# Introduction to

Web Design - Hands-on CSS

# Lesson E O U R

# What will we cover in this lesson?

#### Lesson 4: Table markup

What are tables?

element

element

element

element

SUMMARY attribute

<caption> element

<thead> element

<tfoot> element

element

<col> element

<colgroup> element

What is needed?

## Open the exercise folder

Open the folder called "start" and then open the file called "lesson04.htm" using some sort of HTML editor.

## Note: What are tables?

The HTML table allows authors to arrange data into rows and columns of cells. This is often referred to as "tabular data".

If the information would make sense laid out in a spreadsheet, it is almost certainly tabular data.

The HTML table should not be used to help authors control the layout of web documents.

We can create data tables using a range of elements including tables (), table rows () and table cells ().

# Step 1: element

The element represents the table itself.
The element requires a start and end tag.



### Exercise

Let's add the table element...

```
Col1 header
Col2 header
Row 1 - Cell 1
Row 1 - Cell 2
Row 2 - Cell 1
Row 2 - Cell 2
```

## Step 2: element

## The element represents a table row.

## Exercise

Let's add some table rows...

```
Coll header
Col2 header
 Row 1 - Cell 1
Row 1 - Cell 2
  Row 2 - Cell 1
Row 2 - Cell 2
```

## Step 3: element

### The element represents a table cell used to contain table data.

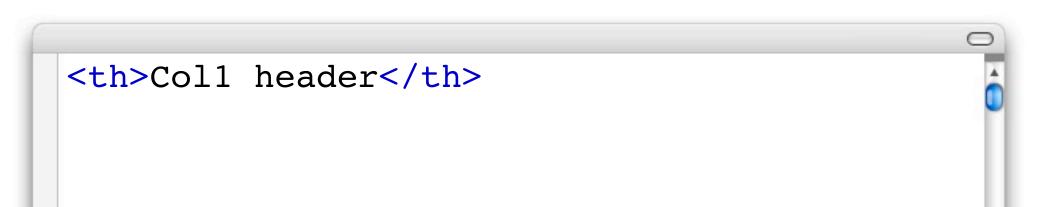
### Exercise

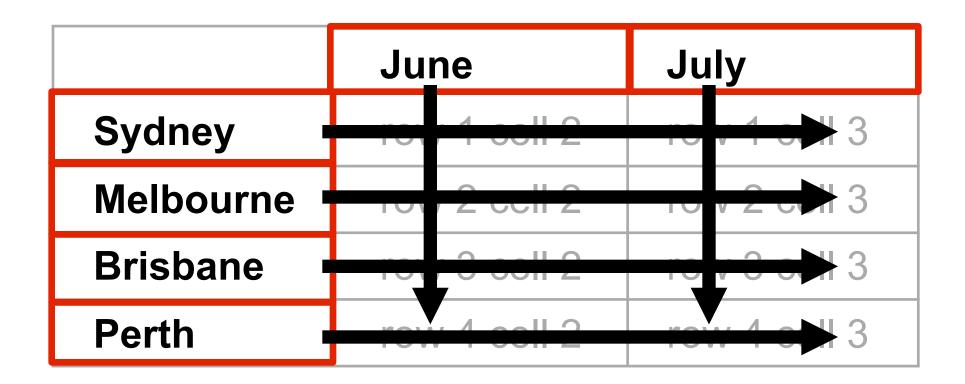
Let's add some table cells...

```
Coll header
Col2 header
 Row 1 - Cell 1
   Row 1 - Cell 2
 Row 2 - Cell 1
   Row 2 - Cell 2
```

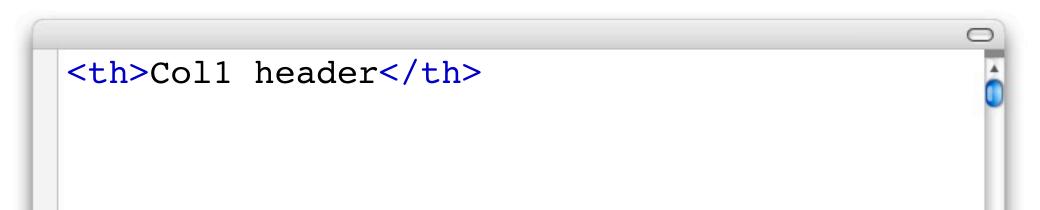
## Step 4: element

The element represent a header cell - used to container header information that describes column and row information.





These header cells are also used by assistive devices to describe the contents of the table.



### Exercise

Let's add some table headers...

```
Coll header
   Col2 header
 Row 1 - Cell 1
   Row 1 - Cell 2
 Row 2 - Cell 1
   Row 2 - Cell 2
```

# Note: SUMMARY attribute

The **SUMMARY** attribute provides a summary of the contents of the table for assistive technologies.

The SUMMARY attribute is now considered obsolete (should not be used) in HTML5.

There are a range of solutions for providing a summary of the table. One solution would be to provide the summary as a simple paragraph of text associated with the table.

# Step 5: <aption> element</a>

The <caption> element provides a caption, or a short description for the table.

<caption>Table caption here



The <caption> element must be inserted immediately after the start tag.

```
     <caption>Table caption here</caption>
```

### Exercise

Let's add a caption...

```
<caption>Table caption here/caption>
 Coll header
   Col2 header
 Row 1 - Cell 1
   Row 1 - Cell 2
 Row 2 - Cell 1
   Row 2 - Cell 2
```

### Step 6: <a href="#"><thead> element</a>

The contents of a data table can be broken into three separate areas: The table header (<thead>), table body () and table footer (<tfoot>).

## The <thead> element is used to group the header content inside a data table.

```
<thead>

>Coll header
<ch>>Coll header

>Coll header
```

## The <thead> element must have one or more elements inside.

# The <thead> element must be placed inside a element.

```
<thead>
>Coll header
>C
```

It must be placed directly after the start tag or after the <caption> element, if present.

The <thead> element must come before any , <tfoot> or elements.

```
<thead>
<thead>
<thead>
<tfoot>
<thoot>
```

Some browsers allow you to scroll the table header content separately to the table body content.

When printing a table that spans more than one page, the table header will be printed at the top of each page for reference.

### Exercise

Let's wrap a table header around our first row...

```
<caption>Table caption here/caption>
  <thead>
    Coll header
      Col2 header
    </thead>
  Row 1 - Cell 1
    Row 1 - Cell 2
  Row 2 - Cell 1
    Row 2 - Cell 2
```

### Step 7: <tfoot> element

## The <tfoot> element is used to group the footer content inside a data table.

```
Coll header
Coll header
```

## The <tfoot> element must have one or more elements inside.

# The <tfoot> element must be placed inside a element.

```
<thead>
</thead>
<tfoot>
</tfoot>
```

### It must be placed after any <aption> or <thead>.

```
<caption>Table caption here/caption>
  <thead>
  </thead>
  <tfoot>
  </tfoot>
```

### It must **come before** any or elements.

```
<caption>Table caption here/caption>
  <thead>
  </thead>
  <tfoot>
  </tfoot>
```

The <tfoot> is only needed if the table is long, and an additional reference at the bottom of the table would be helpful (ie. avoid having to scroll to the top of the table).

When printing a table that spans more than one page, the table footer will be printed at the bottom of each page for reference.

### Exercise

Let's create a new table footer...

```
<caption>Table caption here/caption>
  <thead>
    Coll header
      Col2 header
    </thead>
  <tfoot>
    Coll header
      Col2 header
    </tfoot>
  Row 1 - Cell 1
```

# Step 8: element

## The element is used to group the body content inside a data table.

# The element must have one or more elements inside.

# The element must be placed inside a element.

```
<thead>
</thead>
</thoot>
</tfoot>
</tfoot>
</tfoot>
</tfoot>
```

#### It must be placed after any <caption>, <thead> or <tfoot> elements.

```
<caption>Table caption here/caption>
  <thead>
  </thead>
  <tfoot>
  </tfoot>
```

# There can be more than one element inside a single table.

```
<tfoot>
</tfoot>
</tfoot>
```

### Exercise

Let's wrap a table body around our content rows...

```
Coll header
     Col2 header
   </tfoot>
 \langle t.r \rangle
     Row 1 - Cell 1
     Row 1 - Cell 2
   Row 2 - Cell 1
     Row 2 - Cell 2
```

### Step 9: < col> element

HTML tables are laid out in rows and cells. Even though these cells appear in column form, there is no structural column element.

The <col> element does not group columns structurally. However, it does allow us to define attributes to all the cells in one or more columns.

header 1	header 2	header 3
row 1 cell 1	row 1 cell 2	row 1 cell 3
row 2 cell 1	row 2 cell 2	row 2 cell 3
row 3 cell 1	row 3 cell 2	row 3 cell 3
row 4 cell 1	row 4 cell 2	row 4 cell 3

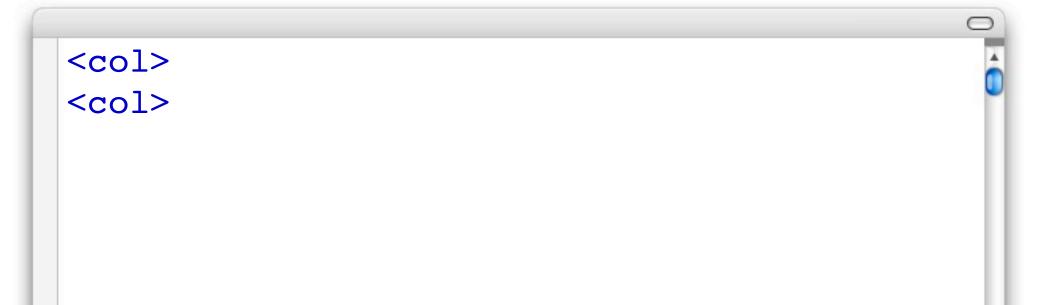
<col> allows us to
define attributes for all
cells in the column

This means we could set the background color or text alignment for a column of cells, without having to style each cell individually.

The <col> must be after the optional <caption> and before the optional <thead>.

```
<caption>Table caption here</caption>
<col>
<col>
<thead>
```

The <col> element is a void element so does not require a closing tag.



In order to identify specific <col> elements, classes
may need to be applied to each <col>.

We could then use a CSS rule like this to apply a background-color to all cells within the column.

```
.col1 { background-color: yellow; }
```

### Exercise

Let's add some cols to our table...

```
<caption>Table caption here/caption>
  <col class="col1">
  <col class="col2">
  <thead>
    Coll header
       Col2 header
    </thead>
  <tfoot>
    Coll header
       Col2 header
    </tfoot>
```

# Step 10: <a href="#"><colgroup</a> element

The <colgroup> element is used to group sets of <col> elements.

The <colgroup> element allows you to set attributes for a number of <cols> without having to set them on each individual <col>.

## The <colgroup> must be after the <caption> and before the <thead>.

### You can use more than one <a href="colored"><colored<a href="colored">

```
<colgroup class="colgroup1">
   <col class="col1">
   <col class="col2">
</colgroup>
<colgroup class="colgroup2">
   <col class="col3">
</colgroup>
<colgroup class="colgroup3">
   <col class="col4">
</colgroup>
```

### Exercise

Let's add a colgroup...

```
<caption>Table caption here/caption>
  <colgroup class="colgroup1">
     <col class="col1">
     <col class="col2">
  </colgroup>
  <thead>
     <tr>
        Coll header
        Col2 header
     </thead>
  <tfoot>
     Coll header
        Col2 header
```

## Note: what is needed?

In many cases, you do not need to include <col> or <colgroup> elements. Even the <caption> element may not be needed if there is enough context associated with the table.

However, all tables should include elements to help identify the cells.

#### Anoopkumar M

Web Design