CS472 WAP

Float

Page Layout

The Whole is Greater than the Sum of the Parts

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Main Point Preview

- The CSS float property makes its element move to right or left side of the containing box. The clear property moves its element downwards if there is a floating element on the specified side. Float is a convenient way to have text wrap around an element or make something appear on the right or left side

- *Do less and accomplish more.*

`float`

Float has several important uses for layout

- One is for wrapping text around images (see next slide).
- Another is to position elements on the left or right or center, and possibly columns
  - This is being replaced by Flexbox and grid and multicolumn

Float Example

```
img {
    float: right;
    margin: 0 0 1em 1em;
}
```

- When we float a div element it will comply to width and height properties rather than taking the whole width
- It is removed from normal document flow
- Underlying text wraps as necessary

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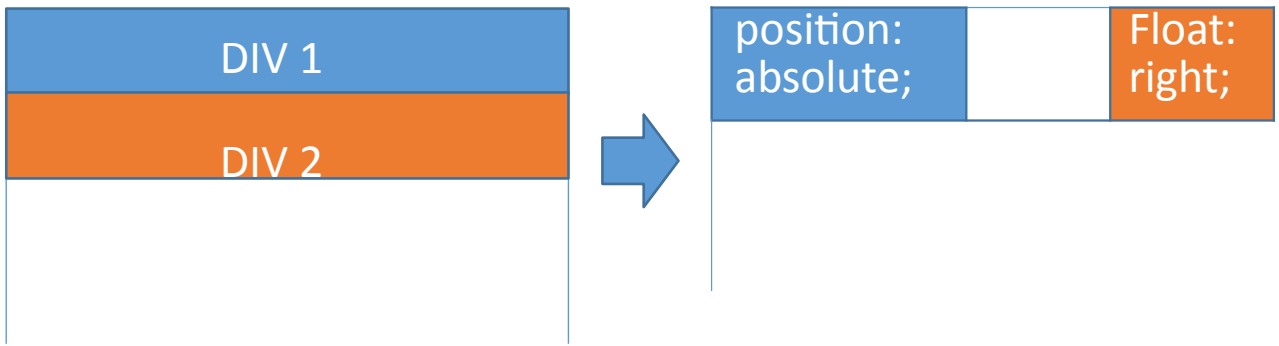
Common float bug: missing width

- often floating block elements must have a width property value
  - if no width is specified, the floating element will size to fit its content. Large content may occupy 100% of the page width, so no content can wrap around it

  - See example: lesson3_examples/floatingwithoutwidth.html

Block elements behavior with `position/float`

- If a block element is positioned as **`fixed`** or **`absolute`**, it will ONLY occupy the space of its content rather than taking the whole width space.
- Same thing applies for block elements with **`float`**.



The `clear` property

(Stop the float I want to get off!)

```
img.hoveringicon { float: left; margin-right: 1em; }
h2 { clear: left; background-color: yellow; }
p { background-color: fuchsia; }
```

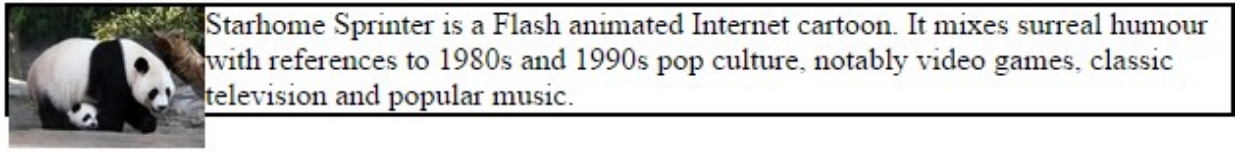
Starhome Sprinter is a Flash animated Internet cartoon. It mixes surreal humour with references to 1980s and 1990s pop culture, notably video games, classic television and popular music.

My Starhome Sprinter Fan Site

Property	Meaning	Values
clear	Whether to move this element below any prior floating elements in the document	left, right, both, none(default)

Common error: container too short

- If you place a tall *floating element* inside a block element without much other content, the floating element may hang down past the bottom edge of the block element that contains it.



- See example: lesson3_examples/commonerrorcontenttooshort.html

The `overflow` property

overflow: hidden

2 scenarios for use of overflow

- *Floating elements* that are too tall for containing block
  - Previous slide
  - lesson3_examples/overflow.html
- Blocks of fixed height that have more content than their space allows
  - https://www.w3schools.com/css/tryit.asp?filename=trycss_overflow_visible

Property	Meaning	Values
overflow	Action to take if element's content is larger than the element itself	visible(default), hidden, scroll, auto

Multi-column layouts

- When more than one element floats in the same direction, they stack horizontally

```
div, p { border: 2px solid black; }
.column { float: right; width: 25%; }

<div class="column"> Lorem ipsum dolor sit amet, consectetuer
 adipiscing elit. Integer pretium dui sit amet felis. </div>
<div class="column"> Integer sit amet diam. Phasellus ultrices
 viverra velit. </div>
<div class="column"> Beware the Jabberwock, my son! The jaws that
 bite, the claws that catch! </div>
```

See example: lesson3_examples/multicolumn-float.html

Multi-column

```
#columns {
  column-count: 3;
  column-gap: 40px;
  column-rule: 2px dotted gray;}
```

browser splits columns rather than split into smaller divs ourselves.

Property	Description	Values
column-count	Number of columns to use	an integer
column-rule	Vertical line between columns	a width, style and color
column-gap	Space between columns	a size (px, pt, %, em)
column-span	Lets contained element span all columns	1(default) or all

Alignment vs. float vs. position

1. if possible, lay out an element by aligning its content
   - horizontal alignment: text-align
     - set this on a block element; it aligns the content (text and inline elements) within it (not the block element itself)
     - E.g., see lesson3_examples/textalign.html example
     - Might need to make block elements have display: inline
   - vertical alignment: vertical-align
     - set this on an inline element, and it aligns it vertically within its containing element
2. float is no longer best practice for layout.
   - Only use for the wrapping text use case
3. Positioning as required for special use cases
4. Modern layouts use flexbox or grid instead of float and positioning

Main Point

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