

# HTML Tables & Subheadings

A Monash University ArtsIT Information Resource

**Author:** Scott Rippon

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## 1.0 Introduction

This document investigates one particular issue faced when creating a table in [HTML][HyperText Markup Language]/[XHTML][Extensible HyperText Markup Language]. The issue is with creating a table that has a number of sub-sections. After the issue is investigated suggestions are made as to how the issue could be overcome in future.

Example shown within this document have been created to comply with the W3C [WAI][Web Accessibility Initiative] Web Content Accessibility Guidelines 1.0 (WCAG1.0).

- [W3C][<http://www.w3.org/>]
- [W3C WAI][<http://www.w3.org/WAI/>]
- [Checklist for Web Content Accessibility Guidelines 1.0][<http://www.w3.org/TR/WCAG10/full-checklist.html>]

## 2.0 Tables With Subheadings

As a Web Developer for Monash University Arts Faculty I have often found it necessary to create tables of information that have a number of sub-sections. The table below is an example of a table with multiple sub-sections.

Example Table 1

Table Heading 1	Table Heading 2	Table Heading 3
Sub-section Heading 1		
S1C1R1	S1C2R1	S1C3R1
S1C1R2	S1C2R2	S1C3R2
Sub-section Heading 2		
S2C1R1	S2C2R1	S2C3R1
S2C1R2	S2C2R2	S2C3R2

This is how this table may be marked up in HTML. A [CSS][Cascading Style Sheets] will be used to visually format the primary table headings (TblHead1) and the secondary table headings (TblHead2):

```
<table
summary="This table is an example of a table containing subsections. In our example
the 2 sub-section each contain sub-section headings.">
<caption>Example Table 1</caption>
<thead>
<tr class="TblHead1">
<th abbr="TH1" id="header1"><p>Table Heading 1</p></th>
<th abbr="TH2" id="header2"><p>Table Heading 2</p></th>
<th abbr="TH3" id="header3"><p>Table Heading 3</p></th>
</tr>
</thead>
<tbody>
<tr class="TblHead2">
<td id="header4"><p>Sub-section Heading 1</p></td>
<td><p>&nbsp;</p></td>
<td><p>&nbsp;</p></td>
</tr>
<tr>
<td headers="header4 header1"><p>S1C1R1</p></td>
<td headers="header4 header2"><p>S1C2R1</p></td>
<td headers="header4 header3"><p>S1C3R1</p></td>
</tr>
<tr>
<td headers="header4 header1"><p>S1C1R2</p></td>
<td headers="header4 header2"><p>S1C2R2</p></td>
<td headers="header4 header3"><p>S1C3R2</p></td>
</tr>
</tbody>
</table>
<tbody>
<tr class="TblHead2">
```

```

    <td id="header5"><p>Sub-section Heading 2</p></td>
    <td><p>&nbsp;</p></td>
    <td><p>&nbsp;</p></td>
</tr>
<tr>
    <td headers="header5 header1"><p>S2C1R1</p></td>
    <td headers="header5 header2"><p>S2C2R1</p></td>
    <td headers="header5 header3"><p>S2C3R1</p></td>
</tr>
<tr>
    <td headers="header5 header1"><p>S2C1R2</p></td>
    <td headers="header5 header2"><p>S2C2R2</p></td>
    <td headers="header5 header3"><p>S2C3R2</p></td>
</tr>
</tbody>
</table>

```

Because there isn't a more elegant method of coding the sub-section heading we have to:

- a. Resort to using the id and headers attributes for associating headings with data cells. This method of can be quite time consuming for web developers.
- b. Create a class for the visual formatting of the sub-heading.

## 2.1 Column Span Issue

It is common for web developers when coding the above table to use the “colspan” attribute when coding the sub-section headings. This may be done like so:

```

<tr class="TblHead2">
    <td colspan="3" id="header4"><p>Sub-section Heading 1</p></td>
</tr>

```

Online sources recommend not using row or column span attributes.<sup>1</sup> This is because it has been found that commonly used screen readers can become lost whilst reading a table. That is the reason why the “colspan” attribute was avoided in the above example.

---

<sup>1</sup> WebAIM, How to Create Accessible Tables, (<http://www.webaim.org/howto/tables/tables3>) [Accessed: 17/10/2003].

### 3.0 An Alternative Solution

In the above example <thead> and <tbody> elements have been used for conformance with WCAG1.0 Priority 1 Checkpoint 5.2 (<http://www.w3.org/TR/WCAG10/wai-pageauth.html#tech-table-structure>). The below example is a theoretical solution to the problem.

```
<table
summary="This table is an example of a table containing subsections. In our example
the 2 sub-section each contain sub-section headings.">
<caption>Example Table 2</caption>
<thead>
<tr class="TblHead1">
<th abbr="TH1" scope="col"><p>Table Heading 1</p></th>
<th abbr="TH3" scope="col"><p>Table Heading 3</p></th>
</tr>
</thead>
<tbody>
<caption>Sub-section Heading 1</caption>
<tr>
<td><p>S1C1R1</p></td>
<td><p>S1C2R1</p></td>
<td><p>S1C3R1</p></td>
</tr>
<tr>
<td><p>S1C1R2</p></td>
<td><p>S1C2R2</p></td>
<td><p>S1C3R2</p></td>
</tr>
</tbody>
<tbody>
<caption>Sub-section Heading 2</caption>
<tr>
<td><p>S2C1R1</p></td>
<td><p>S2C2R1</p></td>
<td><p>S2C3R1</p></td>
</tr>
<tr>
<td><p>S2C1R2</p></td>
<td><p>S2C2R2</p></td>
<td><p>S2C3R2</p></td>
</tr>
</tbody>
</table>
```

The benefits of the above are thus:

- Have ability to markup second level headings within table.
- Can use simpler method of associating table headings with table data. Using scope="col" instead of "id" and "header" attributes.
- Will be able to develop CSS to visually format the sub-heading.
- Avoid "colspan" attribute and reduce confusion to screen readers.