

How to format table cells

UNIT: HTML

LEVEL: PRACTITIONER

WHAT IT IS

Sometimes you want to control the formatting of individual cells in a table. This includes how the text lays within each cell or across cells. This document also describes tips on how you can nest tables.

WHEN YOU WOULD USE IT

- If you want to define the width of individual columns (either absolutely in pixels or as a percentage of the whole table)
- If you had a column with a tall cell and you wanted the text in the other columns to line up in certain ways vertically or horizontally.
- If you wanted to have individual columns for the data, but have the heading span across both
- If you wanted to have a block of information in one column that spanned across multiple rows
- If you want to have a blank cell (with no text)

| Header 1 | Center Header 2 |
|--------------------|-----------------|
| Tall Column | Align top |
| Taller Column Yes? | Align middle |

| Header 1 | |
|----------|---------|
| Col 1 r1 | C2 row1 |
| Col 1 r2 | C2 row2 |
| Col 1 r3 | C2 row3 |
| Col 1 r4 | C2 row4 |

| Header 1 | Header 2 |
|-----------------|----------|
| Spanning 2 rows | Data 1 |
| Spanning 2 rows | |
| Spanning 2 rows | |

STEPS

1. Create your table: with table start and end tags `<table>`
... `</table>`
2. Create your cells within the table. Define each cell, assuming a perfect grid-like format (e.g. 3x3, 4x4). If you are planning on “merging” columns or headers, just define each cell as if they were not merged. For example, both Tables 2 and 3 would start off as 2 x 5 tables.
3. To format individual cells (non-spanning), add the desired parameter and value to the TR or TD tag, as appropriate:
 - a. **WIDTH** = “n” where n is the number of pixels wide the column should be *or*
WIDTH = “n%” where n is the percentage of the table’s total width

| Heading 1 | Heading 2 |
|-----------|-----------|
| A | B |
| C | D |
| E | F |
| G | H |

- b. **ALIGN** = "position" where position is one of the horizontal positions: **left**, **center**, or **right**
 - c. **VALIGN** = "position" where position is one of the horizontal positions: **top**, **middle**, or **bottom**
 - d. **BGCOLOR** = "#rrggbb" where rr, gg, bb are 2-digit hexadecimal numbers related to red, green and blue concentrations
4. To make a cell blank, place ` ` in the TD tag
 5. To format spanning, determine which cell "expands" and which cells "go away".
 - a. For example, in Table 2, the "Heading 1" cell expands and the "Heading 2" cell goes away from the "Grid with Square # of Cells"
 - i. Add **COLSPAN="n"** to the TD tag of the expanding cell where n is the number of columns that are merged. In this example, 2 are merged, the ones for "Heading 1" and "Heading 2"
 - ii. Remove the `<TD> ... </TD>` for the cell that goes away. In this case, remove the TD tags for the "Heading 2" cell.
 - b. For example, in Table 3, the A and E cells expand and the C and G cells go away.
 - i. Add **ROWSPAN="n"** to the TD tag of the expanding cell where n is the number of rows that are merged. In this example, 2 are merged for both A and E spans
 - ii. Remove the `<TD> ... </TD>` for the cells that goes away. In this case, remove the TD tags for the C and G cells

Tips for Nesting Tables

– from Castro, Elizabeth. *HTML for the World Wide Web*

Sometimes you find that you want complete control over the layout width. For example, you want the page contents to be as large as possible, no matter the screen size. However, you also want a table in your web page. In these cases, you may need to put a table within a table – also known as "nesting tables" (like the nesting dolls). Here is a technique that can help you do this successfully.

1. Create the inner table and any text or other elements that should accompany it.
2. Create the outer table. Determine which cell of the outer table will hold the inner table. Type **placeholder** (or some other easily identifiable text) in the cell.
3. Test both tables separately to make sure they look the way you want them to.
4. Replace the word **placeholder** with the inner table content by copying and pasting.

REFERENCES

If you need more tips or how to define these in CSS, consult

- Castro, Elizabeth. (2003). *HTML for the World Wide Web*. 5th Edition. Berkeley, CA: Peachpit Press. ISBN – 0-321-12007-3.

SAMPLE CODE

The following code defines the shown web page (right). There are two separate tables defined in this page. The first table concentrates on the individual cell formatting codes. The second one shows how the spanning codes can be used. The bolded text shows the cell parameters used to define this formatting.

```
<HTML>
<HEAD>
</HEAD>
<BODY>

<H1> Formatted Cells </H1>
  <TABLE BORDER="1" WIDTH="100%">
    <TR>
      <TD WIDTH="25%"> Cell 1 </TD>
      <TD ALIGN="CENTER"> Cell 2 </TD>
      <TD WIDTH="100"> Cell 3 </TD>
    </TR>
    <TR>
      <TD BGCOLOR="#777722"> Cell 4 </TD>
      <TD> Cell 5 has a lot of information! Cell 5 has a lot of information!
        Cell 5 has a lot of information! Cell 5 has a lot of information!
        Cell 5 has a lot of information! Cell 5 has a lot of information!
        Cell 5 has a lot of information! Cell 5 has a lot of information!
      </TD>
      <TD VALIGN="BOTTOM"> Cell 6 </TD>
    </TR>
    <TR>
      <TD> Cell 7 </TD>
      <TD &nbsp;</TD>
      <TD ALIGN="RIGHT"> Cell 9 </TD>
    </TR>
  </TABLE>
<BR><BR><BR>
  <TABLE BORDER="1" WIDTH="100%">
    <TR BGCOLOR="#AAAAFF">
      <TD WIDTH="25%"> Cell 1 </TD>
      <TD ALIGN="CENTER"> Cell 2 </TD>
      <TD WIDTH="100"> Cell 3 </TD>
    </TR>
    <TR>
      <TD BGCOLOR="#777722" ROWSPAN="2"> Cell 4 </TD>
      <TD> Cell 5 has a lot of information! Cell 5 has a lot of information!
        Cell 5 has a lot of information! Cell 5 has a lot of information!
        Cell 5 has a lot of information! Cell 5 has a lot of information!
        Cell 5 has a lot of information! Cell 5 has a lot of information!
      </TD>
      <TD VALIGN="BOTTOM"> Cell 6 </TD>
    </TR>
    <TR>
      <!-- no 1st column in third row because Cell 2 spans it>
      <TD COLSPAN="2" ALIGN="RIGHT"> Cell 8 </TD>
      <!-- No 9th column because Cell 8 spans it >
    </TR>
  </TABLE>
</BODY>
</HTML>
```

