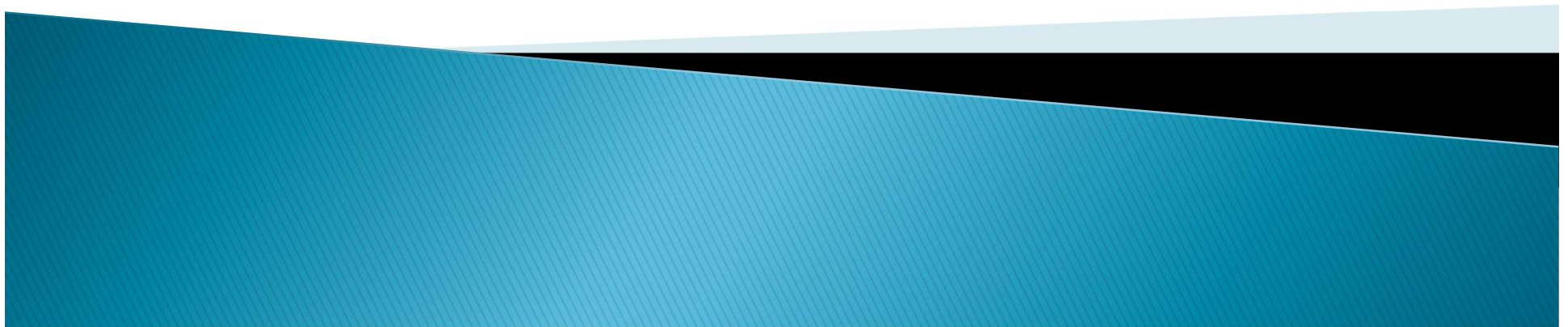


HTML5 Semantic Tags

By Dr Derek Peacock



What is new?

- ▶ **New Tags and attributes**
- ▶ **Native Video & Audio**
- ▶ **2D/3D Canvas with hardware support**
- ▶ **SVG**
- ▶ **Local storage and local SQL Databases**
- ▶ **Web workers and messaging**
- ▶ **Drag and Drop**
- ▶ **Geolocation**
- ▶ **New input types, and data validation**



Basic Block and Inline Tags



- ▶ `<div>` Division
- ▶ `<h1>` Headings
- ▶ `<p>` paragraphs
- ▶ ```` Lists
- ▶ `<table>`



- ▶ `<a>` hyperlinks
- ▶ `` images

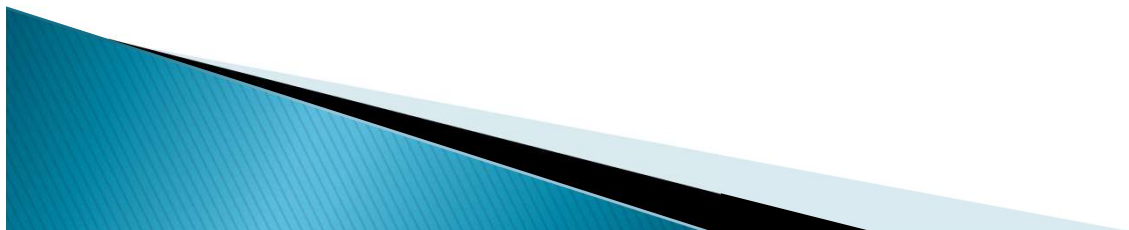


Dividing a Page into Blocks/Parts

```
<div>  
  <div>  
    <div>  
      <div>
```



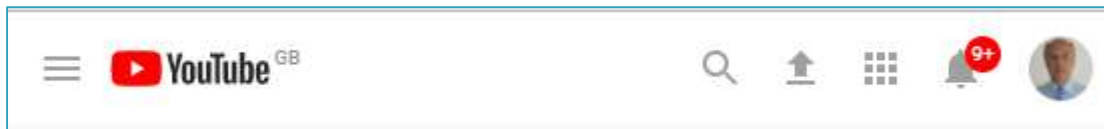
```
<main>  
  <section>  
    <article>  
      <header>
```



HTML5: <header>

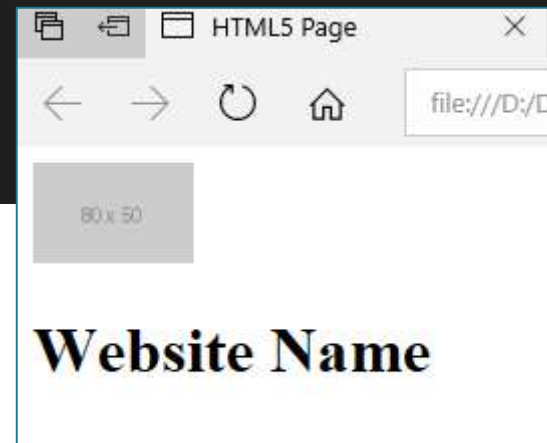
- ▶ The <header> tag is used to specify a header to the page or a part of the page.

```
<header>  
    
  <h1>Website Name</h1>  
</header>
```

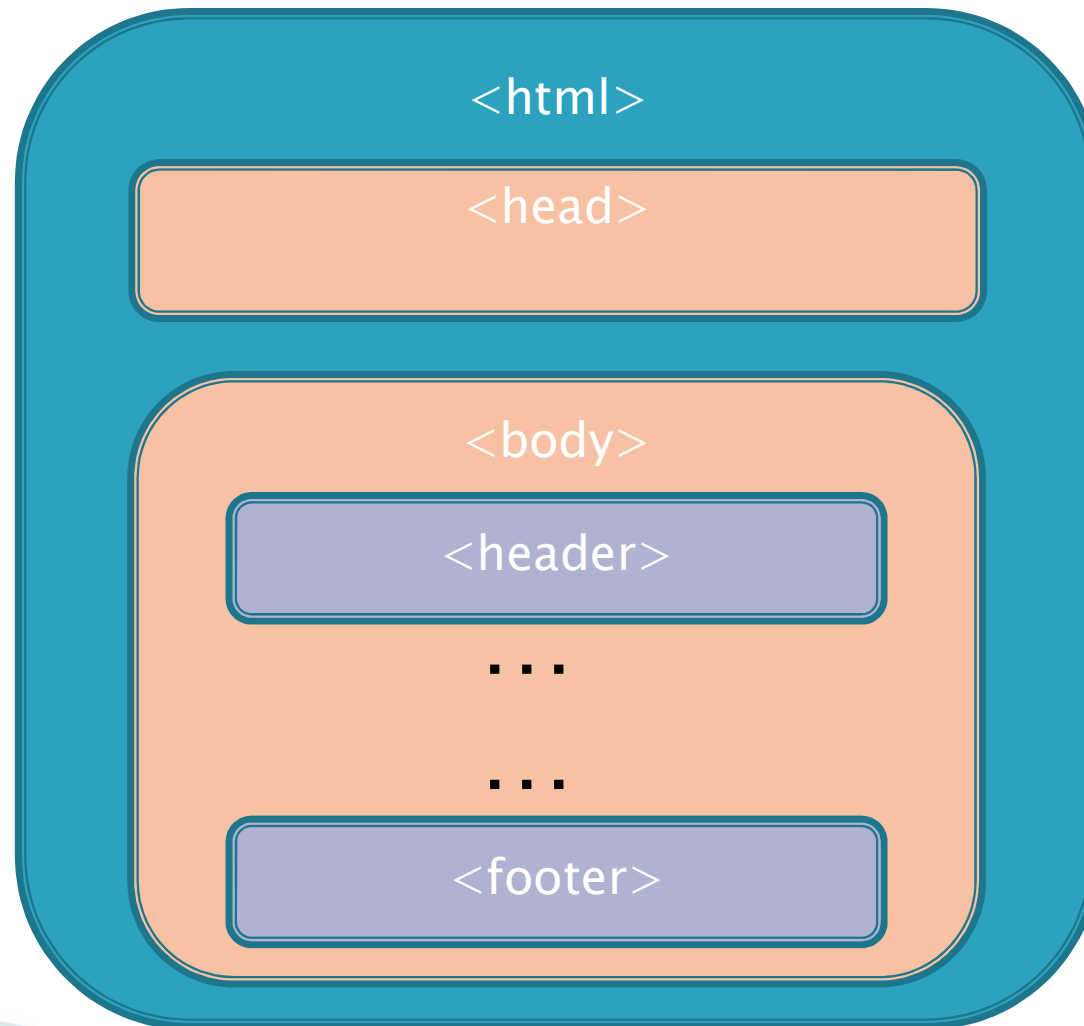


Header Code (repeated)

```
<!DOCTYPE html>
<html>
  <head>
    <meta http-equiv="Content-type" content="text/html;"
    <title>HTML5 Page</title>
  </head>
  <body>
    <header>
      
      <h1>Website Name</h1>
    </header>
  </body>
</html>
```

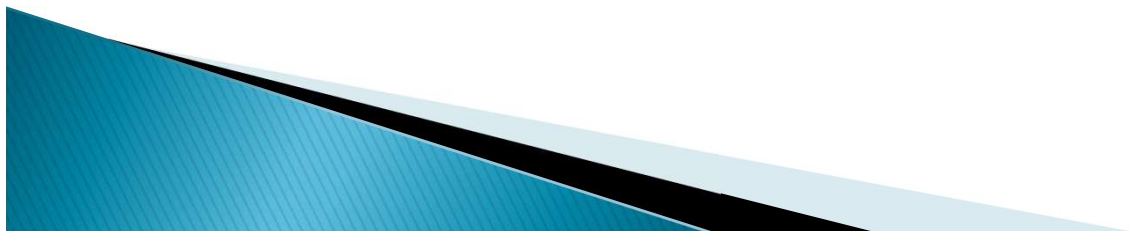
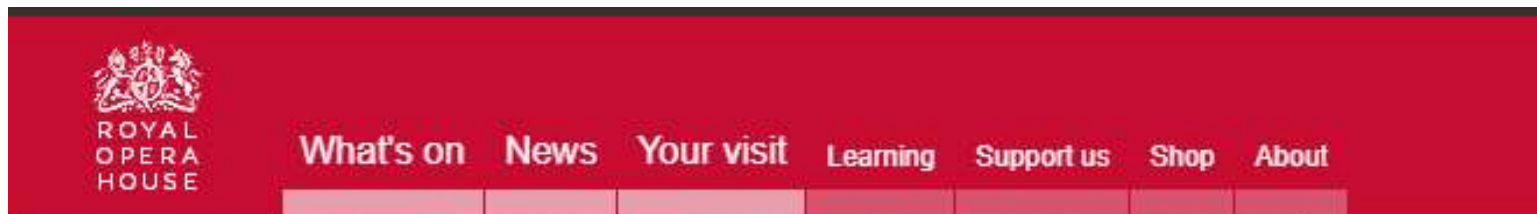


Page Structure



HTML5: <nav>

- ▶ The <nav> tag defines a main section of navigation links or a menu bar.
- ▶ Not all links of a document should be in a <nav> element.
- ▶ The <nav> element is intended only for major block of navigation links.



Website Menu (repeated)

```
<header>  
    
  <h1>Website Name</h1>  
  <nav>  
    <a href="#">Item 1</a>  
    <a href="#">Item 2</a>  
    <a href="#">Item 3</a>  
    <a href="#">Item 4</a>  
  </nav>  
</header>
```

80 x 50

Website Name

[Item 1](#) [Item 2](#) [Item 3](#) [Item 4](#)

HTML5: `<main>`

- ▶ This should enclose the main content of a web page.
- ▶ There should be only one main part of a web page.
- ▶ Should contain unique content only
- ▶ Cannot be part of section, article, header or footer



Main Content (unique)

```
</header>  
<main>  
  <h2>Apples are Wonderful</h2>  
  <p>  
    The apple is the fruit of Malus pumila,  
    a tree that grows in Asia, Europe and North America.  
  </p>  
</main>  
</body>
```

Website Name

[Item 1](#) [Item 2](#) [Item 3](#) [Item 4](#)

Apples are Wonderful

The apple is the fruit of Malus pumila, a tree that grows i



HTML5: <footer>

- ▶ The <footer> tag defines a footer for a document or section.
- ▶ A footer typically contains the author of the document, copyright information, links to terms of use, contact information, etc.
- ▶ Footers are typically placed at the bottom of a document. However, this is not required.
- ▶ A document/section can also have more than one footer



<footer> (repeated)

```
<footer>
  <p>Copyright &copy; Derek Peacock 2018</p>
  <p>
    <a href="link1">Link 1</a>
    <a href="link2">Link 2</a>
    <a href="link3">Link 3</a>
    <a href="link4">Link 4</a>
  <p>
</footer>
```

Website Name

[Item 1](#) [Item 2](#) [Item 3](#) [Item 4](#)

Apples are Wonderful

The apple is the fruit of *Malus pumila*, a tree that grows in

Copyright (2018) Derek Peacock

[Link 1](#) [Link 2](#) [Link 3](#) [Link 4](#)

HTML5: <section>

- ▶ The section element represents a generic section of a document or application.
- ▶ A section, in this context, is a thematic grouping of content, typically with a heading.



<section> example

Spot the mistake?

```
<main>
  <section>
    <h1>Where Apples Grow</h1>
    <p>
      The apple is the fruit of Malus pumila, a tree
    </p>
  </section>
  <section>
    <h2>How to Grow Apples</h2>
    <p>
      Lorem ipsum dolor sit amet, consectetur adipis
    </p>
  </section>
</main>
```

Where Apples Grow

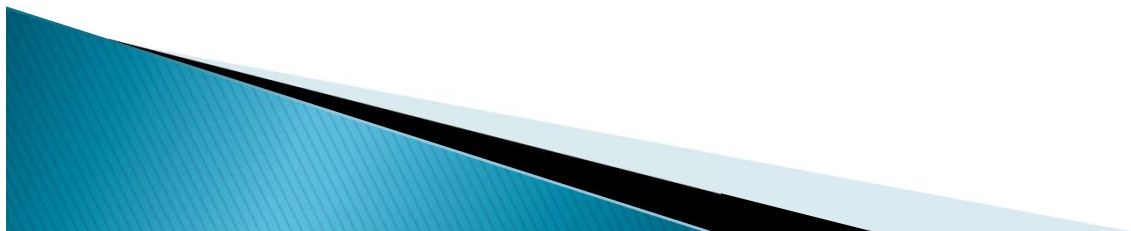
The apple is the fruit of Malus pumila, a tree that grows in

How to Grow Apples

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Fu

HTML5: <article>

- ▶ The <article> tag specifies independent, self-contained content.
- ▶ An article should make sense on its own and it should be possible to distribute it independently from the rest of the page/site.
- ▶ Articles can contain sections, and sections can contain articles



<article> example

```
<main>
  <article>
    <h2>Red Delicious</h2>
    <p>These bright red apples are the most common
    </p>
  </article>

  <article>
    <h2>Granny Smith</h2>
    <p>These juicy, green apples make a great filling
  </article>
</main>
```

Red Delicious

These bright red apples are the most common found in many

Granny Smith

These juicy, green apples make a great filling for apple pies.

<hgroup>

- ▶ The <hgroup> element is used to group a set of <h1> to <h6> elements, when a heading has multiple levels (sub headings).



<aside>

- ▶ The <aside> tag defines some content aside from the content it is placed in.
- ▶ The aside content should be related to the main content, but not essential.

```
<p>
  My family and I visited The Epcot
  centre this summer.
</p>
<aside>
  <h4>Epcot Centre</h4>
  <p>The Epcot Centre is a theme park
    in Disney World, Florida.
  </p>
</aside>
```

<address>

- ▶ The <address> tag defines the contact information for the author/owner of a document or an article.
- ▶ If the <address> element is inside the <body> element, it represents contact information for the document.
- ▶ If the <address> element is inside an <article> element, it represents contact information for that article.
- ▶ The text in the <address> element usually renders in *italic*. Most browsers will add a line break before and after the address element.



<address> example

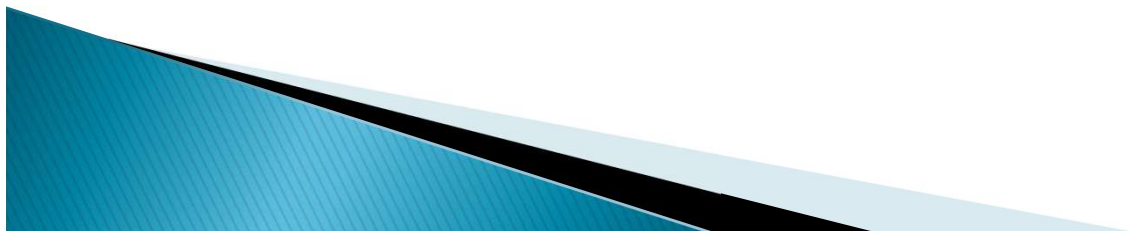
```
<footer>
  <address> For more details, contact
    <a href="mailto:js@example.com">John Smith</a>
  </address>
  <p>
    <small>&copy; copyright 2038 Example</small>
  </p>
</footer>
```



HTML5: <figure>

- ▶ The figure element can be used to annotate illustrations, diagrams, photos, code listings,.

```
<figure>  
    
  <figcaption>Some Image Caption</figcaption>  
</figure>
```



Ed Sheeran

- ▶ Create a suitable HTML structure for the example music page
- ▶ <http://www.edsheeran.com/music>
- ▶ using:-
 - <header><footer><nav><main><section>
 - <article> and
 - <video><button><a><p>
- ▶ DO NOT USE ANY <div>
- ▶ For help use W3Schools

