Adding Tables and Making Them Responsive

Complexity Level: Advanced

The is an advanced topic. You will need to possess a good understanding of HTML, and have significant experience with Drupal content editing.

Overview

You can add tables and, if you like, make those tables responsive in content on Drupal 9. This ensures they look good no matter how small a device someone viewing your site uses.

As this requires going into the "source" of your text editor and working with html, it is more of an advanced topic for our content editors.

The first part covers how to make a table. The second will explain how to add classes to make your table responsive.

```html
<table>
  <thead>
    <tr>
      <th>Name</th>
      <th>Title</th>
      <th>Life</th>
      <th>Wikipedia link</th>
    </tr>
    <tr>
      <td>Katherine Johnson</td>
      <td>physicist, space scientist, mathematician</td>
      <td>1918-present</td>
      <td>https://en.wikipedia.org/wiki/Katherine_Johnson</td>
    </tr>
    <tr>
      <td>Cecilia Payne</td>
      <td>astrophysicist, astronomer</td>
      <td>1900-1979</td>
    </tr>
    <tr>
      <td>Margaret Hamilton</td>
      <td>computer scientist, systems engineer</td>
      <td>1950-present</td>
      <td>https://en.wikipedia.org/wiki/Margaret_Hamilton_(scientist)</td>
    </tr>
    <tr>
      <td>Inge Lehmann</td>
      <td>seismologist, geophysicist</td>
      <td>1890-1933</td>
    </tr>
  </thead>
</table>
```
On this page I'm going to make a responsive table, one that looks good even on small devices.

### Famous scientists and mathematicians

<table>
<thead>
<tr>
<th>Name</th>
<th>Titles</th>
<th>Life</th>
<th>Wikipedia link</th>
</tr>
</thead>
<tbody>
<tr>
<td>Katherine Johnson</td>
<td>physicist, space scientist, mathematician</td>
<td>1918–present</td>
<td><a href="https://en.wikipedia.org/wiki/Katherine_Johnson">Wikipedia page on Katherine Johnson</a></td>
</tr>
<tr>
<td>Margaret Hamilton</td>
<td>computer scientist, systems engineer</td>
<td>1936–present</td>
<td><a href="https://en.wikipedia.org/wiki/Margaret_Hamilton">Wikipedia page on Margaret Hamilton</a></td>
</tr>
</tbody>
</table>

#### Note on the Screenshots in this Document

This document shows screenshots from a site using the Franklin Gold Theme.

#### Famous Scientists – Tables Page

<table>
<thead>
<tr>
<th>Name</th>
<th>Titles</th>
<th>Life</th>
<th>Wikipedia link</th>
</tr>
</thead>
<tbody>
<tr>
<td>Katherine Johnson</td>
<td>physicist, space scientist, mathematician</td>
<td>1918–present</td>
<td><a href="https://en.wikipedia.org/wiki/Katherine_Johnson">Wikipedia page on Katherine Johnson</a></td>
</tr>
<tr>
<td>Margaret Hamilton</td>
<td>computer scientist, systems engineer</td>
<td>1936–present</td>
<td><a href="https://en.wikipedia.org/wiki/Margaret_Hamilton">Wikipedia page on Margaret Hamilton</a></td>
</tr>
</tbody>
</table>

#### Table of Contents

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  - Part One: Create a table in the text editor region of your content
    - 1) Within the text editor region of a piece of content, look for the table icon.
    - 2) Decide how many rows and columns you need. You can always add more later.
    - 3) Indicate where your table header will be (“First Row” in the above example, and provide a caption.
    - 4) Type your content into the cells
5) If you need to add another cell or row, right click on the table and select the option that meets your needs.
   • Merging cells
6) Save your content and view your table.
   • Part Two: In the source of your text editor, add classes to the table rows and cells
     1) Click on the Source button of your text editor
     2) Add a class to the table to make it responsive.
     3) Decide which column or columns have the least priority and add "priority-low" classes to them.
     4) Decide which column or columns have second least priority and add "priority-medium" classes to them.
     5) Edit your table as needed.
   • Source code before and after
     • Table source code before responsive classes were added:
     • Table source code after responsive classes:

Notes for the Web Team (Developers)

In order for this to work for our clients, you need the following fields allowed under the filter settings for the Full HTML text format:

```
<table class> <caption> <tbody> <thead> <tfoot> <th class> <td class style colspan rowspan> <tr> *The style and colspan/rowspan are what users need to merge columns and rows
```

Web team members will also need to ensure the theme has the correct css. This is already available for the Franklin Vertical and Franklin Bold themes.

You can also find it in the tables.css of the Bartik theme.

```css
/**
 * Responsive tables.
 */
@media screen and (max-width: 600px) { 
th.priority-low, 
  td.priority-low, 
th.priority-medium, 
  td.priority-medium { 
  display: none; 
  }
}
@media screen and (max-width: 960px) { 
  th.priority-low, 
  td.priority-low { 
  display: none; 
  }
}
```

Steps

Part One: Create a table in the text editor region of your content
1) Within the text editor region of a piece of content, look for the table icon.

2) Decide how many rows and columns you need. You can always add more later.

3) Indicate where your table header will be ("First Row" in the above example, and provide a caption.

Here's your table:
4) Type your content into the cells

Here's my table filled out:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Life</th>
<th>Wikipedia link</th>
</tr>
</thead>
<tbody>
<tr>
<td>Margaret Hamilton</td>
<td>computer scientist, systems engineer</td>
<td>1916-1992</td>
<td><a href="https://en.wikipedia.org/wiki/Margaret_Hamilton_Jones">https://en.wikipedia.org/wiki/Margaret_Hamilton_Jones</a></td>
</tr>
</tbody>
</table>

Merging cells

Note: If you are trying to merge rows or columns in a table and find you cannot, please put in a ticket to helpdesk.franklin.uga.edu.

5) If you need to add another cell or row, right click on the table and select the option that meets your needs.

6) Save your content and view your table.
Notice the table has some flexibility, but the content doesn't all fit when I downsize the screen to simulate a cell phone screen.

We're going to go into the source and add some responsive classes to our table using html.

**Part Two: In the source of your text editor, add classes to the table rows and cells**

1) Click on the Source button of your text editor
2) Add a class to the table to make it responsive.

```
<table class="responsive-table">
  <caption>Famous scientists and mathematicians</caption>
  <thead>
    <tr>
      <th>Name</th>
      <th>Titles</th>
      <th>Life</th>
      <th>Wikipedia link</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>Katherine Johnson</td>
      <td>Physicist, space scientist, mathematician</td>
      <td>1918-present</td>
      <td>https://en.wikipedia.org/wiki/Katherine_Johnson</td>
    </tr>
  </tbody>
</table>
```

To `<table>` I added `<table class="responsive-table">`.

3) Decide which column or columns have the least priority and add "priority-low" classes to them.

These will be the first to disappear when the screen size shrinks.

Add the "priority-low" class to the table header row and each of the cells.

I'm making the Year column disappear first.

First, to `<th>` I added `<th class="priority-low">` to make the header row Year disappear first.

```
<thead class="priority-low">
  <tr>
    <th>Name</th>
    <th>Titles</th>
    <th class="priority-low">Life</th>
    <th>Wikipedia link</th>
  </tr>
</thead>
```

Next I changed `<tr>` to `<tr class="priority-low">` to each of the Year cells.
I had to remember to add this class to all of the Years for each person in my table.

**Note:** To see all the changes made to the HTML of this table, please see my source code at the bottom of this document.

I won't see a change when I go back to the regular text editor mode away from the Source. I'll need to save my content first.

Save your page and test your results.

The Year column, which I gave the "priority-low" class, disappears once I decrease the size of the page.

4) Decide which column or columns have second least priority and add "priority-medium" classes to them.

These will columns will not show up on the smallest devices.

Edit your page again and select the Source button once more.

Add the "priority-medium" class to the table header row and each of the cells.

I'm making the Title column disappear next.

First I change the table header...
Then I do each of the individual title cells.

<table>
<thead>
<tr>
<th>Name</th>
<th>Wikipedia link</th>
</tr>
</thead>
<tbody>
<tr>
<td>Margaret Hamilton</td>
<td><a href="https://en.wikipedia.org/wiki/Margaret_Hamilton">https://en.wikipedia.org/wiki/Margaret_Hamilton</a></td>
</tr>
</tbody>
</table>

Don't forget to change them all!

Note: Again, to see all the changes made to the HTML of this table, please see my source code at the bottom of this document.

Save your page and test your results.

Now the titles won't show up on small devices.

But there's a problem.

The urls in the Wikipedia page columns are so long, and they don't have a word break so the text won't wrap.
<table>
<thead>
<tr>
<th>Famous scientists and mathematicians</th>
<th>Wikipedia link</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="https://en.wikipedia.org/wiki/Katherine_Johnson">https://en.wikipedia.org/wiki/Katherine_Johnson</a></td>
<td></td>
</tr>
<tr>
<td><a href="https://en.wikipedia.org/wiki/Margaret_Hamilton">https://en.wikipedia.org/wiki/Margaret_Hamilton</a></td>
<td></td>
</tr>
</tbody>
</table>

Because pasting the url as the link text doesn't meet accessibility guidelines any way, I'm going to recreate the link with some friendly text.

5) Edit your table as needed.

I'm changing the link text for this Wikipedia page column.

For more about adding links, please view the Adding Links to Content document.
I did this for each link.

<table>
<thead>
<tr>
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<th>Wikipedia link</th>
</tr>
</thead>
<tbody>
<tr>
<td>Katherine Johnson</td>
<td>physicist, space scientist, mathematician</td>
<td>1916-present</td>
<td>Wikipedia page on Katherine Johnson</td>
</tr>
<tr>
<td>Cecilia Payne</td>
<td>astrophysician, astronomer</td>
<td>1900-1979</td>
<td>Wikipedia page on Cecilia Payne</td>
</tr>
<tr>
<td>Margaret Hamilton</td>
<td>computer scientist, systems engineer</td>
<td>1936-present</td>
<td>Wikipedia page on Margaret Hamilton</td>
</tr>
<tr>
<td>Inge Lehman</td>
<td>seismologist, geophysicist</td>
<td>1888-1983</td>
<td>Wikipedia page on Inge Lehman</td>
</tr>
</tbody>
</table>

Notice I'm not just typing "Wikipedia page" over and over again, because that alone is not specific enough for link text. So I say “Wikipedia page for Katherine Johnson.”

I saved my page.

Looks good!

<table>
<thead>
<tr>
<th>Name</th>
<th>Titles</th>
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<tbody>
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<td>Inge Lehman</td>
<td>seismologist, geophysicist</td>
</tr>
</tbody>
</table>

Still looks good!
Source code before and after

**Table source code before responsive classes were added:**

```html
<table>
  <caption>Famous scientists and mathematicians</caption>
  <thead>
    <tr>
      <th>Name</th>
      <th>Titles</th>
      <th>Life</th>
      <th>Wikipedia link</th>
    </tr>
  </thead>
  <tbody>
    <tr>
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      <td>physicist, space scientist, mathematician</td>
      <td>1918-present</td>
    </tr>
    <tr>
      <td>Cecilia Payne</td>
      <td>astrophysicist, astronomer</td>
      <td>1900-1979</td>
    </tr>
    <tr>
      <td>Margaret Hamilton</td>
      <td>computer scientist, systems engineer</td>
      <td>1936-present</td>
    </tr>
    <tr>
      <td>Inge Lehman</td>
      <td>seismologist, geophysicist</td>
      <td>1888-1993</td>
    </tr>
  </tbody>
</table>
```
<table>
<thead>
<tr>
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<th>Titles</th>
<th>Life</th>
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<tbody>
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<tr>
<td>Margaret Hamilton</td>
<td>computer scientist, systems engineer</td>
<td>1936-present</td>
<td><a href="https://en.wikipedia.org/wiki/Margaret_Hamilton_(scientist)">Wikipedia page on Margaret Hamilton</a></td>
</tr>
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</table>