8 TABLE MARKUP

OVERVIEW

- How tables are structured
- Table headers
- Cell spanning (rows and columns)
- Table captions
- Row and column groups

Tabular Data

HTML table markup is for data arranged into rows and columns.



wikipedia.org



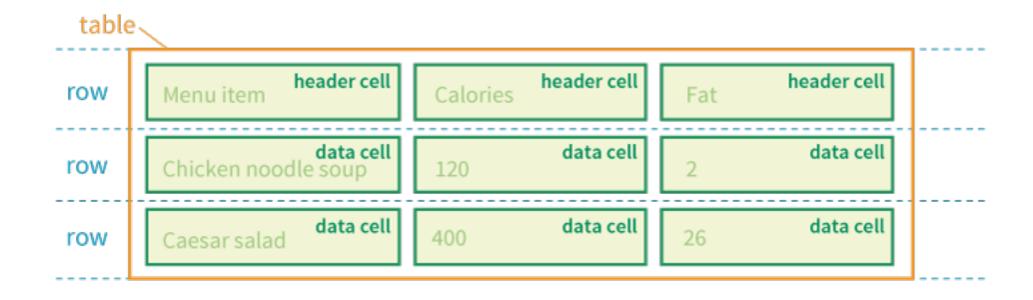
mbta.org

HTML Table Structure

Tables are made up of cells arranged into rows.

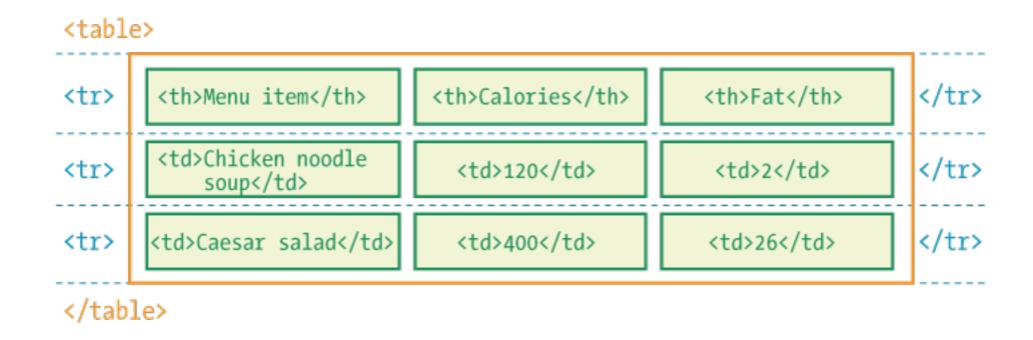
A simple table

| Menu item | Calories | Fat (g) |
|---------------------|----------|---------|
| Chicken noodle soup | 120 | 2 |
| Caesar salad | 400 | 26 |



HTML Table Structure (cont'd.)

How it looks using markup (table, tr, th, and td):



NOTE: Columns are implied by the number of cells in each row (not created with column elements).

HTML Table Structure (cont'd)

The same table written in code: Default browser display:

```
Menu item
  Calories
  Fat (g)
 Chicken noodle soup
  120
  2
 Caesar salad
  400
  26
```

| Menu item | Calories | Fat (g) |
|---------------------|----------|---------|
| Chicken noodle soup | 120 | 2 |
| Caesar salad | 400 | 26 |

The table Element

- Identifies tabular material
- Contains some number of row (tr) elements
- Optionally, may also have a caption element and row and column group elements

Table Row (tr) Element

- **tr** stands for "table row."
- The only thing that can go between tr tags is some number of th (header) and td (data cell) elements.
- There may be no text content in a row that is not contained within a header or data cell.

Table Cells

- td stands for "table data."
- Cells can contain any type of web content.
- All content in a table must be contained in td tags.

Table Headers

- th stands for "table header."
- Headers provide information about the cells in the row or column they precede.
- They are key tools for making table content accessible.
 Screen readers may read headers aloud before each data cell, providing context that is missing when you can't see the table.
- Headers are often rendered in a bold font by default.

Table Columns Are Implied

This table would have 2 rows and 3 columns (because there are 3 cells defined in each row):

```
>Burgers
Organic Grass-fed Beef
td>

Hand-cut Idaho potato

Seasoned sweet potato
```

Spanning Cells

Spanning

Stretching a cell to cover several rows or columns

Column span

Stretching a cell to the right over subsequent columns

Row span

Stretching a cell downward over several rows

Column Spans

Use the **colspan** attribute to specify the number of columns the cell should span over:

Notice that the first **tr** element only has one cell in it now. Every row should have the same number of cells or equivalent **colspan** values.

Row Spans

The **rowspan** attribute to specifies the number of rows the cell spans:

Notice that the **td** elements that were spanned over are no longer in the source.

Table Caption

<caption> </caption>

- Provides a title or description for the table
- Improves table accessibility
- The caption element must appear first in the table element.
- The caption displays above the table by default.

Table Caption (cont'd)

Nutritional Information

| Menu item | Calories | Fat (g) |
|---------------------|----------|---------|
| Chicken noodle soup | 120 | 2 |
| Caesar salad | 400 | 26 |

```
<caption>Nutritional Information</caption>

Menu item
Calories
Fat (g)
```

Row and Column Groups

- For complicated tables, you can create semantic groups of rows and/or columns that describe the table's structure.
- Row group and column group elements also provide more "hooks" for scripting and styling.

Row Groups

```
<thead> </thead> </thody> </thoot>
```

- Provide additional semantic structure
- Row group elements may contain one or more tr elements (no direct text content).
- Some browsing agents may repeat the header and footer rows on tables that span multiple pages.

Row Groups (cont'd)

```
<thead>
<!-- headers -->
<thead>
<!-- data -->

<tr>
<tfoot>
<!-- footnote -->
</tfoot>
```

Bidi control codes injected by 'unicode-bidi' at the start/end of 'display: inline' boxes

| | 'direction' value | | | |
|----------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| 'unicode-bidi' value | 'Itr' | | <u>'rtl'</u> | |
| | start | end | start | end |
| 'normal' | _ | _ | _ | _ |
| 'embed' | LRE (U+202A) | PDF (U+202C) | RLE (U+202B) | PDF (U+202C) |
| 'isolate' | LRI (U+2066) | PDI (U+2069) | RLI (U+2067) | PDI (U+2069) |
| 'bidi-override'* | LRO (U+202D) | PDF (U+202C) | RLO (U+202E) | PDF (U+202C) |
| 'isolate-override'* | FSI,LRO (U+2068,U+202D) | PDF,PDI (U+202C,U+2069) | FSI,RLO (U+2068,U+202E) | PDF,PDI (U+202C,U+2069) |
| 'plaintext' | FSI (U+2068) | PDI (U+2069) | FSI (U+2068) | PDI (U+2069) |

^{*} The LRO/RLO+PDF pairs are also applied to the root inline box of a block container if these values of 'unicode-bidi' were specified on the block container.

NOTE: this table also utilizes row and column spans.

Column Groups

```
<colgroup> </colproup> <col> </col>
```

- Allows you to assign id and class names to columns so they can be accessed by scripts or styles
- colgroup elements go at the start of the table, after the caption element if there is one.
- colgroup elements contain no content; they only provide an indication of column structure

Column Groups (cont'd)

The number of columns in a group is noted with the **span** attribute:

```
<caption>...</caption>
<colgroup></colgroup>
<colgroup span="2"></colgroup>
<colgroup span="2"></colgroup>
<!-- rest of table... -->
```

If you need to access individual columns, identify them with **col** elements: