

HTML5 and CSS3 Workshop



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WebVisions 2010
#wv2010



Agenda

9:00 – 12:00
HTML5

12:00 – 1:30
Lunch

1:30 – 4:30
CSS 3

4:30 – 5:00
Questions

Kimberly Blessing is a Web developer who has helped numerous organizations make successful transitions to Web standards.

Christopher Schmitt is an award-winning Web designer who has been working with the Web since 1993.

HTML5



Questions, Questions



- What is HTML5?
- Why do we need HTML5?
- Who came up with HTML5?
- **Can I use HTML5 now?**

Can I use HTML5 now?



“Implementors should be aware that this specification is not stable. Implementors who are not taking part in the discussions are likely to find the specification changing out from under them in incompatible ways.”

<http://www.w3.org/TR/html5/#status-of-this-document>

Can I use HTML5 now?



“HTML5 is still a draft.”

<http://dev.w3.org/html5/html4-differences/>

Can I use HTML5 now?



“HTML5 is defined in a way that it is backwards compatible with the way user agents handle deployed content.”

<http://dev.w3.org/html5/html4-differences/>

Can I use HTML5 now?



“Authors must not use elements, attributes, or attribute values for purposes other than their appropriate intended semantic purpose. Authors must not use elements, attributes, or attribute values that are not permitted by this specification or other applicable specifications.”

<http://dev.w3.org/html5/html4-differences/>

Can I use HTML5 now?



“The HTML5 specification will not be considered finished before there are at least two complete implementations of the specification.”

<http://dev.w3.org/html5/html4-differences/>

Can I use HTML5 now?



New, stylable HTML5 elements - Working Draft

HTML5 offers some new elements, primarily for semantic purposes. The "stylable" part refers to the ability to use CSS on these elements

Resources: [Workaround for IE](#) [Alternate workaround](#) [Examples of usage](#)

	Internet Explorer	Firefox	Safari	Chrome	Opera
Far Past	6.0	3.0	3.1	2.0	9.6
Past	7.0	3.5	3.2	3.0	10.1
Present	8.0	3.6	4.0	4.0	10.5
Near Future (early 2010)			4.*	5.0	
Future (late 2010 or later)	9.0	4.0		6.0	10.*

Conclusion: **Not ready***. Waiting for Internet Explorer 8 to expire

Note: In Firefox 2 and older, unknown elements are self-closing (like a `br` or `img` element) when serving the page as text/html. HTML 5 Elements in pages served as XHTML work as expected

<http://caniuse.com/>

Can I use HTML5 now?



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Conclusion: **Ready with JavaScript shims***. Waiting for Internet Explorer 9 for native support!

Note: In Firefox 2 and older, unknown elements are self-closing (like a `br` or `img` element) when serving the page as text/html. HTML 5 Elements in pages served as XHTML work as expected

<http://caniuse.com/> and Firebug ☺

Can I use HTML5 now?



Yes.

(Just make sure your IE audience has JavaScript enabled and be prepared to update your code as the spec changes.)

Do I have to use HTML5 now?

NO!

What has changed in HTML5?



- Old presentational elements and attributes are gone
 - Not deprecated – there can be only one HTML5 language!
- Updated definitions for some elements
 - Beware! It's “not backwards incompatible”

And those elements are outta here...

- basefont
- big
- center
- font
- s
- strike
- tt
- u
- frame
- frameset
- noframes
- acronym
not included because it has created a lot of confusion; use abbr for abbreviations
- applet
obsoleted in favor of object
- isindex
can be replaced by form controls
- dir
obsoleted in favor of ul
- noscript
when in XML syntax only

What's **NEW** in HTML5?



<!doctype html>

What's **NEW** in HTML5?



```
<meta charset="UTF-8">
```



EXERCISE 1

1. Choose a valid HTML or XHTML site.
2. Save it locally (or update it online if you want/can).
3. Change the doctype and meta charset to the HTML5 versions.
4. Validate at the W3C!

W3C Markup Validation Service
Check the markup (HTML, XHTML, ...) of Web documents

Jump To: [Notes and Potential Issues](#) [Congratulations - Icons](#)

This document was successfully checked as HTML5!

Result:	Passed, 1 warning(s)	
Address:	<input type="text" value="http://www.obiwankimberly.com/"/>	
Encoding:	utf-8	<input type="text" value="(detect automatically)"/>
Doctype:	HTML5	<input type="text" value="(detect automatically)"/>
Root Element:	html	

The W3C validators rely on community support for hosting and development. [Donate](#) and help us build better tools for a better web.

Options

Show Source Show Outline List Messages Sequentially Group Error Messages by Type
 Validate error pages Verbose Output Clean up Markup with HTML Tidy

[Help](#) on the options is available.

Notes and Potential Issues

The following notes and warnings highlight missing or conflicting information which caused the validator to perform some guesswork prior to validation, or other things affecting the output below. If the guess or fallback is incorrect, it could make validation results entirely incoherent. It is *highly recommended* to check these potential issues, and, if necessary, fix them and re-validate the document.

EXPECTED RESULT:
A successful validation message!

What's **NEW** in HTML5?



- New elements and attributes reflect the way we've been writing "Web standards" code for years
 - No more `<div id="header">` over and over...
- New content models
 - Block vs. inline is *sooooo* RFC-era HTML

New elements in HTML5



- article
- aside
- audio
- canvas
- command
- datalist
- details
- embed
- figcaption
- figure
- footer
- header
- hgroup
- mark
- meter
- nav
- output
- progress
- rp, rt, ruby
- section
- source
- summary
- time
- video

New elements in HTML5



- **article**
- **aside**
- audio
- canvas
- command
- datalist
- details
- embed
- figcaption
- figure
- **footer**
- **header**
- hgroup
- mark
- meter
- **nav**
- output
- progress
- rp, rt, ruby
- **section**
- source
- summary
- time
- video

Today #1



`<div id="header">`

`<div id="nav">`

`<div id="content">`

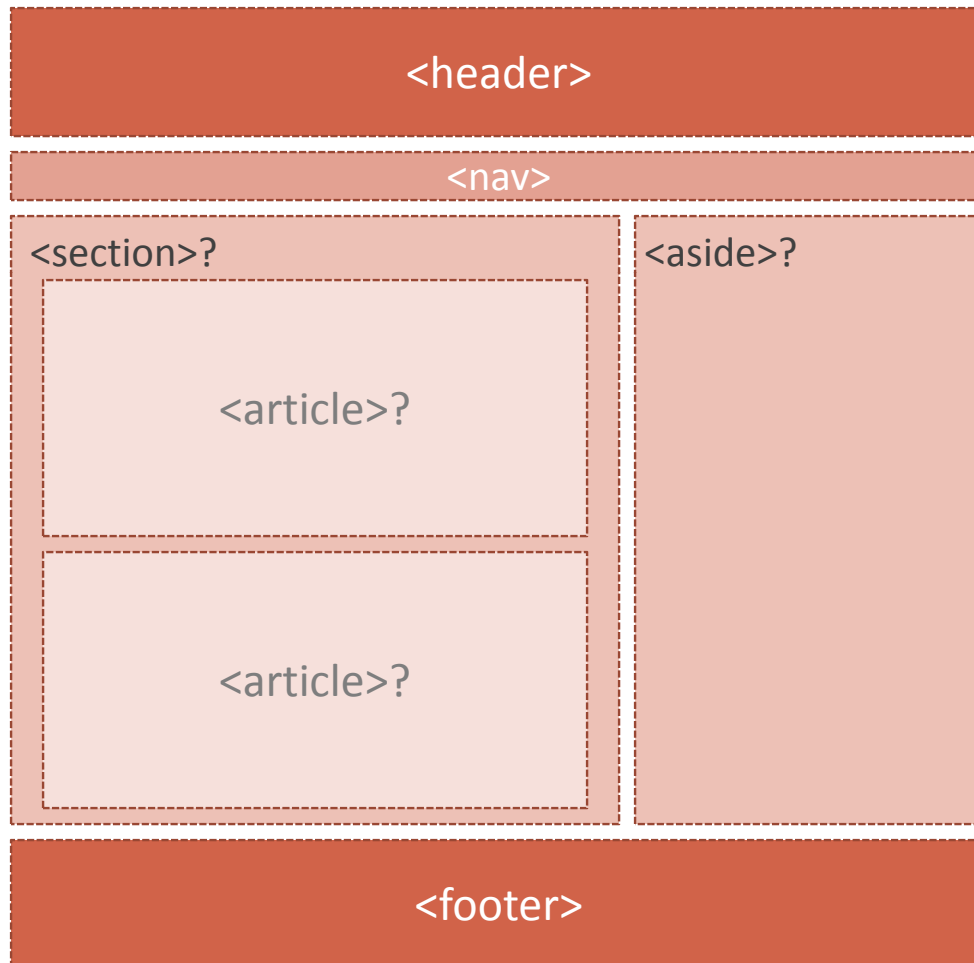
`<div id="sidebar">`

`<div class="post">`

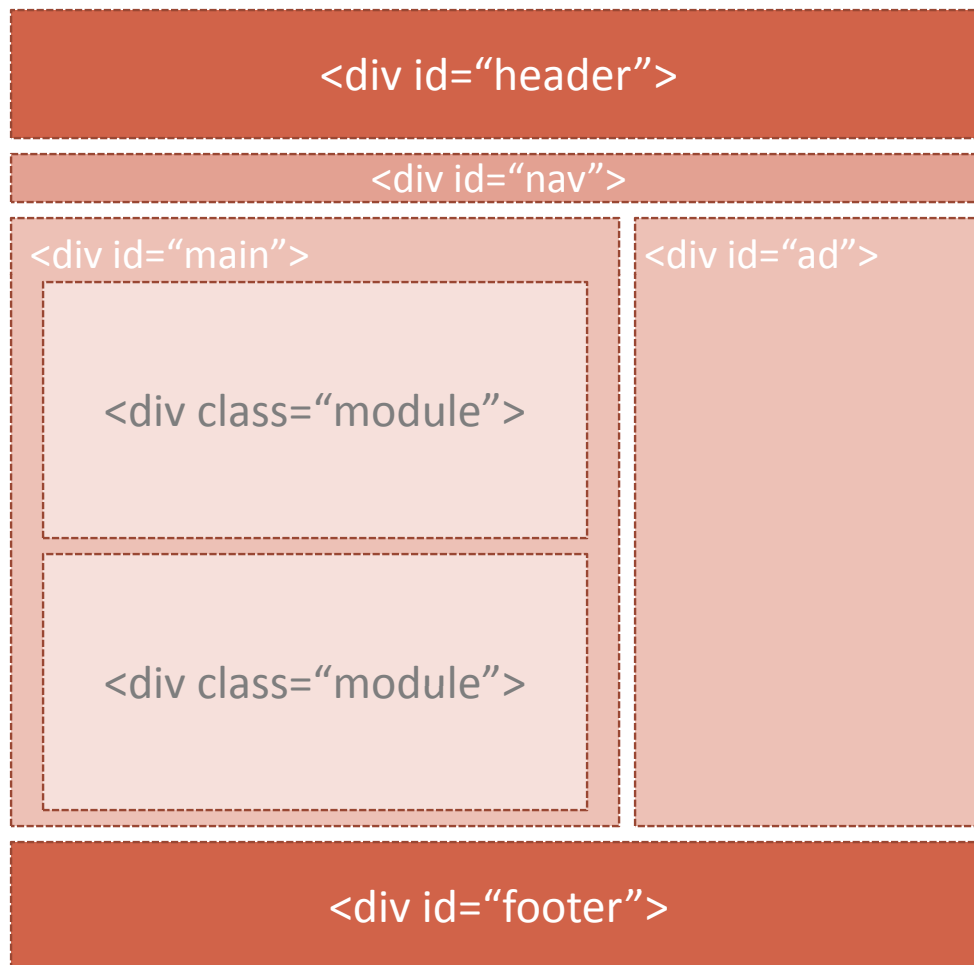
`<div class="post">`

`<div id="footer">`

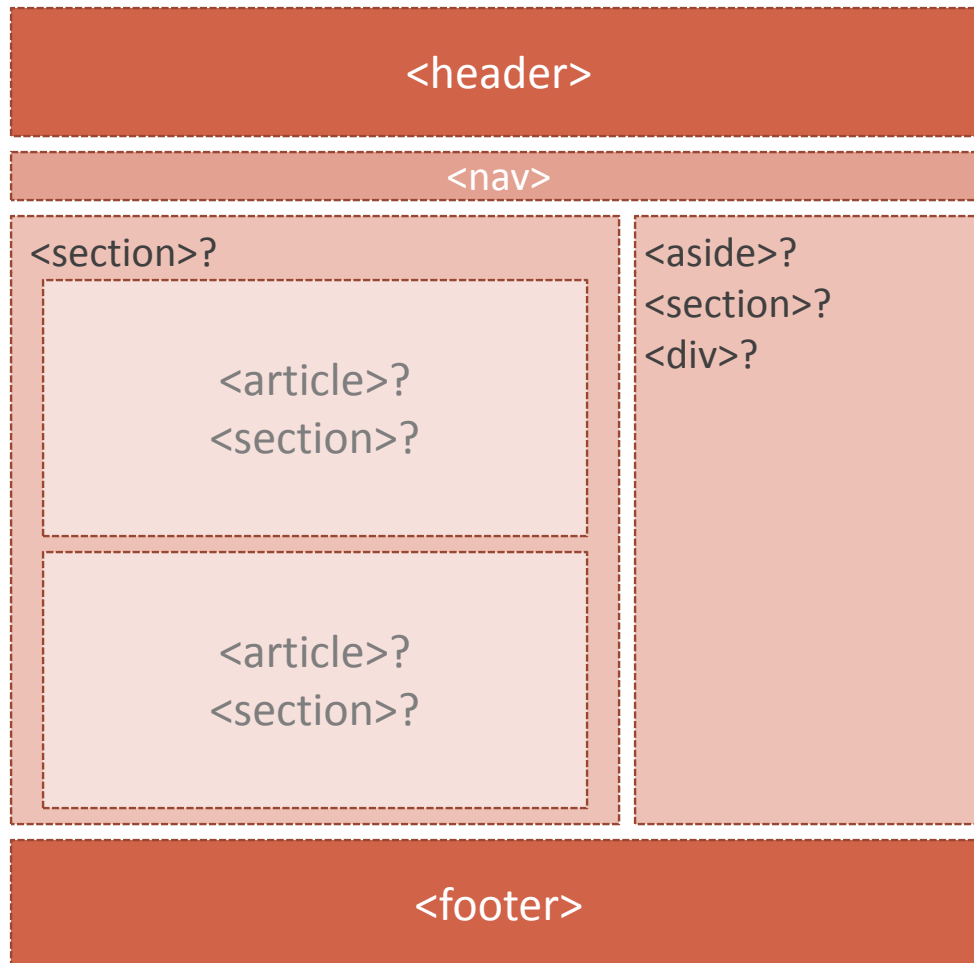
With HTML5...?



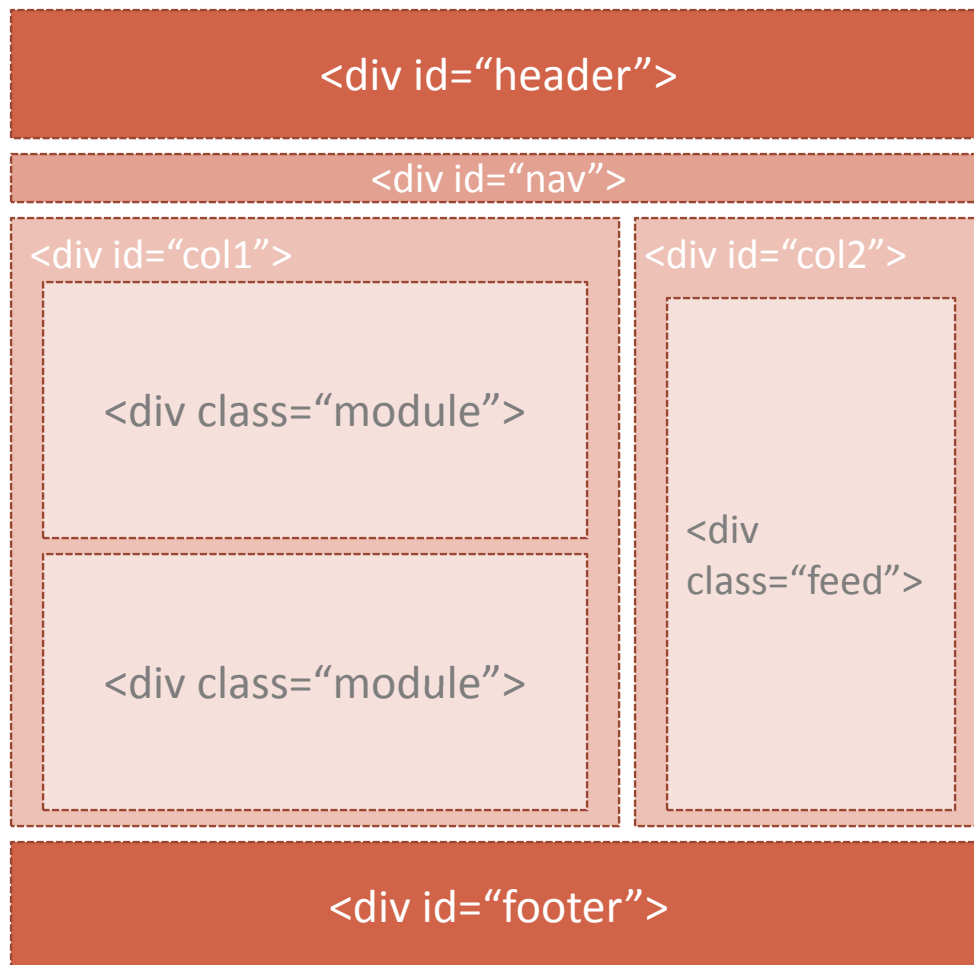
Today #2



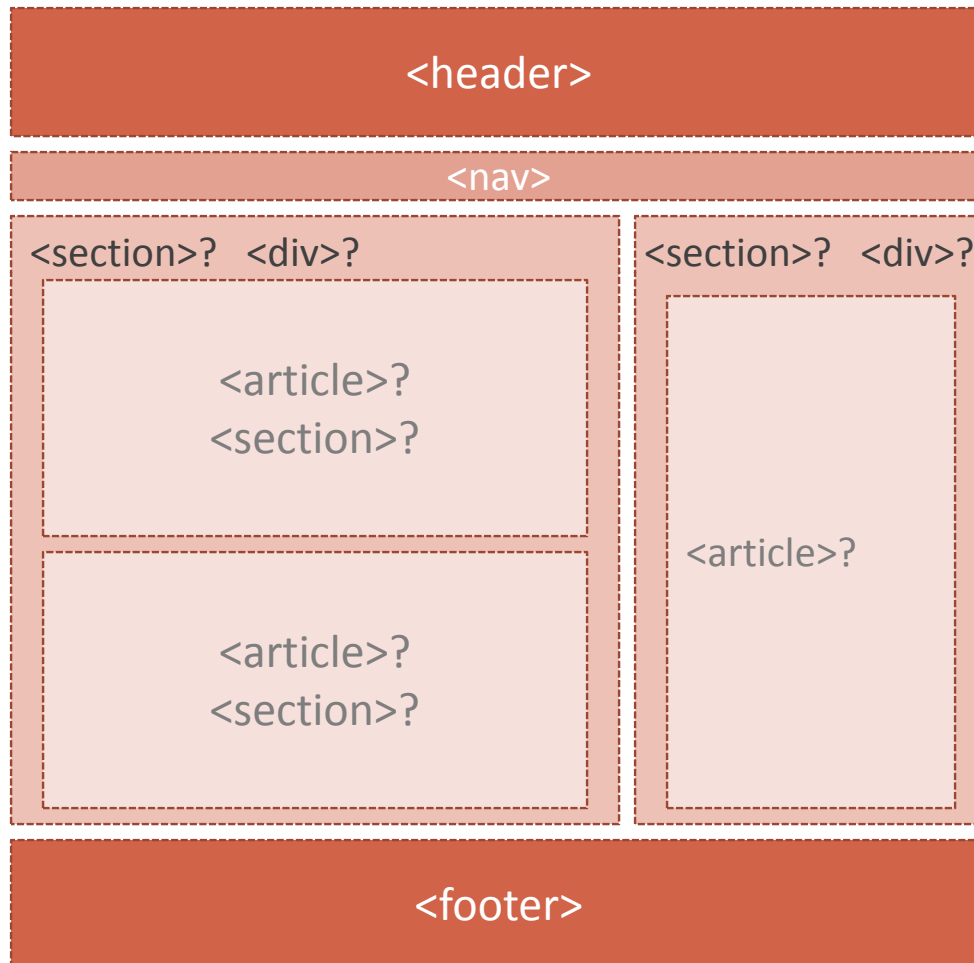
With HTML5...?



Today #3



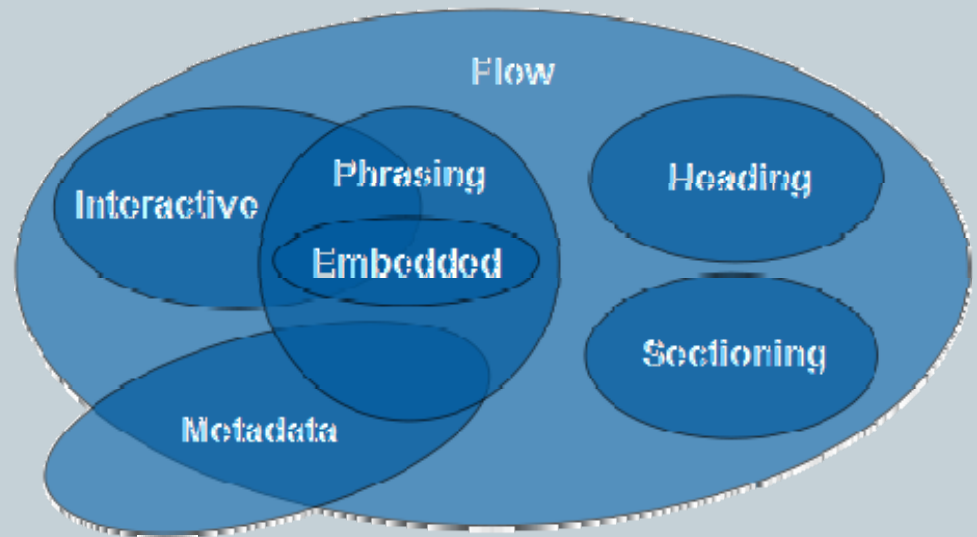
With HTML5...?



New content models in HTML5



- Metadata content
- Flow content
- Sectioning content
- Heading content
- Phrasing content
- Embedded content
- Interactive content



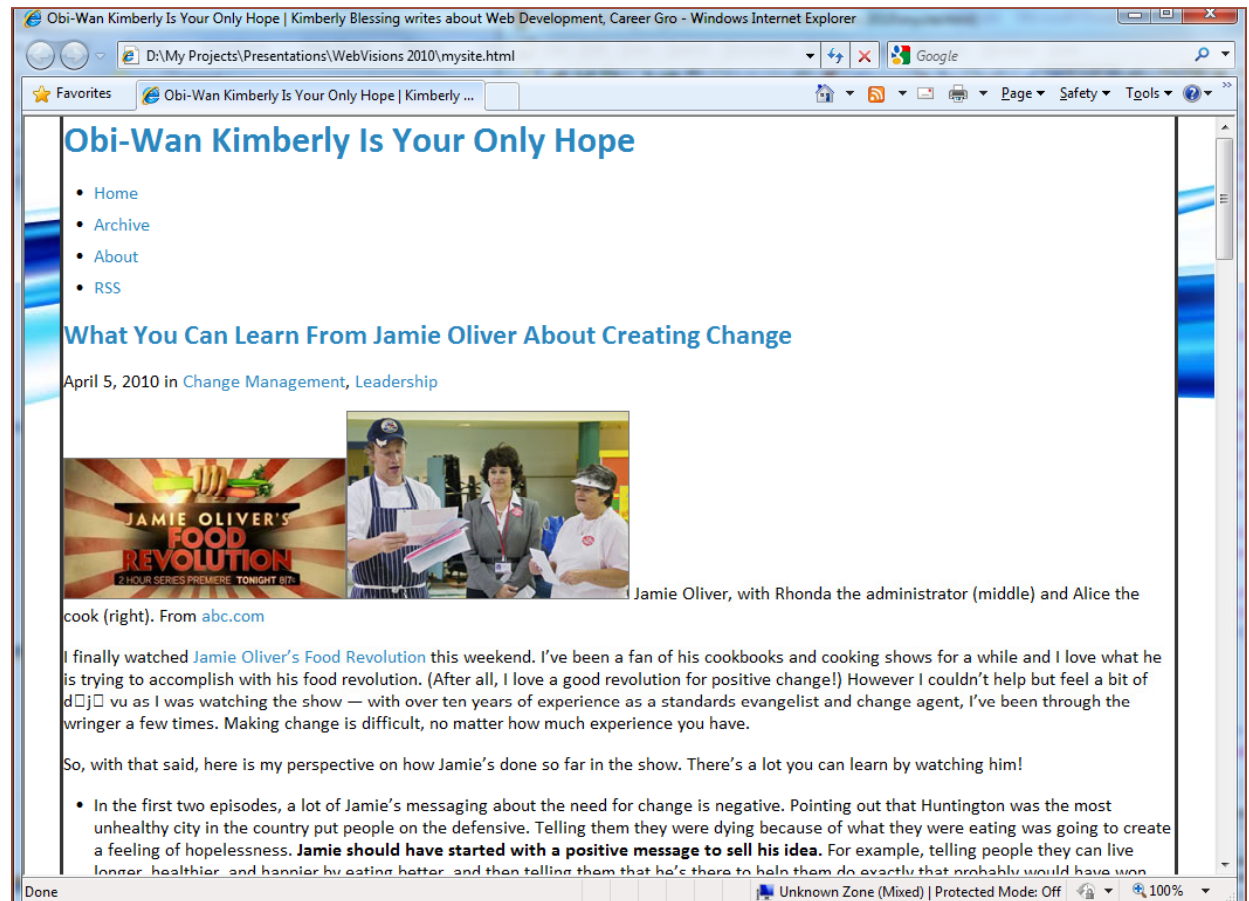
Huh?

Interpreter, please?

- This is what makes an **a** (anchor) element a “block-level” element in HTML5
 - ☞ Except it’s a hyperlink now, not an anchor
 - ☞ Except “block-level” doesn’t exist now
 - ☞ This is basically how **ins** and **del** worked in HTML 4
- **a** belongs to the *flow* and *phrasing* content models
 - The flow content model contains both “block” and “inline” elements. When **a** is contained by a flow element, **a** can contain flow content.
 - The phrasing content contains is the text of the document and “inline” elements. When **a** is contained by a phrasing element, it can only contain phrasing content.

EXERCISE 2

1. Using your valid HTML5 document from exercise 1, update the markup to use the new, more semantic sectioning elements. (You may need to tweak your CSS, too.)
2. Validate at the W3C!
3. Try loading it in a few browsers...

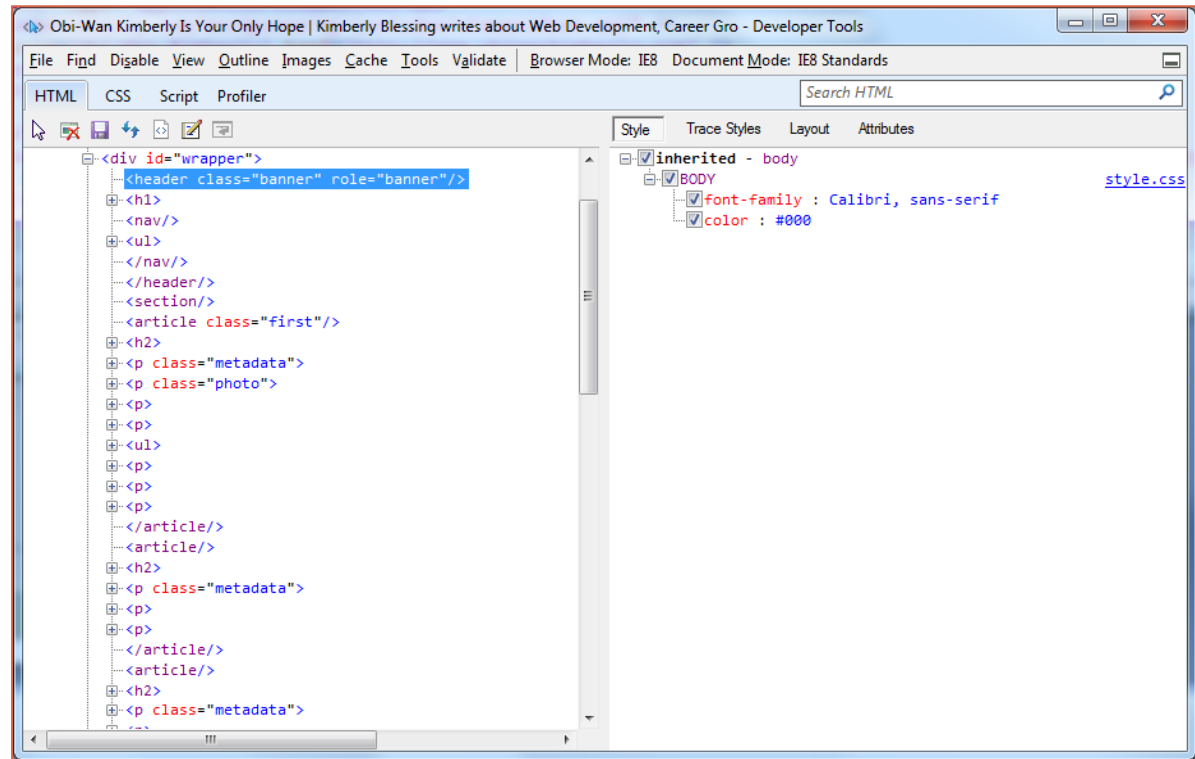


EXPECTED RESULT:

A successful validation message!
Styles not working in IE?

Why, IE, why?

- Same issue we've always had – not able to style abbr because IE doesn't “see” elements it doesn't recognize.
- Firefox 2 and Camino 1 also have a similar rendering engine bug
- To fix, use JS to create the elements in the DOM and the browsers will “see” them!



HTML5 JavaScript shiv for IE



```
<head>
```

```
...
```

```
<!--[if lt IE 9]>
```

```
<script src="http://html5shiv.googlecode.com/svn/trunk/html5.js"></script>
```

```
<![endif]-->
```

```
...
```

```
</head>
```

- Or, if you want to check for additional browser feature support, use Modernizr: <http://www.modernizr.com/>

EXERCISE 3

1. Using your valid HTML5 document from exercise 1 & 2, add the HTML5 JS shiv or Modernizr.
2. Now try it in IE!

Obi-Wan Kimberly Is Your Only Hope | Kimberly Blessing writes about Web Development, Career Gro - Windows Internet Explorer

D:\My Projects\Presentation\WebVisions 2010\mysite.html

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What You Can Learn From Jamie Oliver About Creating Change

April 5, 2010 in [Change Management](#), [Leadership](#)

I finally watched [Jamie Oliver's Food Revolution](#) this weekend. I've been a fan of his cookbooks and cooking shows for a while and I love what he is trying to accomplish with his food revolution. (After all, I love a good revolution for positive change!) However I couldn't help but feel a bit of d[] v[] as I was watching the show — with over ten years of experience as a standards evangelist and change agent, I've been through the wringer a few times. Making change is difficult, no matter how much experience you have.

So, with that said, here is my perspective on how Jamie's done so far in the show. There's a lot you can learn by watching him!

- In the first two episodes, a lot of Jamie's messaging about the need for change is negative. Pointing out that Huntington was the most unhealthy city in the country put people on the defensive. Telling them they were dying because of what they were eating was going to create a feeling of hopelessness. **Jamie should have started with a positive message to sell his idea.** For example, telling people they can live longer, healthier, and happier by eating better, and then telling them that he's there to help them do exactly that probably would have won him more allies early on.



Jamie Oliver, with Rhonda the administrator (middle) and Alice the cook (right). From [abc.com](#)

Who is Obi-Wan?

Obi-Wan Kimberly is Kimberly Blessing: a Web developer, standards evangelist, and technology executive who has worked with numerous organizations to successfully make the transition to Web standards. [more...](#)

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EXPECTED RESULT:
IE works!



CHOOSE YOUR OWN WORKSHOP

1. Continue with the exercise of adding HTML5 features to your code.
2. Discuss related topics and look at what some sites are already doing.
3. Look at some implementation examples of the HTML5 and related APIs.

- Accessibility
- SEO
- Performance
- ~~Forms~~ (saving for tomorrow's session)
- video/audio
- canvas/svg
- Microdata
- Prefetching
- Sandboxing
- localStorage
- Geolocation

This has been
HTML5



WITH
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