CSS3 POSITIONING & LAYOUT: CORE CONCEPTS

COMP 126: Practical Web Design & Development for Everyone

THE POSITION PROPERTY

```
position: static;
          relative;
          absolute;
          fixed;
          sticky;
```

POSITION: STATIC;

default; moves with "the normal flow of the document": that is, everything migrates to the upper left-hand corner of the page

//codepen.io/tkjn/embed/GXYmvQ/?height=265&theme-id=0&default-tab=css,result&embed-version=2

POSITION: RELATIVE;

positions the element *relative to where it would fall in the document's normal flow,* by defining "offsets"--the distances from the top, bottom, left, or right. Also required to make other elements available for absolute positioning (see next...)

//codepen.io/tkjn/embed/ZMqKeg/?height=265&theme-id=0&default-tab=html,result&embed-version=2

POSITION: ABSOLUTE;

places the element *completely outside the normal flow of the document*: nothing in the document or browser affects its position. Its offsets only refer to the nearest *positioned* containing element--which usually means you need to set position: relative; on the nearest containing element

POSITION: FIXED;

top, bottom, left, & right values are based on the viewport (the browser window), *not the container element*; fixed elements *do not scroll*

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POSITION: STICKY;

combination of relative and fixed;

the sticky element stays in place until another sticky element replaces it

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THE Z-INDEX PROPERTY

allows you to stack/layer positioned elements

//codepen.io/tkjn/embed/wEQeZB/?height=265&theme-id=0&default-tab=html,result&embed-version=2

BASIC FLOATS & CLEARS

//codepen.io/tkjn/embed/YORVBx/?height=265&theme-id=0&default-tab=css,result&embed-version=2

MORE FLOATS & CLEARS

//codepen.io/tkjn/embed/Ewowwq/?height=265&theme-id=0&default-tab=css,result&embed-version=2

2-COLUMN FIXED-WIDTH LAYOUT WITH FLOATS

//codepen.io/tkjn/embed/JaeNQE/?height=265&theme-id=0&default-tab=css,result&embed-version=2

2-COLUMN FLUID LAYOUT WITH FLOATS

//codepen.io/tkjn/embed/NLEgWJ/?height=265&theme-id=0&default-tab=css,result&embed-version=2

THINGS TO REMEMBER ABOUT FLOATS

1. Inline elements that come after floated elements in the HTML flow around the floated elements.
2. **Non-positioned** block elements that come directly after floated elements in the HTML ignore the floated elements and try to flow in their usual manner (vertically), as though the floated elements did not exist (potentially leading to overlaps/collisions/collapses).
3. If you want to make a block element recognize the floated elements and behave normally toward them (not run into/overlap them) you have to "clear" the floats (left, right, or both).

COLLAPSING PARENT DIVS

In this example, the floated (green) divs are located inside a blue parent container...but you can't see the parent, because parent containers (which are block elements) collapse when all their contents are floated. They don't recognize the floats at all.

OVERFLOW: AUTO;

This simple trick will overcome the collapsing parent element problem...in most cases.

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