DEBUG   PROFILE   BUILD

File   Edit   Find   View   Navigate   Help   www/index.html

```
1   <!DOCTYPE html>
2 ▼ <html>
3
4 ▼ <head>
5       <title>Mark Example</title>
6   </head>
7
8 ▼ <body>
9       <h3>Lane: </h3>
10 ▼     <p>Yes sir.
11          <mark>[Handing his master the sandwiches on a salver]</mark>
12      </p>
13  </body>
14
15  </html>
```

📄 Mark Example   ✕

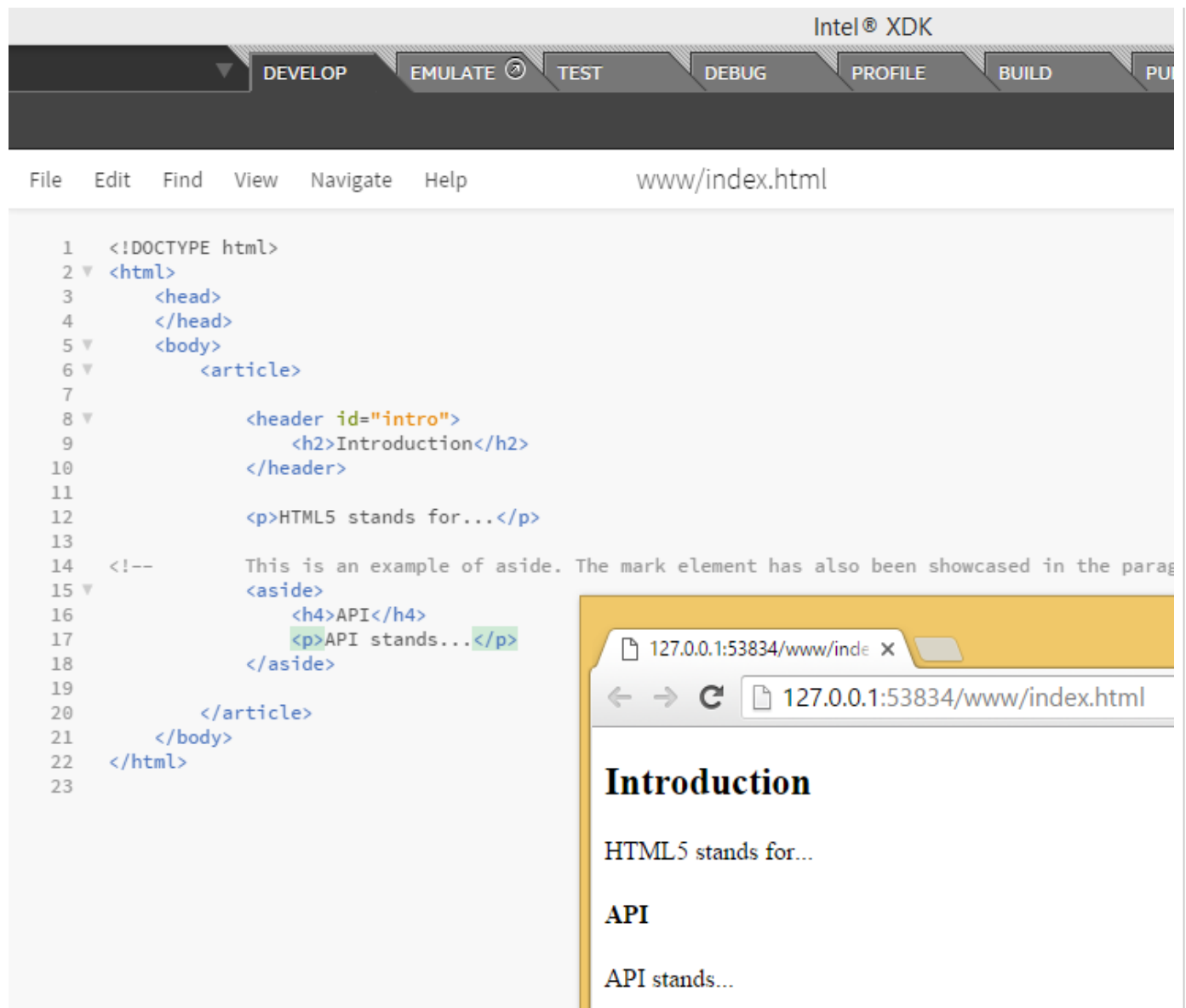← → C   📄 127.0.0.1:54667/www/index.html

Lane:

Yes sir. [Handing his master the sandwiches on a salver]

Most browsers will display mark element with a yellow background to black text by default, however, if it doesn't, you can specify the styling in CSS.

EFFECT OF SEMANTIC ELEMENTS

If you have had a chance to try the examples of the semantic elements discussed above, you will notice that semantic elements are not visually promising in general. Only a few semantic elements like <mark>, <em>, <strong> and <code> provide some kind of visual change to the document. The rest don't do anything except provide structure to your document.

A good example is <aside>. <aside> is used for side content other than main content, like a sidebar but it does not actually create a sidebar in your page. Sidebar is a user interface (UI) element and must be styled to achieve the look of a sidebar. The following code will only create structure to your document, not any visual change:

DEVELOP   EMULATE ⊘   TEST   DEBUG   PROFILE   BUILD   PU

File   Edit   Find   View   Navigate   Help   www/index.html

```
 1    <!DOCTYPE html>
 2 ▼  <html>
 3        <head>
 4        </head>
 5 ▼      <body>
 6 ▼          <article>
 7
 8 ▼              <header id="intro">
 9                    <h2>Introduction</h2>
10              </header>
11
12              <p>HTML5 stands for...</p>
13
14    <!--        This is an example of aside. The mark element has also been showcased in the parag
15 ▼          <aside>
16                  <h4>API</h4>
17                  <p>API stands...</p>
18              </aside>
19
20          </article>
21      </body>
22  </html>
23
```

127.0.0.1:53834/www/inde ✕

← → C 127.0.0.1:53834/www/index.html

Introduction

HTML5 stands for...

API

API stands...

LESSER KNOWN SEMANTIC ELEMENTS (OPTIONAL)

Note: This section is optional material included for the curious. It will not appear on any graded question.

We will look at a few more semantic elements that are commonly in use but lesser known.

Semantic Element	Description	Example
<code>	Used to represent short computer code in a sentence. It displays code in default monospace font.	For larger code snippets, you should use the <code>pre tag</code>.

<abbr>	Used to indicate the occurrence of an abbreviation.	<abbr title="Hypertext Markup Language">HTML</abbr>
 	Used to introduce a line break in your HTML document	<address> John Doe #123, Doe Villa Los Angeles, USA </address>
<hr>	Used to introduce a horizontal line in your HTML document	Hello <hr> World!

Apart from these, <address>, <cite>, <em>, <strong>, <p> and <blockquote> are also semantic elements.

Knowledge check 2.3.3 (not graded)

True of False? You are designing a Web page to store your grandmother's recipes. Each recipe should be enclosed in a section element.

- ○ True

- ○ False

?