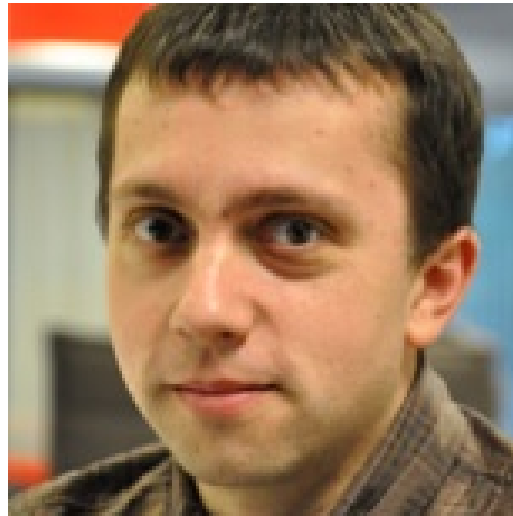# Practical HTML5

Creating a Site Using HTML5

Gill Cleeren

@gillcleeren

Outline

The end result of the course

HTML5 overview

Building the skeleton

Target of This Module

We'll have an understanding of what HTML5 is

We'll have created a couple of pages for our site

How Will You Learn in This Course?

What We Will Be Building

- Joe's Coffee Store
  - Home page
  - All available coffee overview
  - Coffee detail page
  - Add to cart/Shopping cart
  - Checkout page

Which Features Will We Use?

New elements and attributes	New form controls	Support for CSS3
Audio and video integration	Graphics using Canvas	SVG
Web storage	Drag and drop	Geolocation

Demo: Taking a Look at the Completed Site

JOE'S COFFEE STORE

Hello HTML5!

New version

No need for plugins

Cross platform

Designed by W3C and WHATWG

HTML5 Has Many New Features

New elements and attributes

New form controls

Support for CSS3

Graphics using Canvas

Audio and video integration

Web storage

Local file access

Offline support

Drag and drop support

Microdata

And a couple more!

HTML5 Has Many New Features

- Not really part of HTML5 but considered as part of it:
  - Web SQL database
  - Indexed Database API
  - File API
  - File Writer
  - Background workers
  - Geolocation
  - Web sockets
  - …

Building the Skeleton

Building the Skeleton

```
<!DOCTYPE html>
<html lang="en" xmlns="http://www.w3.org/1999/xhtml">
<head>
    <meta charset="utf-8" />
    <title>Joe's Coffee store</title>
    <script src="~/Scripts/jquery.min.js")"></script>
    <link href="styles.css" rel="stylesheet" type="text/css" />
</head>
<body>
    Content goes here
</body>
</html>
```

Updating to HTML5

In HTML4:

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN"
"http://www.w3.org/TR/html4/strict.dtd">
```

In HTML5:

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="UTF-8">
      <title>Joe's coffee store</title>
  </head>
  <body>

  ...
  </body>
</html>
```

Elements We Had in HTML Before

- <doctype>

- <a>

- <img>

- <p> (paragraph)

- <table>

- <div> (division)

- <span>

- &

- <object>

- <form>

- <input type="xyz">

- <font>

- <span>

- …

A full list is available at
http://www.w3schools.com/tags/default.asp

pluralsight

A div is just a div…

New Semantic Elements

Article	Header	Footer
Section	Address	Aside
Figure	Figcaption	Summary and Details
Nav	Audio and Video	Canvas

Header and Article

```
<article>

  <header>

    <h1>Joe's Coffee Store official opening</h1>

  </header>

  <p>On August 15 2014, Joe's Coffee Store officially opened!</p>

</article>
```

Joe's Coffee Store official opening

On August 15 2014, Joe's Coffee Store officially opened!

Footer

```
<footer>

  <p>Post written by: Joe</p>

  <p>Contact Joe via: <a href="mailto:joe@joescoffeestore.com">

    joe@joescoffeestore.com</a>.</p>

</footer>
```

Post written by: Joe

Contact Joe via: joe@joeccoffeestore.com.

Section

```
<section>
  <h1>Kenia Blend</h1>
  <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit.</p>
</section>
<section>
  <h1>Willow Blend</h1>
  <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit.</p>
</section>
```

Kenia Blend

Lorem ipsum dolor sit amet, consectetur adipiscing elit.

Willow Blend

Lorem ipsum dolor sit amet, consectetur adipiscing elit.

Address

```
<address>
  Written by <a href="mailto:joe@joescoffeestore.com">Joe</a>.<br>
  Visit us at:<br>
  New Blend Street<br>
  12345 Coffeeland<br>
  Belgium
</address>
```

Written by *Joe*.
Visit us at:
New Blend Street
12345 Coffeeland
Belgium

Aside

```html
<article>

    <header> <h1>Coffee makes the world go round</h1> </header>

    <p>Lorem ipsum dolor sit amet... </p>

    <aside>

        <q>Did you know that daily, 2.25B coffees are consumed?.</q>

    </aside>

    <p>Maecenas odio ipsum, … </p>

</article>
```

Coffee makes the world go round

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aliquam at pulvinar nibh. Nam porttitor tortor vel dui consectetur sollicitudin vel vel est. Curabitur sagittis diam a vulputate iaculis. Donec tellus purus, congue sit amet facilisis cursus, blandit sit amet ligula. Nam id elit congue, ornare ligula nec, fringilla lacus.

'Did you know that daily, 2.25B coffees are consumed?.'

Maecenas odio ipsum, egestas vitae nunc posuere, adipiscing gravida eros. Integer ac est justo. Cras sapien velit, ornare ac turpis vitae, sodales imperdiet tellus.

Figure and Figcaption

```html
<p>A cup of coffee is the start for the day for many of us.</p>
<figure>
  <img src="cup.jpg" alt="The Pulpit Rock" width="304" height="228">
  <figcaption>Fig.1 - A fresh cup.</figcaption>
</figure>
```


A cup of coffee is the start for the day for many of us.

Fig.1 - A fresh cup.

Summary and Details

```
<details>

<summary>What is Arabica Coffee.</summary>

<p>Coffee arabica is a species of Coffee originally </p>

</details>
```

Doesn't work in IE and FireFox!

▼ What is Arabica Coffee.

Coffea arabica is a species of Coffea originally indigenous to the mountains of the southwestern highlands of Ethiopia. It is also known as the "coffee shrub of Arabia", "mountain coffee" or "arabica coffee".

New Semantic Elements

- Inline elements
  - Mark
  - Meter
  - Progress
  - Output
  - Time

What's an inline again?

Mark

```
<p>Don't forget to order in time
    <mark>before our holiday closing!</mark>
 today.
</p>
```

Don't forget to order in time <mark>before our holiday closing!</mark> today.

Meter

```
<p>How strong is this coffee?</p>

<meter value="6" min="0" max="10">6 out of 10</meter>
```


How strong is this coffee?

Progress

```
Your order is almost ready... <br/>

We're here at the moment:

<progress value="75" max="100">

</progress>
```

Your order is almost ready...
We're here at the moment: [progress bar ~75%]

Time
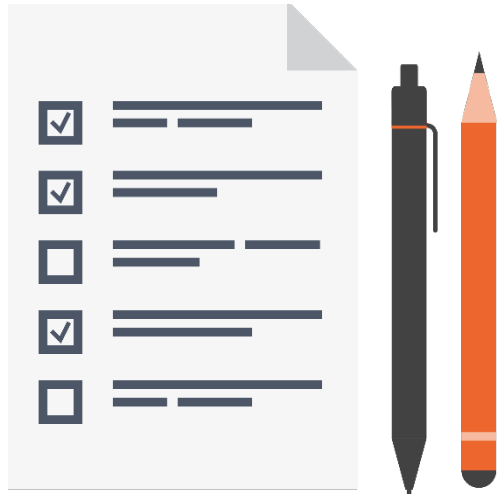
```
<p>Joe's Coffee Store, located in Blend Street,

is open every day from <time>10:00</time> .</p>

<p>Sorry but we are closed on <time datetime="2014-12-24">

 Christmas Eve</time>.</p>
```

Joe's Coffee Store, located in Blend Street, is open every day from 10:00 .

Sorry but we are closed on Christmas Eve.

Demo: Creating the Pages Using the New Elements

Image courtesy of Stirling Noyes on Flickr, used under Creative Commons license

Summary

HTML5 adds many new features

Many new tags add semantic meaning to elements on the page

Enables us to build cross-platform sites