Pemrograman Web
Minggu 4:

Layouting

Oleh : Nugraha

The Different Kinds of CSS Layout

- Using Table
- Using Float
- Using Flexbox
- Using Grid

Read More : https://css-tricks.com/guides/layout/

Using Table

The <table> element in HTML is used for displaying tabular data. You can think of it as a way to describe and display data that would make sense in spreadsheet software. Essentially: columns and rows. In this article, we’re going to look at how to use them, when to use them, and everything else you need to know.

```html
<table id="table-example-1">
    <caption>Specification values: <b>Steel</b>, <b>Castings</b>,
        Ann. A.S.T.M. A27-16, Class B;* P max. 0.06; S max. 0.05.</caption>
    <thead>
        <tr>
            <th rowspan="2">Grade.</th>
            <th rowspan="2">Yield Point.</th>
            <th colspan="2">Ultimate tensile strength</th>
            <th rowspan="2">Per cent elong. 50.8 mm or 2 in.</th>
            <th rowspan="2">Per cent reduct. area.</th>
        </tr>
        <tr>
            <th>kg/mm<sup>2</sup></th>
            <th>lb/in<sup>2</sup></th>
        </tr>
    </thead>
    <tbody>
        <tr>
            <td>Hard</td>
            <td>0.45 ultimate</td>
            <td>56.2</td>
            <td>80,000</td>
            <td>15</td>
            <td>20</td>
        </tr>
        <tr>
            <td>Medium</td>
            <td>0.45 ultimate</td>
            <td>49.2</td>
            <td>70,000</td>
            <td>18</td>
            <td>25</td>
        </tr>
        <tr>
            <td>Soft</td>
            <td>0.45 ultimate</td>
            <td>42.2</td>
            <td>60,000</td>
            <td>22</td>
            <td>30</td>
        </tr>
    </tbody>
</table>
```

```css
#table-example-1 {
    border: solid thin;
    border-collapse: collapse;
}

#table-example-1 caption {
    padding-bottom: 0.5em;
}

#table-example-1 th,
#table-example-1 td {
    border: solid thin;
    padding: 0.5rem 2rem;
}

#table-example-1 td {
    white-space: nowrap;
}

#table-example-1 th {
    font-weight: normal;
}

#table-example-1 td {
    border-style: none solid;
    vertical-align: top;
}

#table-example-1 th {
    padding: 0.2em;
    vertical-align: middle;
    text-align: center;
}

#table-example-1 tbody td:first-child::after {
    content: leader(". ");
    '

}

body {
    padding: 1rem;
}
```

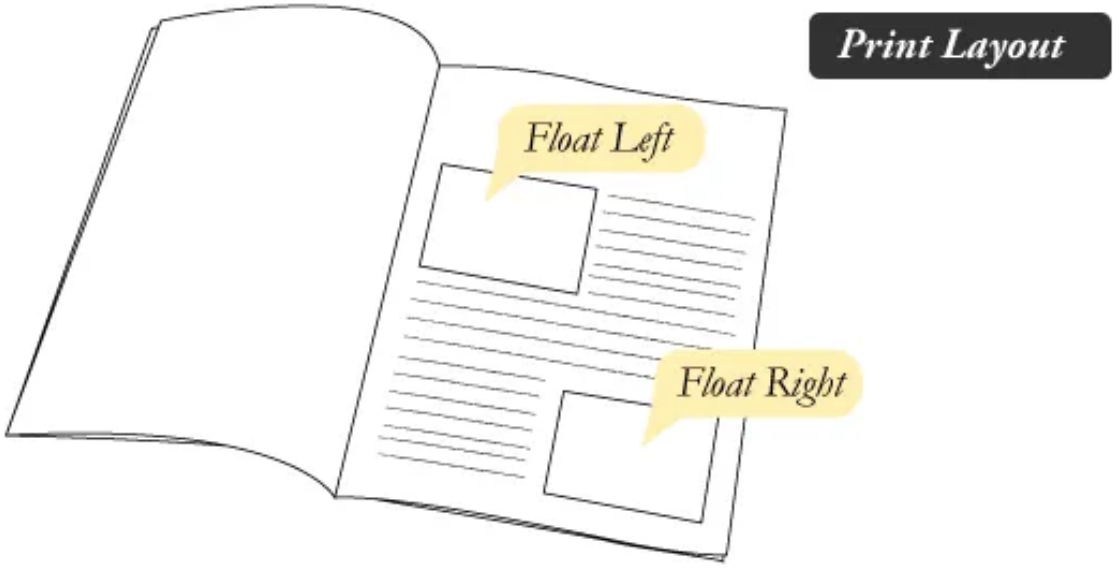
Making Semantic Elements Behave Like a Table

CSS has properties to make any element you wish behave as if it was a table element. You'll need to structure them essentially as you would a table, and it will be subject to the same source-order-dependency as a table, but you can do it. I'm not crapping on it either, it's genuinely useful sometimes. If that layout style solves a problem and has no negative order implications, use it

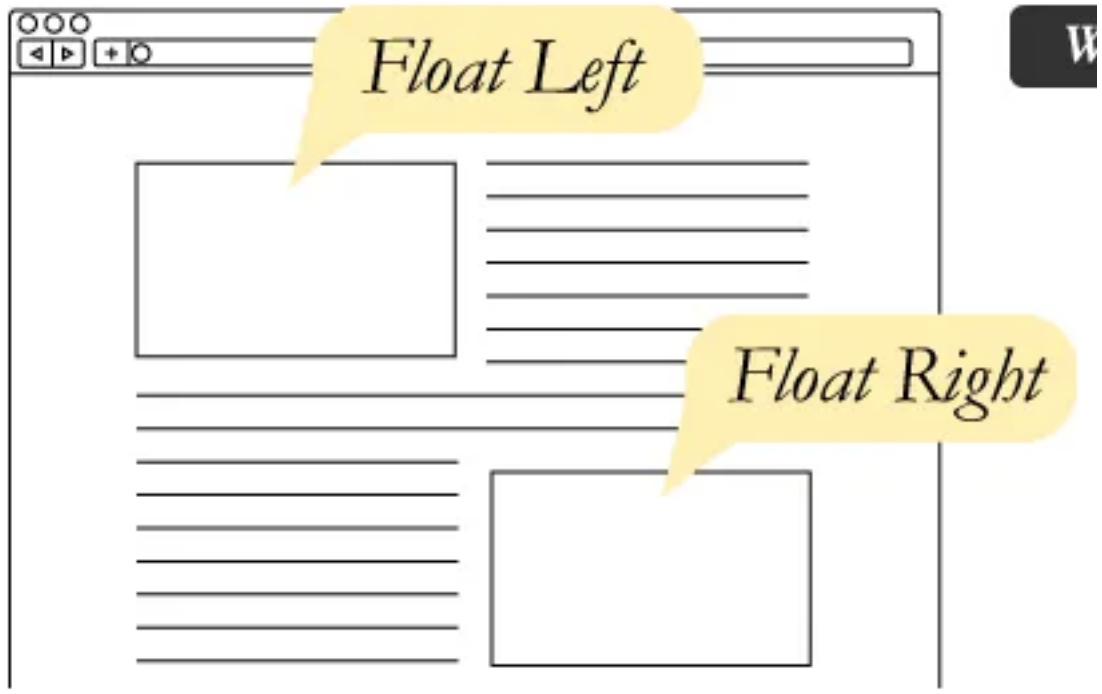
```
<section style="display: table;">
  <header style="display: table-row;">
    <div style="display: table-cell;"></div>
    <div style="display: table-cell;"></div>
    <div style="display: table-cell;"></div>
  </header>
  <div style="display: table-row;">
    <div style="display: table-cell;"></div>
    <div style="display: table-cell;"></div>
    <div style="display: table-cell;"></div>
  </div>
</section>
```

What is “Float”?

- **Float** is a CSS positioning property. To understand its purpose and origin, we can look to print design. In a print layout, images may be set into the page such that text wraps around them as needed. This is commonly and appropriately called “text wrap”. Here is an example of that.

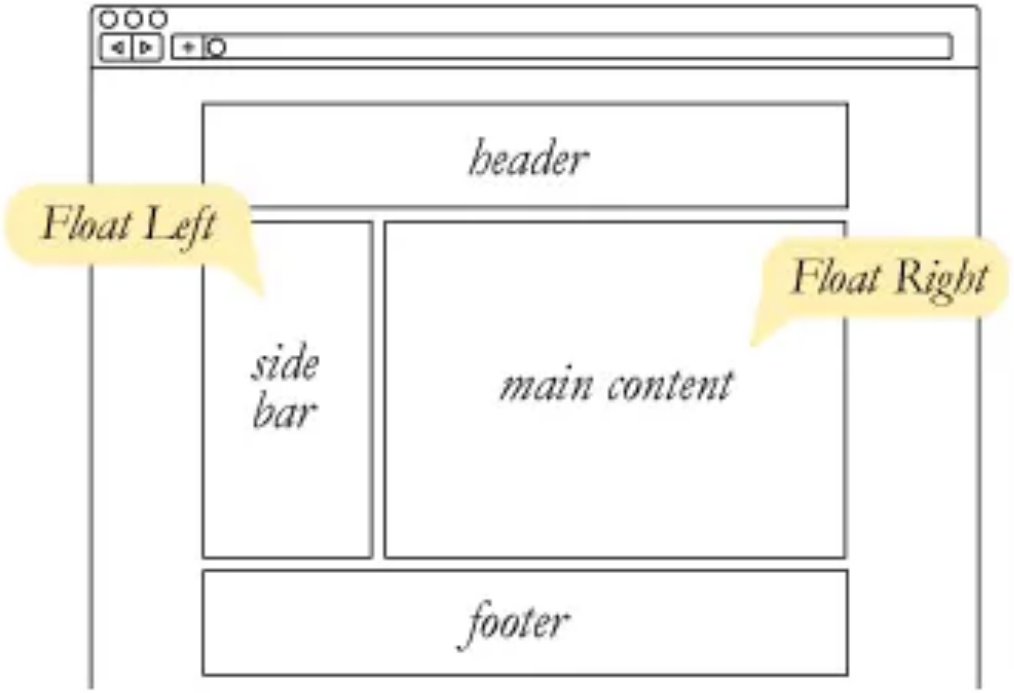


In page layout programs, the boxes that hold the text can be told to honor the text wrap, or to ignore it. Ignoring the text wrap will allow the words to flow right over the image like it wasn't even there. This is the difference between that image being part of the *flow* of the page (or not). Web design is very similar.

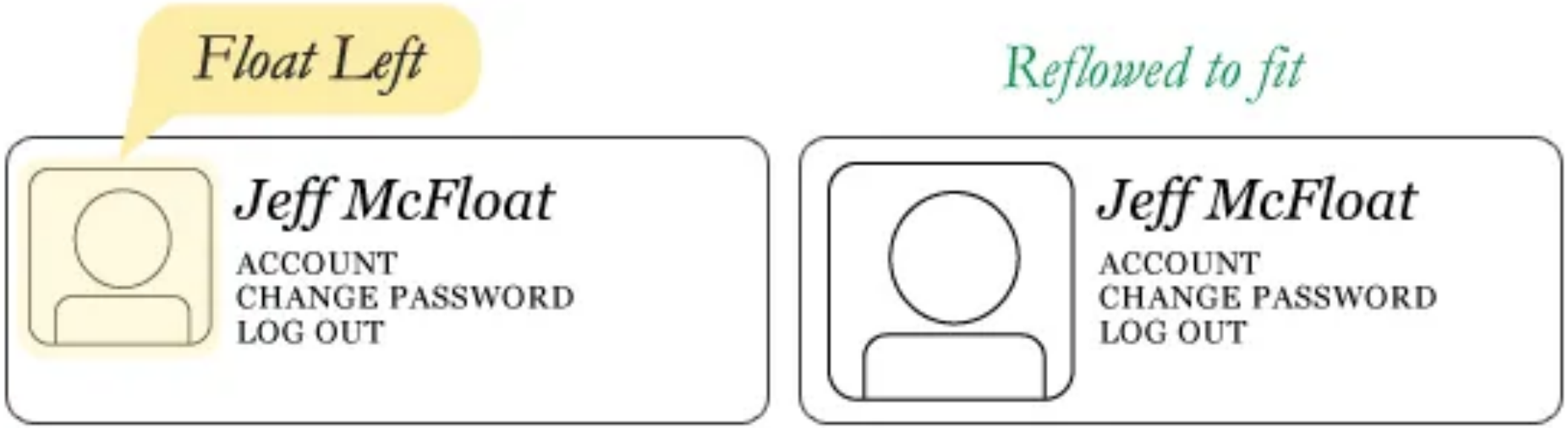


What are floats used for?

Aside from the simple example of wrapping text around images, floats can be used to create **entire web layouts**.



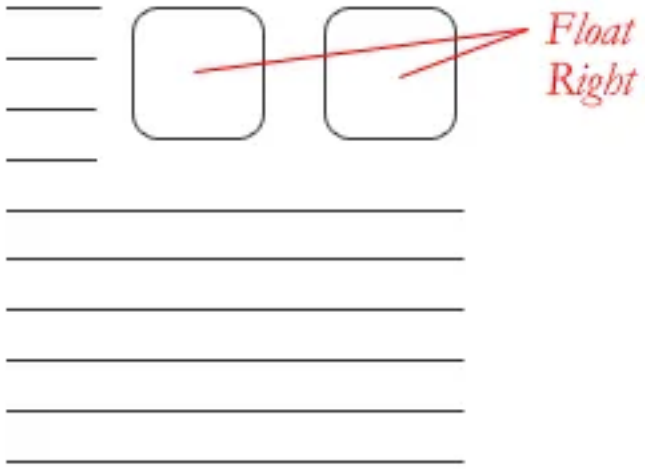
Floats are also helpful for layout in smaller instances. Take for example this little area of a web page. If we use float for our little avatar image, when that image changes size the text in the box will reflow to accommodate:

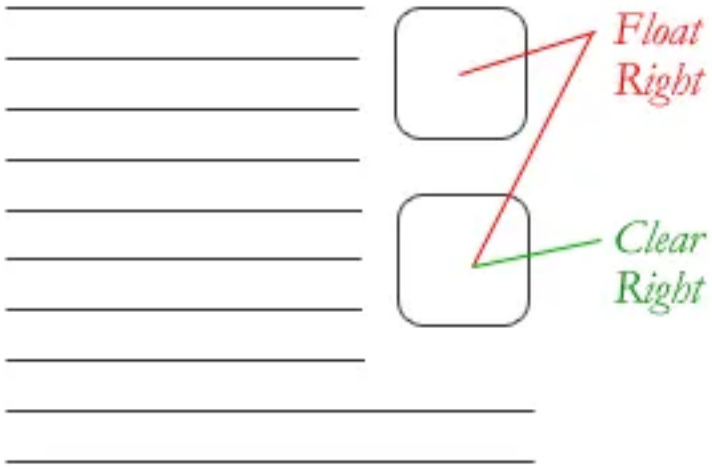


Clearing the Float

Float's sister property is clear. An element that has the clear property set on it will not move up adjacent to the float like the float desires, but will move itself down past the float. Again an illustration probably does more good than words do.

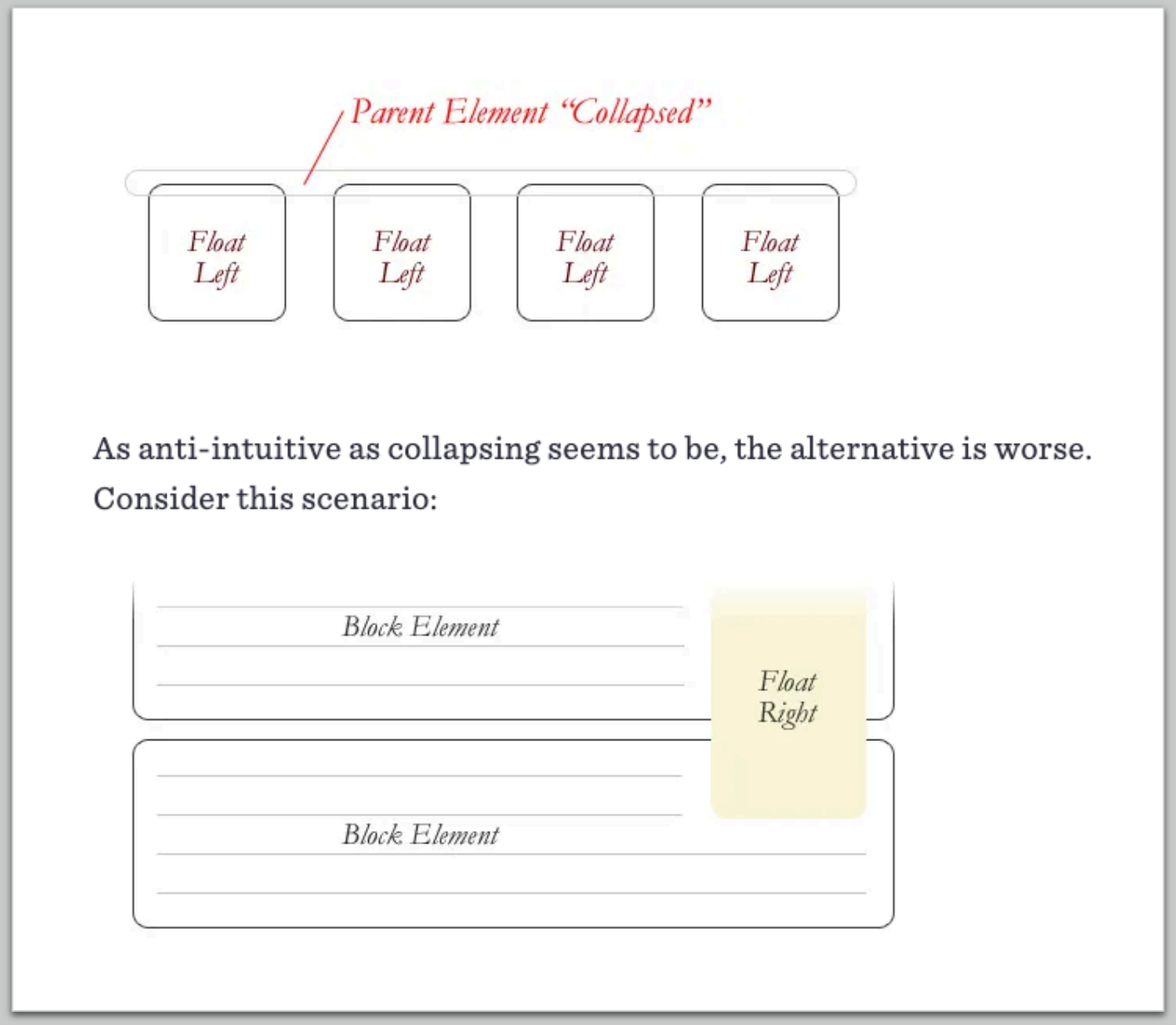
Clear has four valid values as well. **Both** is most commonly used, which clears floats coming from either direction. **Left** and **Right** can be used to only clear the float from one direction respectively. **None** is the default, which is typically unnecessary unless removing a clear value from a cascade. **Inherit** would be the fifth, but is strangely not supported in Internet Explorer. Clearing only the left or right float, while less commonly seen in the wild, definitely has its uses.





The Great Collapse

One of the more bewildering things about working with floats is how they can affect the element that contains them (their “parent” element). If this parent element contained nothing but floated elements, the height of it would literally collapse to nothing. This isn’t always obvious if the parent doesn’t contain any visually noticeable background, but it is important to be aware of.



Techniques for Clearing Floats (clear: both;)

- **The Empty Div Method** is, quite literally, an empty div.
- **The Overflow Method** relies on setting the overflow CSS property on a parent element. If this property is set to auto or hidden on the parent element, the parent will expand to contain the floats, effectively clearing it for succeeding elements
- **The Easy Clearing Method** uses a clever CSS pseudo selector (:after) to clear floats.

Referensi

- https://css-tricks.com/complete-guide-table-element/
- https://css-tricks.com/all-about-floats/
- https://css-tricks.com/snippets/css/a-guide-to-flexbox/