

A modern dining room featuring a light-colored wooden table and matching chairs with red upholstered seats. The room is decorated with a green shelving unit, a red clock, and various plants. A yellow patterned rug is on the floor. The text "Talkin' Tables" is overlaid on the image.

Talkin' Tables

Adrian Roselli for A11yTO Conf 2025

Basics



When Tables

- Data across two axes
- Key / value pairs
- Layout

Structure

- HTML `<table>`
- ARIA `role="table"`
- ARIA `role="grid"`

Simple Tables

- `<caption>`
- `<th>`
- `scope= ?`
- `<thead>`, `<tbody>`, `<tfoot>`, `<colgroup>?`
- ~~`colspan=`, `rowspan=`~~

Headers

- First row / column
- Mid-table
- Switch mid-table
- End of table
- abbr

Complex Tables

- `<caption>`
- `<th>`
- `scope= ?`
- `<thead>`, `<tbody>`, `<tfoot>`, `<colgroup>?`
- `colspan=`, `rowspan=`
- `headers=`

Spanning

- Must use **headers** attribute
- It still won't work
- Avoid spanning

Region	Author	Title	Year	ISBN		Formats Available		
				13	10	Pulp	Audio	Digital
Asia	Murasaki Shikibu (紫 式部, Lady Murasaki)	<i>The Tale of Genji</i> (源氏物語, <i>Genji monogatari</i>)	1021	9780142437148	014243714X	✓		
Europe	Miguel De Cervantes	<i>The Ingenious Gentleman Don Quixote of La Mancha</i>	1605	9783125798502	3125798507	✓	✓	✓
		<i>Novelas ejemplares</i>	1590–1612	unknown	unknown			
		<i>La Galatea</i>	1605	9788437613154	unknown	✓		
	Sir Isaac Newton	<i>The Method of Fluxions and Infinite Series: With Its Application to the Geometry of Curve-lines</i>	1763	9781330454862	1330454863	✓	✓	✓
		<i>Frankenstein; or, The Modern Prometheus</i>	1818	9781530278442	1530278449	✓	✓	✓
	Mary Shelley	<i>The Last Man</i>	1826	unknown	0192838652	✓		
		<i>The Beautiful Widow</i>	1835	unknown	1551110776	✓	✓	
North America	Herman Melville	<i>Moby-Dick; or, The Whale</i>	1851	9781530697908	1530697905	✓	✓	✓
		<i>Typee</i>	1820	9781657584419	1657584410	✓	✓	✓
	F. Scott Fitzgerald	<i>The Great Gatsby</i>	1925	9780743273565	0743273567	✓		✓
		<i>Who Fears Death</i>	2010	9780756406691	0756406692	✓	✓	✓
Africa	Nnedi Okorafor	<i>The Book of Phoenix</i>	2015	9780756410780	0756410789	✓	✓	✓
		<i>Remote Control</i>	2021	9781250772800	125077280X	✓	✓	✓

Cell Counts

- Need consistent cell count
- Factor spans
- Else broken headers



The image shows a contemporary dining area. A light-colored wooden table with a thick top and a large, matching wooden cabinet base stands on a dark grey rug. The table is set with two white mugs, a glass pitcher of orange juice, and a plate of pastries. Two black folding chairs are tucked under the table. In the background, white kitchen cabinets with silver handles are visible, along with a window ledge holding books and a small plant. The word "Responsive" is overlaid in a large, black, sans-serif font on a white rectangular background.

Responsive

Under-engineered

- Wrapping element
- Styles
- ARIA
- JavaScript

Wrapper

```
<div  
  role="region"  
  aria-labelledby="Caption01"  
  tabindex="0">  
  <table>[...]</table>  
</div>
```

Wrapper Styles

```
[role="region"][aria-labelledby][tabindex] {  
    overflow: auto;  
}
```

```
[role="region"][aria-labelledby][tabindex]:focus {  
    outline: .1em solid rgba(0,0,0,.1);  
}
```


Books in a Scrolling Container

Author	Title	Year	ISBN-13	ISBN-10
Miguel De Cervantes	<i>The Ingenious Gentleman Don Quixote of La Mancha</i>	1605	9783125798502	3125798
Gabrielle-Suzanne Barbot de Villeneuve	<i>La Belle et la Bête</i>	1740	9781910880067	1910880
Sir Isaac Newton	<i>The Method of Fluxions and Infinite Series: With Its Application to the Geometry of Curve-lines</i>	1763	9781330454862	1330454
Mary Shelley	<i>Frankenstein; or, The Modern Prometheus</i>	1818	9781530278442	1530278
Herman Melville	<i>Moby-Dick; or, The Whale</i>	1851	9781530697908	1530697
Emma Dorothy Eliza Nevitte Southworth	<i>The Hidden Hand</i>	1888	9780813512969	0813512
F. Scott Fitzgerald	<i>The Great Gatsby</i>	1925	9780743273565	0743273
George Orwell	<i>Nineteen Eighty-Four</i>	1948	9780451524935	0451524
Nnedi Okorafor	<i>Who Fears Death</i>	2010	9780756406691	0756406

Over-engineered

- Wrapping element?
- Styles
- ARIA?
- JavaScript?

Books I May or May Not Have Read

Author	Title	Year	ISBN-13	ISBN-10
Miguel De Cervantes	<i>The Ingenious Gentleman Don Quixote of La Mancha</i>	1605	9783125798502	3125798507
Mary Shelley	<i>Frankenstein; or, The Modern Prometheus</i>	1818	9781530278442	1530278449
Herman Melville	<i>Moby-Dick; or, The Whale</i>	1851	9781530697908	1530697905
Emma Dorothy Eliza Nevitte Southworth	<i>The Hidden Hand</i>	1888	9780813512969	0813512964
F. Scott Fitzgerald	<i>The Great Gatsby</i>	1925	9780743273565	0743273567
George Orwell	<i>Nineteen Eighty-Four</i>	1948	9780451524935	0451524934

Fixed Headers



Fixed Table Headers

- `scope=row`
- `<thead>` (`<tbody>`, `<tfoot>`)
- ARIA
- JavaScript

Fixed Row Headers

```
th[scope="row"] {  
  position: sticky;  
  inset-inline-start: 0;  
  z-index: 1;  
}
```


Row Header Border

```
th[scope="row"]::after {  
  content: "";  
  position: absolute;  
  inset-inline-end: 0;  
  inset-block: 0;  
  border-inline-end: .05em solid #d6d6d6;  
}
```

Books with a Fixed Row Header Column

Author	Title
Miguel De Cervantes	<i>The Ingenious Gentleman Don Quixote of La Mancha</i>
Gabrielle-Suzanne Barbot de Villeneuve	<i>La Belle et la Bête</i>
Sir Isaac Newton	<i>The Method of Fluxions and Infinite Series: With Its Application to the Geometry of Curve-lines</i>
Mary Shelley	<i>Frankenstein; or, The Modern Prometheus</i>
Herman Melville	<i>Moby-Dick; or, The Whale</i>
Emma Dorothy Eliza Nevitte Southworth	<i>The Hidden Hand</i>
F. Scott Fitzgerald	<i>The Great Gatsby</i>
George Orwell	<i>Nineteen Eighty-Four</i>
Nnedi Okorafor	<i>Who Fears Death</i>

Fixed Column Headers

```
thead {  
  position: sticky;  
  inset-block-start: 0;  
  z-index: 2;  
}
```


Books with a Fixed Column Header Row

Author	Title	Year	ISBN-13
Miguel De Cervantes	<i>The Ingenious Gentleman Don Quixote of La Mancha</i>	1605	9783125798502
Gabrielle-Suzanne Barbot de Villeneuve	<i>La Belle et la Bête</i>	1740	9781910880067
Sir Isaac Newton	<i>The Method of Fluxions and Infinite Series: With Its Application to the Geometry of Curve-lines</i>	1763	9781330454862
Mary Shelley	<i>Frankenstein; or, The Modern Prometheus</i>	1818	9781530278442
Herman Melville	<i>Moby-Dick; or, The Whale</i>	1851	9781530697908

Scroll in Two Directions

- Yes
- But maybe no

Books with Fixed Headers on Both Axes

Author	Title
Miguel De Cervantes	<i>The Ingenious Gentleman Don Quixote of La Mancha</i>
Gabrielle-Suzanne Barbot de Villeneuve	<i>La Belle et la Bête</i>
Sir Isaac Newton	<i>The Method of Fluxions and Infinite Series: With Its Application to the Geometry of Curve-lines</i>
Mary Shelley	<i>Frankenstein; or, The Modern Prometheus</i>
Herman Melville	<i>Moby-Dick; or, The Whale</i>
Emma Dorothy Eliza Nevitte Southworth	<i>The Hidden Hand</i>

Scroll-snap

- Almost definitely no

Author	Title	Year	ISBN-13	ISBN-10	Mood
Murasaki Shikibu (紫 式部, Lady Murasaki)	<i>The Tale of Genji</i> (源氏物語, <i>Genji monogatari</i>)	1021	9780142437148	014243714X	😞
Miguel De Cervantes	<i>The Ingenious Gentleman Don Quixote of La Mancha</i>	1605	9783125798502	3125798507	😬
Gabrielle- Suzanne Barbot de Villeneuve	<i>La Belle et la Bête</i>	1740	9781910880067	191088006X	😄

Horizontal scrolling table

Author	Title
Murasaki Shikibu (紫 式部, Lady Murasaki)	The Tale of Genji (源氏物語, Genji monogatari)
Miguel De Cervantes	The Ingenious Gentleman Don Quixote of La
Gabrielle-Suzanne Barbot de Villeneuve	La Belle et la Bête
Sir Isaac Newton	The Method of Fluxions and Infinite Series: V Application to the Geometry of Curve-lines
Mary Shelley	Frankenstein; or, The Modern Prometheus
Herman Melville	Moby-Dick; or, The Whale
Emma Dorothy Eliza Nevitte Southworth	The Hidden Hand
F. Scott Fitzgerald	The Great Gatsby
George Orwell	Nineteen Eighty-Four
Nnedi Okorafor	Who Fears Death

Labeling



Labeling Controls

- `<label>`, contents
- `aria-labelledby`
- `aria-label`
- Visually-hidden text

Flag	Author	Title	Year	ISBN-13	Claimed by	Remove
☒	Miguel De Cervantes	The Ingenious Gentleman Don Quixote of La Mancha	1605	9783125798502		<button>Remove</button>
☒	Mary Shelley	Frankenstein; or, The Modern Prometheus	1818	9781530278442		<button>Remove</button>
☐	Herman Melville	Moby-Dick; or, The Whale	1851	9781530697908		<button>Remove</button>
☐	Emma Dorothy Eliza Nevitte Southworth	The Hidden Hand	1888	9780813512969		<button>Remove</button>
☐	F. Scott Fitzgerald	The Great Gatsby	1925	9780743273565		<button>Remove</button>
☐	George Orwell	Nineteen Eighty-Four	1948	9780451524935		<button>Remove</button>



Selecting

Clickable Row

- JavaScript
- ARIA grid
- CSS

Block CSS

```
th {  
  position: relative;  
}  
th > label::after {  
  content: "";  
  display: block;  
  position: absolute;  
  inset: 0;  
  width: 92vw;  
}
```

```
tr:hover, tr:focus-within {  
  outline: .5em solid  
    rgba(0,0,255,.25);  
}  
td:has(input:focus) + th  
  label::after {  
  background-color:  
    rgba(255,255,0,.1);  
}
```

	Title	Author	Year	ISBN-13
☐	<i>The Tale of Genji</i> (源氏物語, <i>Genji monogatari</i>)	Murasaki Shikibu (紫 式部, Lady Murasaki)	1021	9780142437148
☐	<i>The Ingenious Gentleman Don Quixote of La Mancha</i>	Miguel De Cervantes	1605	9783125798502
☐	<i>Frankenstein; or, The Modern Prometheus</i>	Mary Shelley	1818	9781530278442
☒	<i>Moby-Dick; or, The Whale</i>	Herman Melville	1851	9781530697908
☐	<i>The Hidden Hand</i>	Emma Dorothy Eliza Nevitte Southworth	1888	9780813512969
☒	<i>The Great Gatsby</i>	F. Scott Fitzgerald	1925	9780743273565
☐	<i>Nineteen Eighty-Four</i>	George Orwell	1948	9780451524935
☐	<i>Who Fears Death</i>	Nnedi Okorafor	2010	9780756406691



Expandos

Expando Basics

- Disclosure widget
- **hidden**

Expando Name

```
<tr>
  <td>
    <button type="button"
      id="btnMSb"
      aria-expanded="false"
      aria-label="3 more from"
      aria-labelledby="btnMSb lblMSb">[...]</button>
  </td>
  <td id="lblMSb">Mary Shelley</td>
  [...]
</tr>
```

Author	Title	Year	ISBN-13	ISBN-10
Miguel De Cervantes	<i>The Ingenious Gentleman Don Quixote of La Mancha</i>	1605	9783125798502	3125798507
▶ Mary Shelley	<i>Frankenstein; or, The Modern Prometheus</i>	1818	9781530278442	1530278449
Herman Melville	<i>Moby-Dick; or, The Whale</i>	1851	9781530697908	1530697905
▶ Emma Dorothy Eliza Nevitte Southworth	<i>The Hidden Hand</i>	1888	9780813512969	0813512964
F. Scott Fitzgerald	<i>The Great Gatsby</i>	1925	9780743273565	0743273567
George Orwell	<i>Nineteen Eighty-Four</i>	1948	9780451524935	0451524934

Expando Extras

- Can hold more than rows
- But no



Sortable

Sortable Columns

- `<colgroup>`, `<col>`, `<button>`
- CSS
- ARIA
- JavaScript
- SVG

ARIA for Sorting

- `<th aria-sort="none">` (default)
- `<th aria-sort="ascending">`
- `<th aria-sort="descending">`
- `<th aria-sort="other">`

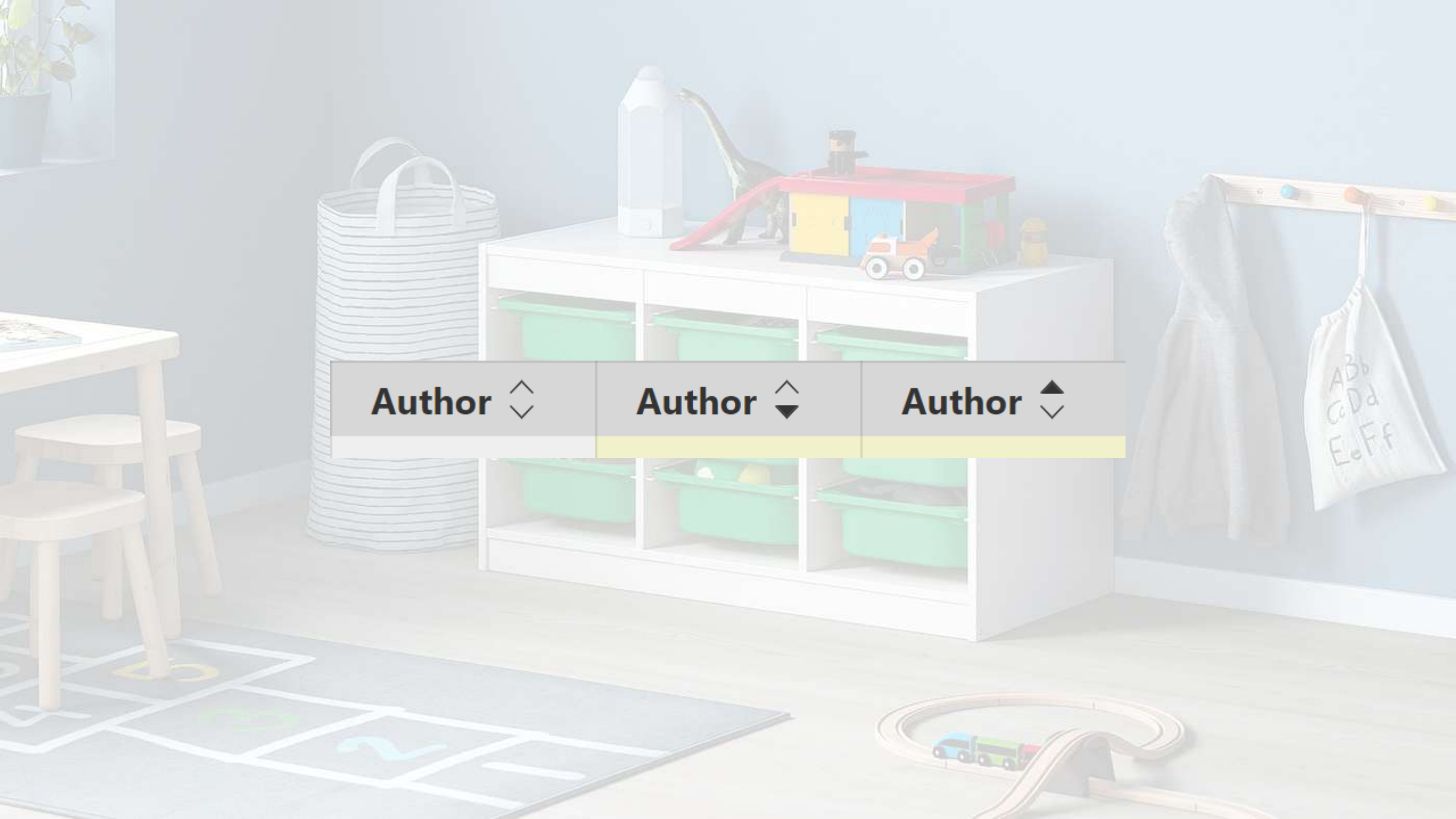
Visual Sorted Column Cue

```
colgroup:has(+ thead th[aria-sort]:nth-child(1)) col:nth-child(1) {  
    background-color: rgba(255, 255, 0, 0.15);  
}  
colgroup:has(+ thead th[aria-sort]:nth-child(2)) col:nth-child(2) {  
    background-color: rgba(255, 255, 0, 0.15);  
}
```

Author ⌵	Title ⌵	Year ⌴	ISBN-13 ⌵	ISBN-10 ⌵	Mood ⌵
Murasaki Shikibu (紫 式部, Lady Murasaki)	<i>The Tale of Genji</i> (源氏物語, <i>Genji monogatari</i>)	1021	9780142437148	014243714X	😞
Miguel De Cervantes	<i>The Ingenious Gentleman Don Quixote of La Mancha</i>	1605	9783125798502	3125798507	😬
Gabrielle-Suzanne Barbot de Villeneuve	<i>La Belle et la Bête</i>	1740	9781910880067	191088006X	😄
Sir Isaac Newton	<i>The Method of Fluxions and Infinite Series: With Its Application to the Geometry of Curve-lines</i>	1763	9781330454862	1330454863	😬
Mary Shelley	<i>Frankenstein; or, The Modern Prometheus</i>	1818	9781530278442	1530278449	😱
Herman Melville	<i>Moby-Dick; or, The Whale</i>	1851	9781530697908	1530697905	😬
Emma Dorothy Eliza Nevitte Southworth	<i>The Hidden Hand</i>	1888	9780813512969	0813512964	😬
F. Scott Fitzgerald	<i>The Great Gatsby</i>	1925	9780743273565	0743273567	😞
George Orwell	<i>Nineteen Eighty-Four</i>	1948	9780451524935	0451524934	😡
Nnedi Okorafor	<i>Who Fears Death</i>	2010	9780756406691	0008288747	😞

Sort Button

```
<th aria-sort="descending|ascending">  
  <button [...]>  
    <span>Author</span>  
    <svg [...] aria-hidden="true">  
      <use [...]></use>  
    </svg>  
    <svg [...] aria-hidden="true">  
      <use [...]></use>  
    </svg>  
  </button>  
</th>
```



Author 	Author 	Author 

Sort Button Layout

```
th > button {  
  display: grid;  
  grid-template-columns: minmax(2em, max-content) .65em auto;  
  grid-template-areas: "t a x" "t d x";  
}  
th > button > span {  
  grid-area: t;  
  padding-inline-end: .5em;  
}
```

Sort Button Icons Layout

```
th > button > .asc {  
  grid-area: a;  
  align-self: center;  
}  
th > button > .des {  
  grid-area: d;  
  align-self: center;  
}  
th > button::after {  
  content: "";  
  grid-area: x;  
}
```

Live region

⌵ off

⌵ polite

✓ assertive

Live region output:

sorted down

Books I May or May Not Have Read

Author ⌵	Title ⌵	Year ⌵	ISBN-13 ⌵	ISBN-10 ⌵	Mood ⌵
Murasaki Shikibu (紫 式部, Lady Murasaki)	<i>The Tale of Genji</i> (源氏物語, <i>Genji monogatari</i>)	1021	9780142437148	014243714X	😞
Miguel De Cervantes	<i>The Ingenious Gentleman Don Quixote of La Mancha</i>	1605	9783125798502	3125798507	😞
Gabrielle-Suzanne Barbot de Villeneuve	<i>La Belle et la Bête</i>	1740	9781910880067	191088006X	😄
Sir Isaac Newton	<i>The Method of Fluxions and Infinite Series: With Its Application to the Geometry of Curve-lines</i>	1763	9781330454862	1330454863	😞
Mary Shelley	<i>Frankenstein; or, The Modern Prometheus</i>	1818	9781530278442	1530278449	😱
Herman Melville	<i>Moby-Dick; or, The Whale</i>	1851	9781530697908	1530697905	😞
Emma Dorothy Eliza Nevitte Southworth	<i>The Hidden Hand</i>	1888	9780813512969	0813512964	😞
F. Scott Fitzgerald	<i>The Great Gatsby</i>	1925	9780743273565	0743273567	😞
George Orwell	<i>Nineteen Eighty-Four</i>	1948	9780451524935	0451524934	😡
Nnedi Okorafor	<i>Who Fears Death</i>	2010	9780756406691	0008288747	😞

Sortable Column Mad Libs

Demonstrating how a browser and screen reader build the announcement presented to users when they encounter sortable table columns. Activate the button and scroll down. Read my post [Sortable Table Column Mad Libs](#) for more information.

Control Type ☒ Button ☐ Link (no)		aria-roledescription Value
Text in the Control Year	Text Referenced via aria-describedby	
Text Referenced via aria-labelledby	Does aria-labelledby reference the control itself <i>and</i> another node? ☒ Yes (this is better) ☐ No (overriding what the user sees)	
Column Count 6	Sorted ☒ Unsorted ☐ Ascending ☐ Descending	
Column Position 3		

Sortable Column Header, Assemble!

Multi-column Sort

- Sort and set a priority
- Using one control
- No ARIA for this (yet)

Live region

⊘ off

⊘ polite

✓ assertive

Live region output:

empty

Books I May or May Not Have Read

Author ⌵

Title ⌵

Year ⌵

ISBN-13 ⌵

ISBN-10 ⌵

Mood ⌵

Murasaki Shikibu

The Tale of Genji

1021

9780142437148

014243714X



(紫式部 Lady

源氏物語 Genji monogatari)

1

Author ⬆

Murasaki Shikibu

(紫式部 Lady Murasaki)

2

Title ⬆

The Tale of Genji

(源氏物語 Genji monogatari)

Unrelated...



Book!

- *Digital Accessibility Ethics: Disability Inclusion in all things Tech*
- Lainey Feingold, Reginé Gilbert, and Chancey Fleet
- 32 chapters by 39 authors
- Introduces the first Digital Accessibility Ethics Framework
- March, 2026; Taylor and Francis



Outro



A kitchen scene with a wooden cabinet, a range hood, a clock, and a rolling cart. The text "rosel.li/TablesA11yTO" is overlaid on the image.

rosel.li/TablesA11yTO

