Creating Table Styles in CSS

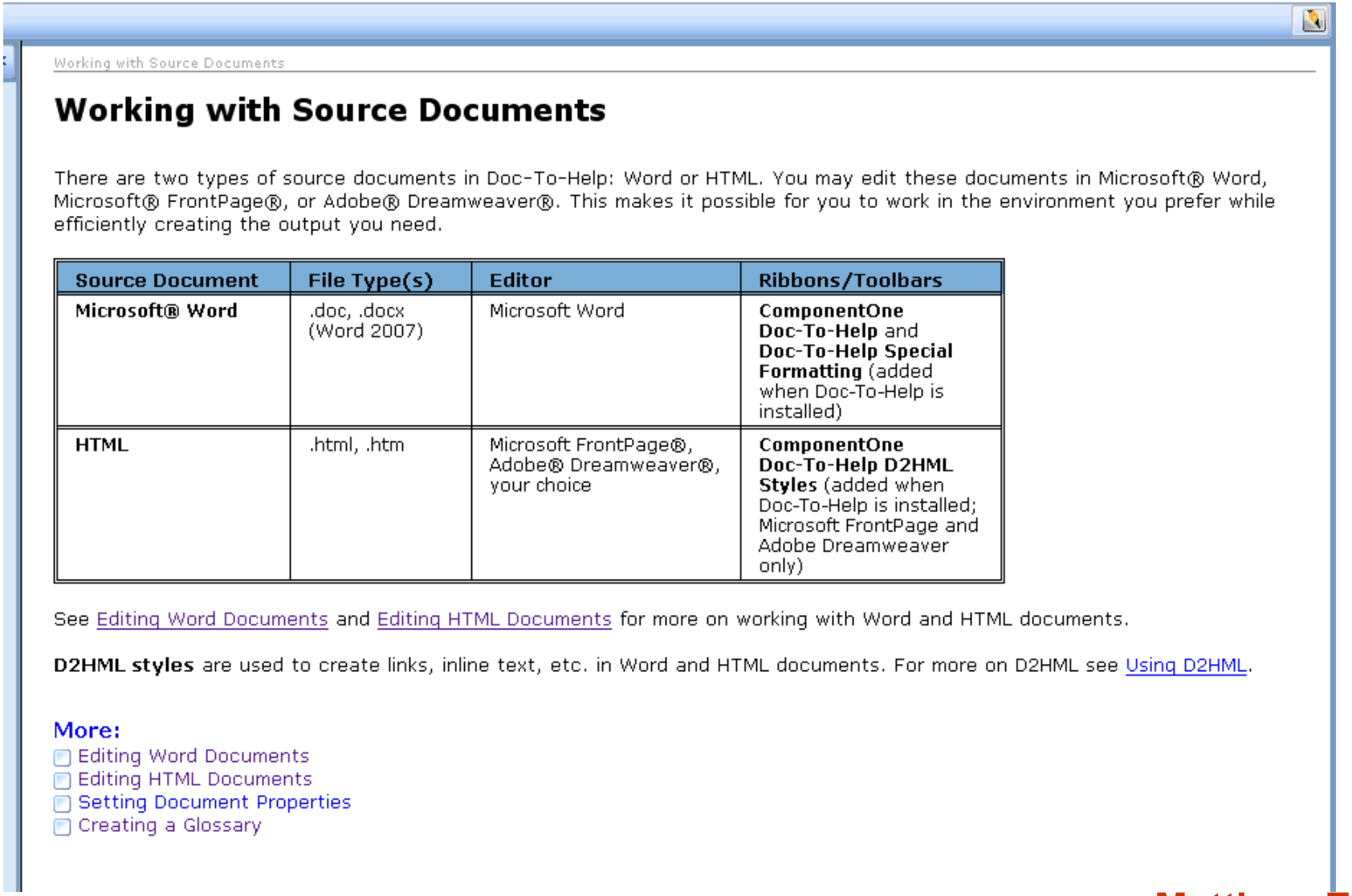
Matthew Ellison
matthew@ellisonconsulting.com

Matthew Ellison
Consulting

What we'll cover in this session

- Components of an HTML-based table
- Why is table formatting a challenge?
- What are the basic formatting options for tables?
- To which elements do we apply the formatting properties?
- Descendant selectors in CSS
- Putting it altogether to create "table styles"

Tables in Help



Working with Source Documents

Working with Source Documents

There are two types of source documents in Doc-To-Help: Word or HTML. You may edit these documents in Microsoft® Word, Microsoft® FrontPage®, or Adobe® Dreamweaver®. This makes it possible for you to work in the environment you prefer while efficiently creating the output you need.

Source Document	File Type(s)	Editor	Ribbons/Toolbars
Microsoft® Word	.doc, .docx (Word 2007)	Microsoft Word	**ComponentOne Doc-To-Help** and **Doc-To-Help Special Formatting** (added when Doc-To-Help is installed)
HTML	.html, .htm	Microsoft FrontPage®, Adobe® Dreamweaver®, your choice	**ComponentOne Doc-To-Help D2HML Styles** (added when Doc-To-Help is installed; Microsoft FrontPage and Adobe Dreamweaver only)

See Editing Word Documents and Editing HTML Documents for more on working with Word and HTML documents.

D2HML styles are used to create links, inline text, etc. in Word and HTML documents. For more on D2HML see Using D2HML.

More:

- Editing Word Documents
- Editing HTML Documents
- Setting Document Properties
- Creating a Glossary

Matthew Ellison Consulting

Tables in Help

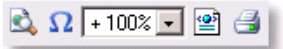
Topic Toolbars

The *Topic Toolbars* give you quick access to commonly used commands in the authoring environment.

Commands for working with topic content are located on the left of the Topic Editor toolbars.

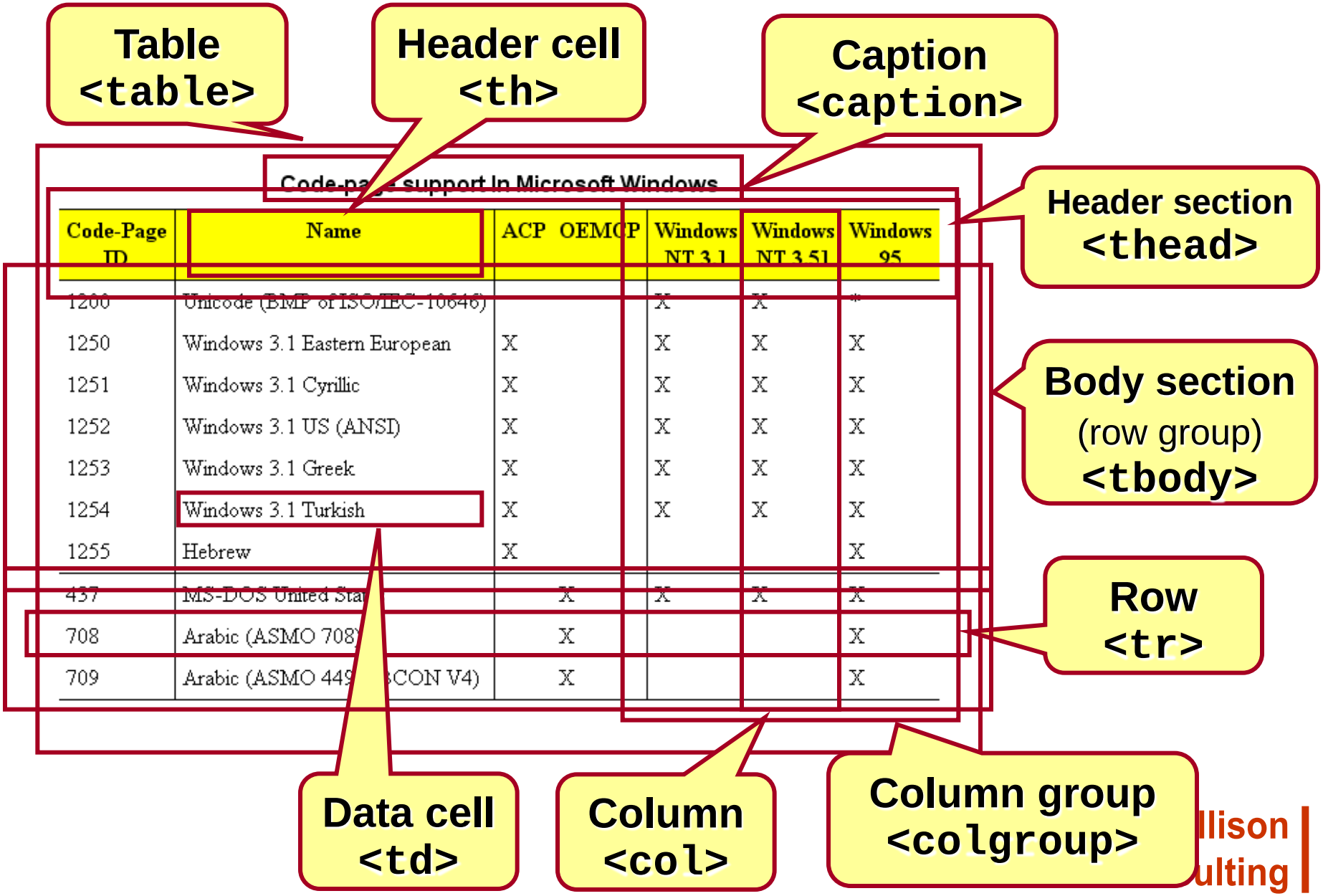
This button	Does this
Save	Saves the topic
Undo	Reverses the last action in the topic
Redo	Reverses the last action applied by the Undo button
Insert New Link	Creates a new Hyperlink, or edit a Hyperlink applied to selected text
Insert Existing Link	Inserts an existing Hyperlink
Unlink	Removes a Hyperlink from selected text
Insert Image	Creates a new image, or edit the selected image
Insert Existing Image	Inserts an existing image
Insert a File Object from Thumbnails	Inserts an existing image using an image preview
Cut	Removes the selected content from the topic
Copy	Copies the selected content to the clipboard
Paste	Pastes the content from the clipboard into the topic
Find	Finds characters or words in your topic
Find/Replace	Finds and replaces characters or words in your topic

Commands for adding custom characters and viewing the topic are located on the right of the Topic Editor



Matthew Ellison Consulting

Components of an HTML-based table



Code-Page ID	Name	ACP	OEMCP	Windows NT 3.1	Windows NT 3.51	Windows 95
1200	Unicode (BMP of ISO/IEC-10646)			X	X	*
1250	Windows 3.1 Eastern European	X		X	X	X
1251	Windows 3.1 Cyrillic	X		X	X	X
1252	Windows 3.1 US (ANSI)	X		X	X	X
1253	Windows 3.1 Greek	X		X	X	X
1254	Windows 3.1 Turkish	X		X	X	X
1255	Hebrew	X				X
437	MS-DOS United Sta		X	X	X	X
708	Arabic (ASMO 708)		X			X
709	Arabic (ASMO 449	CON V4)	X			X

Why is table formatting a challenge?

- Tables contain multiple nested elements
- Each nested element has its own formatting properties
  - **Table**: width, borders, background, etc.
  - **Caption**: font, colour, margin, position, etc.
  - **Column**: width
  - **Table header**: background
  - **Table cells**: alignment, padding, borders, background, font, colour, etc.
- How can we control all of this with a single style?

My objectives for table formatting

- Simplify my table mark-up!

```
<table x-use-null-cells style="x-cell-content-align: top; width: 100%; border-spacing:
0px;"
 cellspacing=0 width=100%>
<col style="width: 20%;">
<col style="width: 20%;">
<col style="width: 20%;">
<col style="width: 20%;">
<col style="width: 20%;">

<tr valign=top><td style="border-left-width: 1px; border-top-style: Solid;
border-top-color: #008000; border-top-width: 3px;
                    border-right-width: 1px; border-bottom-style: Solid;
                    border-bottom-width: 1px;
                    border-bottom-color: #008000; padding-right: 10px; padding-left:
                    10px;"
 width=20%>
<p>Code-Page<br />
ID</td>
<td style="border-top-style: Solid; border-top-color: #008000; border-top-width: 3px;
border-right-width: 1px;
    border-bottom-style: Solid; border-bottom-width: 1px; border-bottom-color: #008000;
    padding-right: 10px; padding-left: 10px;" width=20%>
<p>Name</td>
```

```
<table class="formal">
<col class="col1">
<col class="col2">
<col class="col3">
<col class="col4">
<col class="col5">

<tr>
    <td>Code-Page<br />ID</td>
    <td>Name</td>
```

Matthew Ellison Consulting

How do we apply the formatting?

- Using CSS of course!
- My objectives for table formatting:
  - No formatting information within HTML code
  - Formatting all within linked CSS file
  - Should be as easy as possible to apply a specific look-and-feel to an entire table

Strategy

- Use CSS properties instead of HTML attributes

  Examples:

  - Instead of:

    ```
    <table width="100%">
    ```

    HTML

    Use:

    ```
    table { width: 100%; }
    ```

    CSS

  - Instead of:

    ```
    <tr valign="top">
    ```

    HTML

    Use:

    ```
    tr { vertical-align: top }
    ```

    CSS

Strategy

- Avoid inline CSS
- Example:
  - Instead of:

```
<td style=
"border-left: 1px Solid  #008000;">
```

HTML

  - Use:

```
<td>
```

HTML

```
td
{border-left:1px Solid  #008000;}
```

Linked CSS file

The basic table formatting options

- Width (table and columns)
- Height (table and rows)
- Background colour (table, header, rows, cells)
- Borders (table frame and individual cells)
- Border-collapse (table property)
- Padding (within cells)
- Horizontal alignment (of data within cells)
- Vertical alignment (of data within cells)

Demonstration

Border collapse property

Spice Girls

Real Name	Spice Name	Year of Birth	Likes
Melanie Jane Chisholm	Sporty	1975	• Getting up early • Breakfast
Emma Lee Bunton	Baby	1976	• Eating doughnuts • Pop/garage music
Geraldine Estelle Halliwell	Ginger	1972	• Talking
Victoria Caroline Beckham	Posh	1975	• Designer clothes • Posing for the cameras
Melanie Janine Brown	Scary	1975	• Rap • Hip hop • Jungle

`Table {border-collapse: separate}`

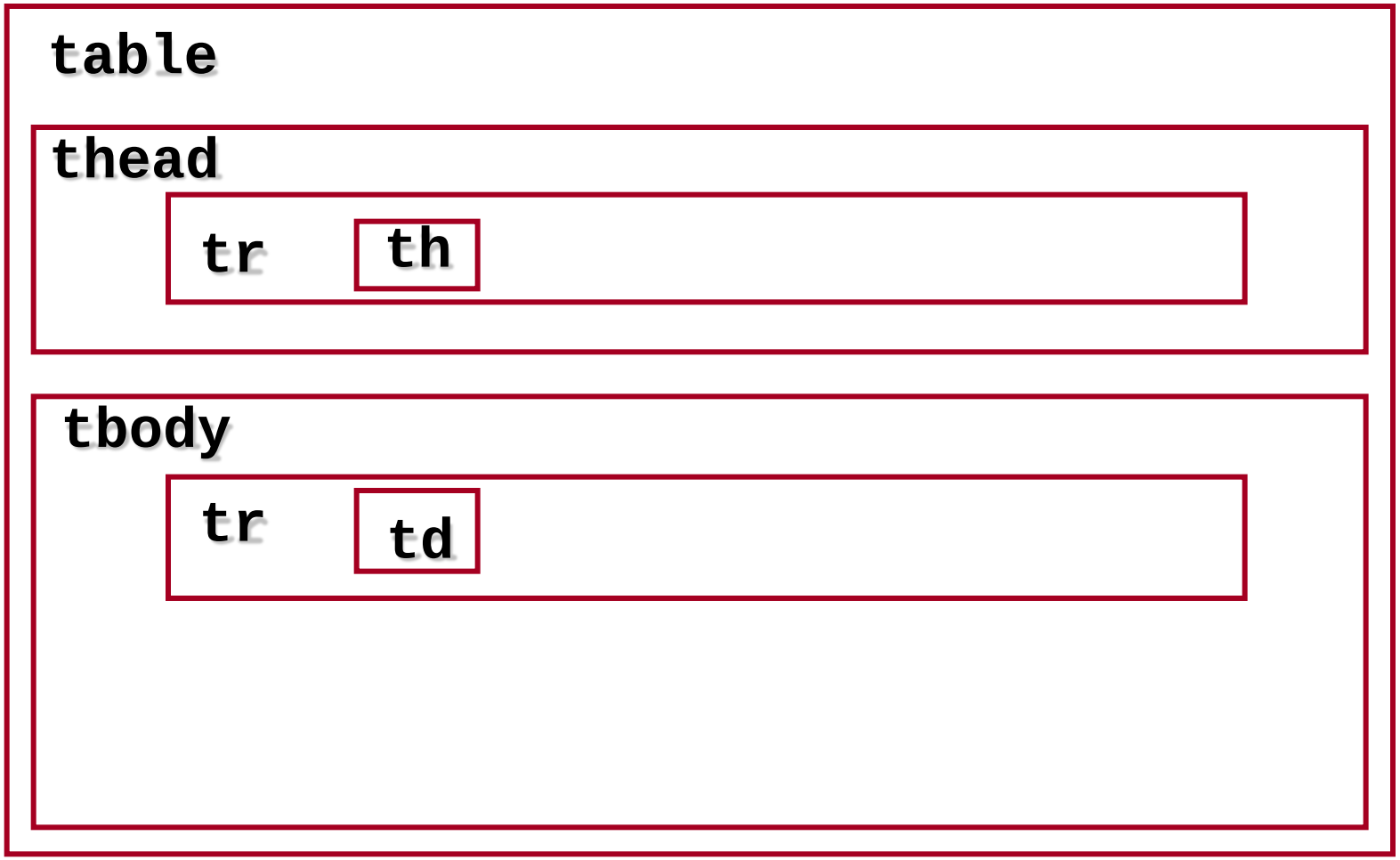
Spice Girls

Real Name	Spice Name	Year of Birth	Likes
Melanie Jane Chisholm	Sporty	1975	• Getting up early • Breakfast
Emma Lee Bunton	Baby	1976	• Eating doughnuts • Pop/garage music
Geraldine Estelle Halliwell	Ginger	1972	• Talking
Victoria Caroline Beckham	Posh	1975	• Designer clothes • Posing for the cameras
Melanie Janine Brown	Scary	1975	• Rap • Hip hop • Jungle

`Table {border-collapse: collapse}`

Which elements do we format?

- Make use of inheritance



Which elements do we format?

- Apply formatting properties to the highest possible element

```
table { text-align: left; }
tr { vertical-align: middle; }
tbody { background-color: #FFC0FF; }
```

- Golden rules about inheritance:
  - Font properties, colour and alignment **are** inherited
  - "Box" properties (margin, border, padding), width and height are **not** inherited

Where to apply some key properties

- Table border/frame:
  - **`table`**
- Cell borders and padding:
  - **`td`**
  - **`th`**
- Row borders (not supported by IE):
  - **`tr`**
- Header background colour:
  - **`thead`** or **`th`**
- Cell background colour:
  - **`tbody`**, **`tr`** or **`td`**
- Horizontal alignment (**`text-align`**):
  - **`table`** or **`tbody`**
- Vertical alignment (**`vertical-align`**):
  - **`tbody`** or **`tr`**

Problem

- We can define properties for standard table elements:

```
table { width 400px, … }
tbody { … }
tr { … }
td { … }
etc.
```

- BUT all our tables will look the same

Demonstration

Possible solution

- Use CSS classes:

```
<table>
<thead>
<tr>
<th>
…</th></tr></thead>

<tbody>
<tr>
<td>
…
```

HTML

```
table { … }
thead { … }
tbody { … }
tr { … }
th { … }
td { … }
```

CSS

Possible solution

- Use CSS classes:

```
<table class="formal">
<thead class="formal">
<tr class="formal">
<th class="formal">
…</th></tr></thead>

<tbody class="formal">
<tr class="formal">
<td class="formal">
…
```

HTML

```
table.formal { … }
thead.formal { … }
tbody.formal { … }
tr.formal { … }
th.formal { … }
td.formal { … }
```

CSS

New problem

- Our table mark-up is rather complicated
- To change the look-and-feel of the table, we need to replace all the class attributes in the HTML

Demo

Source

Introducing descendant selectors

- Sometimes known as contextual selectors
- Simple example:

```
h1 { font-weight: bold }
em { font-weight: bold }
h1 em { font-style: italic }
```

those **em** elements that are contained by an **h1** element

Descendant selectors are *very* useful

- See www.w3.org/TR/REC-CSS2/selector.html#descendant-selectors

How this helps with tables

- Apply class attribute to table element only
- Use descendant selectors to specify formatting for all nested elements

```
<table class="formal">
<thead class="formal">
<tr class="formal">
<th class="formal">
…</th></tr></thead>

<tbody class="formal">
<tr class="formal">
<td class="formal">
…
```

HTML

```
table.formal { … }
thead.formal { … }
tbody.formal { … }
tr.formal { … }
th.formal { … }
td.formal { … }
```

CSS

How this helps with tables

- Apply class attribute to table element only
- Use descendant selectors to specify formatting for all nested elements

```
<table class="formal">
<thead>
<tr>
<th>
…</th></tr></thead>

<tbody>
<tr>
<td>
…
```

HTML

```
table.formal { … }
table.formal thead { … }
table.formal tbody { … }
table.formal tr { … }
table.formal th { … }
table.formal td { … }
```

CSS

Only one class attribute to replace!

Demo

Source

Help Authoring Tool issues

- RoboHelp 7:
  - Does not support **`thead`** and **`tbody`** elements
  - HTML Editor does not represent table formatting accurately (OK when published)

- Flare 3:
  - Has its own proprietary "table styles" as an alternative strategy
  - Provides easy way to alternate row colours
  - Each table style represented by a separate CSS file

Summary

- Keep table coding as simple as possible
- Avoid using element attributes for table formatting
- Use external CSS
- Apply class attribute to top-level element only
- Use CSS descendant selectors for nested elements