

# Markup for Table Headers

In this lesson, we'll get into more detail of markup for table headers.

## WE'LL COVER THE FOLLOWING



- [Listing 3-12](#): Tables with header cells
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## table *<th>* headers in HTML5



Most tables have headers, either columns or rows, sometimes both. HTML table definitions allow you to specify cells as headers with the `<th>` tag.

A `<th>` tag can be used exactly as the `<td>` tag, so it can use the `colspan` and `rowspan` attributes as well.

Listing 3-12 demonstrates tables with header cells:

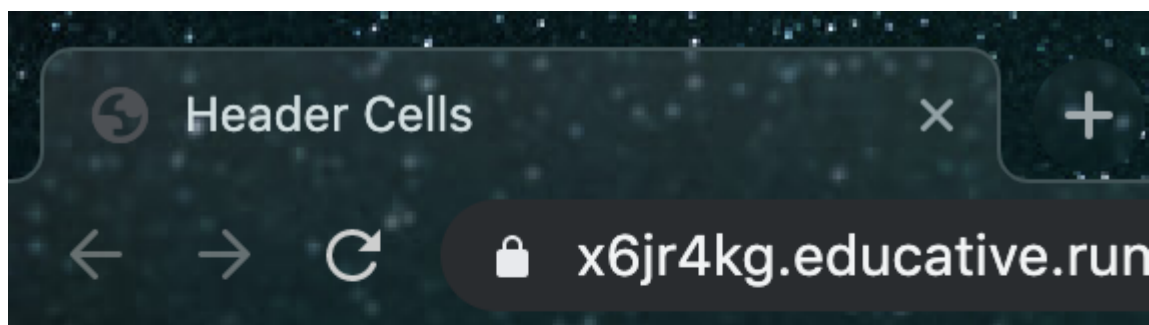
## Listing 3-12: Tables with header cells #

```
<!DOCTYPE html>
```

```
<html>
<head>
  <title>Header Cells</title>


</head>
<body>
  <table border="1">
    <tr>
      <th>Category</th>
      <th>Points</th>
    </tr>
    <tr>
      <td>Gold</td>
      <td>15000</td>
    </tr>
    <tr>
      <td>Silver</td>
      <td>8000</td>
    </tr>
    <tr>
      <td>Bronze</td>
      <td>3000</td>
    </tr>
  </table>
</body>
</html>
```

Table headers are displayed in most browsers with a boldfaced font (image below), and normally, this is the only visual clue that tells you they are header cells.



Category	Points
Gold	15000
Silver	8000
Bronze	3000

Table with header cells

 **NOTE:** Of course, with styling you can make more visual distinction between headers and normal cells, as you will learn later in this chapter.

You can use header cells not only in the first row but in any rows.

Listing 3-13 demonstrates this fact. It defines a table that describes the behavior of the logical XOR (logical eXclusive OR) operation and defines two row and two-column header cells.

## Listing 3-13: Using headers in multiple rows #

```
<!DOCTYPE html>
<html>
<head>
  <title>Header Cells</title>
</head>
<body>
  <table border="1">
    <tr>
      <td>XOR</td>
      <th>>false</th>
      <th>>true</th>
    </tr>
    <tr>
      <th>>false</th>
      <td>>false</td>
      <td>>true</td>
    </tr>
    <tr>
      <th>>true</th>
      <td>>true</td>
      <td>>false</td>
    </tr>
  </table>
</body>
</html>
```

The rendered markup is shown below:

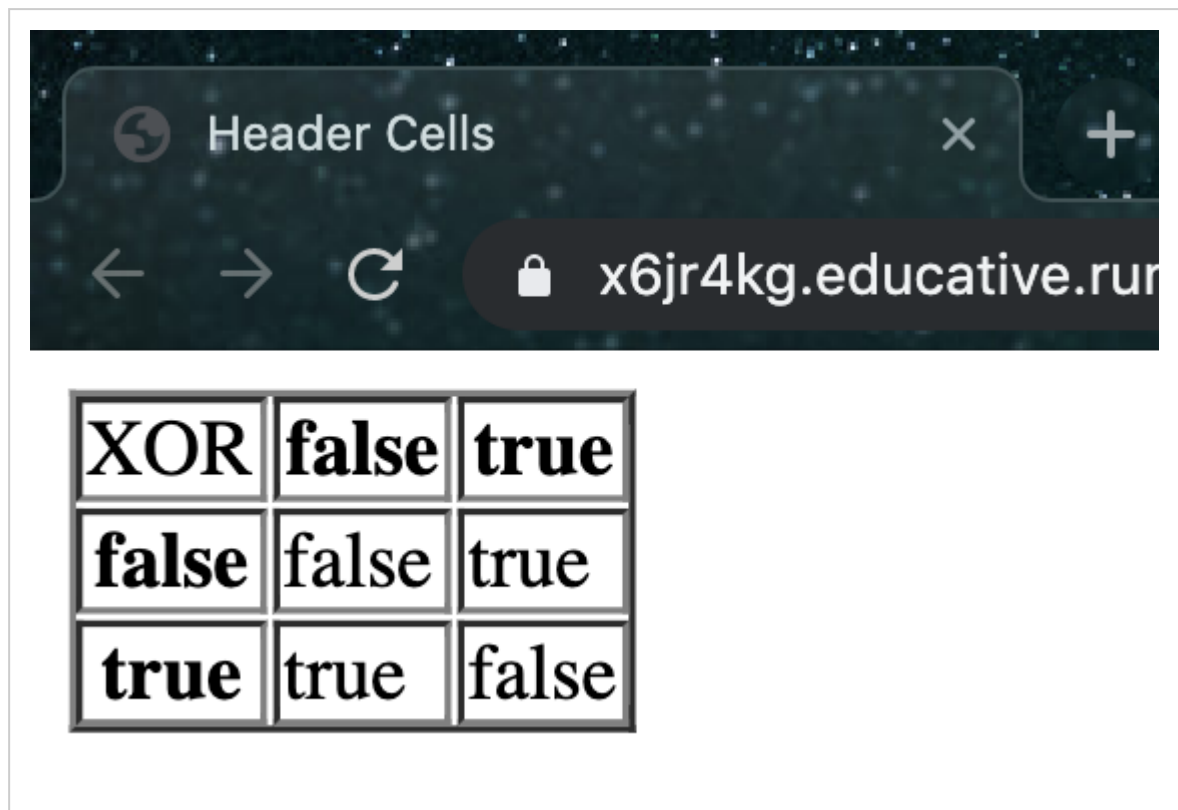


Table with multiple header cells

In this chapter, you already learned that HTML5 provides new semantic elements for page structure (such as `<aside>`, `<footer>`, etc.) and for text (such as `<time>`, `<mark>`, etc.).

Tables have new attributes in HTML5 just for the sake of additional semantics. If you use multiple header cells, attributes assigned to `<th>` can provide more semantic value, which could be leveraged by browser extensions, such as screen readers.

Listing 3-14 extends Listing 3-13 with new header cells and demonstrates the extra semantics offered by the headers and scope attributes of `<th>`.

## Exercise 3-14: Extra headers semantic and scope attributes of `<th>` #

```
<!DOCTYPE html>
<html>
<head>
  <title>Header Cells</title>
</head>
<body>
  <table border="1">
```

```

<table border="1">
  <tr>
    <td rowspan="2" colspan="2">XOR</td>

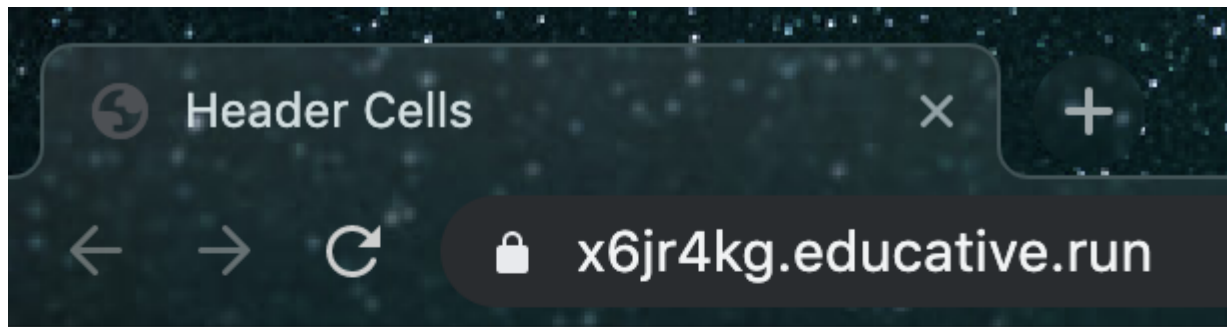
    <th id="input" colspan="2">Input</th>
  </tr>
  <tr>
    <th headers="input" scope="col">false</th>
    <th headers="input" scope="col">true</th>
  </tr>
  <tr>
    <th id="output" rowspan="2">Output</th>
    <th headers="output" scope="row">false</th>
    <td>false</td>
    <td>true</td>
  </tr>
  <tr>
    <th headers="output" scope="row">true</th>
    <td>true</td>
    <td>false</td>
  </tr>
</table>
</body>
</html>

```

Take a look at the image below which shows how the markup in Listing 3-14 is rendered.

Just as most of the semantic elements do not provide any visual properties in regard to the extra semantic meaning, you cannot see any additional clue that would describe new semantics.

Well, those are invisible for human readers, but not for browser plug-ins accessing the page structure.



XOR		Input	
Output	false	false	true
	true	true	false

Table with extra semantic

The first row's `<th>` tag has an `id` attribute with the value of `"input"`. This cell not only visually nests the `"false"` and `"true"` cells directly beneath it in the image above, but as the second row's definition shows, those cells are semantically connected to the `"input"` `<th>` tag through their `headers="input"` attribute:

index.html

```
<tr>
  <th headers="input" scope="col">false</th>
  <th headers="input" scope="col">true</th>
</tr>
```

Both tags' `scope` attributes are set to `"col"`, and this setting tells that the corresponding `<th>` cells are headers for a column.

A similar relationship is built up for the `"Output"` cell and its related `"false"` and `"true"` cells, using the `"output"` ID value. As their `scope="row"` settings tell, these cells are headers for rows.

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In the *next lesson*, we'll define our tables in style!

See you there!