

Lecture 9.2: Floats

Objectives

- understand the normal flow of elements
- use the division element to create content containers
- create floating layouts
- build a flexible page layout
- build a fixed page layout

Understanding the Normal Flow of Elements

- normal flow determines the sequence of element display
- boxes are laid out vertically one after the other, beginning at the top of the containing box
- each box horizontally fills the browser window
- for *inline* elements, boxes are laid out horizontally beginning at the top left of the containing block
- inline boxes comprise the lines of text within, for example, a `<p>` element
- when you *float* an element, you take it out of the normal flow

Creating Content Containers

- use sectioning elements and occasionally `<div>` elements to create content sections
- `<div>` has no special meaning; use it only as a container for style purposes, as in a page wrapper
- `<section>` is a thematic section of a document with a heading
- `<article>` is a reusable section of content

Creating Floating Layouts

- `float` property lets you build columnar layouts
- align content to either the right or left side of the browser window
- remember to always use `width` property for floating elements
- choose a method for containing the floating elements
- often, floating elements extend beyond their containing elements
 - Solution1: for multiple columns, at least one column needs to be non-floating and positioned with margin properties
 - Solution2: use a non-floating footer element with `clear: both`
- column drop: occurs when the total width of the columnar elements in a page layout exceeds the width of their containing element

Building a Flexible Page Layout

- flexible layout adapt to the size of the browser window
- flexible layouts are the basis for responsive layouts used for mobile devices
- control compression and expansion of content in a flexible layout by setting minimum and maximum widths:
`div.wrapper{width:100%; min-width: 750px; max-width: 1220px;}`

Building a Fixed Page Layout

- fixed layouts remain constant despite resizing of the browser in different screen resolutions and sizes
- allow more control over finished design
- normally contained by a wrapper element that controls the page width and centers the page in the browser window
 - `#wrapper{width: 960px; margin-left:auto; margin-right:auto;}`

Summary

- normal flow dictates the way in which elements normally are displayed in the browser window
- when you remove an element from the normal flow, you may see unexpected behaviour from other elements
- remember to always use a width property for floating elements
- remember to avoid using the height property
- for fixed layouts, content elements are usually contained with a wrapper element that sets the width for the page layout