HTML5 and CSS3 for Mobile Applications
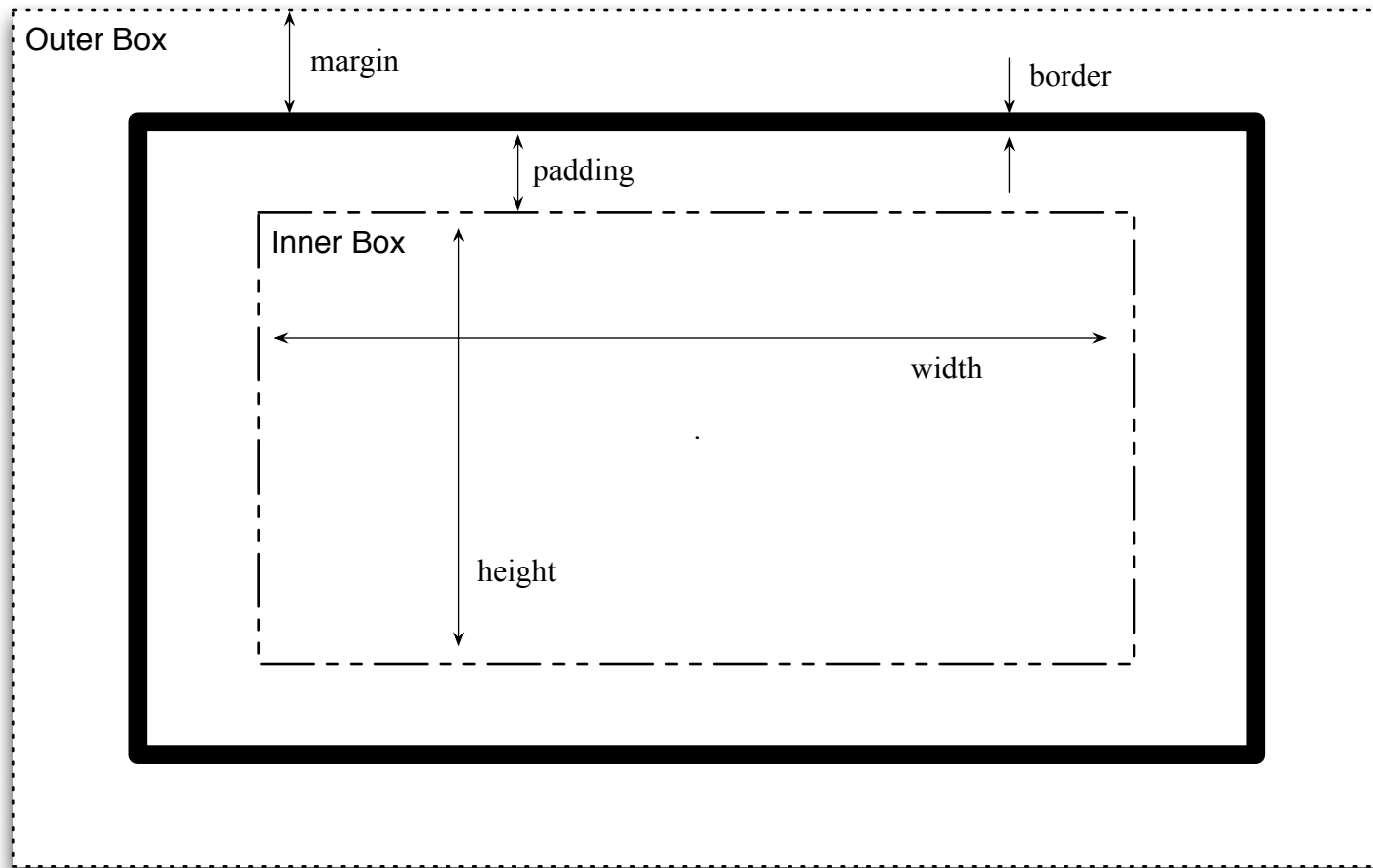
CSS Tricks - Including Animations
Prof. Paul Krause, University of Surrey

What we are going to do today

- General Pattern: Outside-in Box

- Tabs

- Animated Tabs

Outside-in Box: The Problem

- How do we set the *outer width* of an element to specific value, without it being affected by *padding*, *border* or *margin* settings?

Outer Box

margin

border
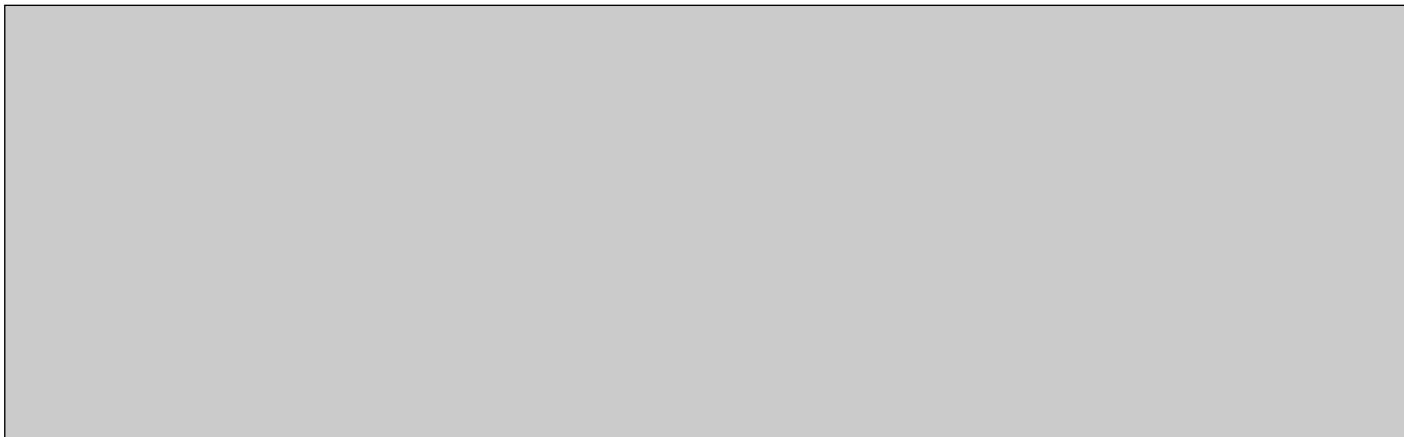
padding

Inner Box

width

height

Outside-in: The Solution

- Use a container element with no *borders*, *padding* or *margin*

- Stretch the *width* of the container to the value you want (100% in our example)

- Place the "outside in" element inside the container and set the *margins*, *borders* and *padding* to the values you want

- The *width* of the container then becomes the outer width of the outside-in element

Outside-in: The Solution

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- The *width* of the container then becomes the outer width of the outside-in element

HTML

```
12 ▾   <body>
13        <h1>Outside-in Box</h1>
14        <h2>Before</h2>
15 ▾      <article class="container">
16          <section class="before float">
17            Float
18          </section>
19        </article>
20
21        <section class="float-divider">
22          <h2>After</h2>
23        </section>
24
25 ▾      <article class="container">
26 ▾        <section class="after float">
27            <div class="oi">
28              Float
29            </div>
30          </section>
31        </article>
32      </body>
```

HTML

```
12 ▾  <body>
13       <h1>Outside-in Box</h1>
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```

CSS

```
20  .before {
21    width: 100%;
22    margin: 5px;
23    border: 5px solid #000;
24  }
25
26  .after {
27    width: 100%;
28  }
29
30  .after .oi {
31    margin: 5px;
32    padding: 5px;
33    border: 5px solid #000;
34    display: block;
35  }
```

CSS

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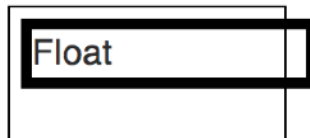
CSS

```css
20  .before {
21    width: 100%;
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35  }
```

The Result

Nav Bar with Tabs

tabs.html

```
13 ▾    <header>
14        <h1>Tab Menu</h1>
15 ▾      <nav id="main_nav">
16 ▾        <ul class="tabs">
17            <li class="selected">
18              <h3 class="tab-label"><a href="tabs.html">Tab 1</a></h3>
19            </li>
20            <li><h3 class="tab-label"><a href="tab2.html">Tab 2</a></h3></li>
21            <li><h3 class="tab-label"><a href="tab3.html">Tab 3</a></h3></li>
22            <li><h3 class="tab-label"><a href="tab4.html">Tab 4</a></h3></li>
23          </ul>
24        </nav>
25      </header>
```
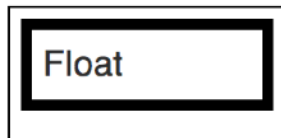
tabs.html

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      </li>
      <li><h3 class="tab-label"><a href="tab2.html">Tab 2</a></h3></li>
      <li><h3 class="tab-label"><a href="tab3.html">Tab 3</a></h3></li>
      <li><h3 class="tab-label"><a href="tab4.html">Tab 4</a></h3></li>
    </ul>
  </nav>
</header>
```

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23          </ul>
24        </nav>
25    </header>
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22            <li><h3 class="tab-label"><a href="tab4.html">Tab 4</a></h3></li>
23          </ul>
24        </nav>
25      </header>
```

tabs.css

```css
24  ul.tabs li {
25    float: left;
26    width: 25%;
27  }
28
29  ul.tabs .tab-label {
30    border: 1px solid #FFFF66;
31    margin: 0;
32    padding-bottom: 2px;
33    text-align: center;
34    font-weight: normal;
35    background-color: #EEE;
36  }
```

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35      background-color: #EEE;
36  }
```

Highlight the selected tab

```css
38  ul.tabs li.selected .tab-label {
39      position: relative;
40      border-bottom: none;
41      top: 1px;
42      padding-bottom: 4px;
43      padding-top: 5px;
44      border-top: 2px solid #FFFF66;
45      margin-top: -5px;
46      background-color: #AAA;
47      font-weight: bold;
48  }
```

Highlight the selected tab

```
38  ul.tabs li.selected .tab-label {
39      position: relative;
40      border-bottom: none;
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44      border-top: 2px solid #FFFF66;
45      margin-top: -5px;
46      background-color: #AAA;
47      font-weight: bold;
48  }
```

Animated Tabs

Animated Tabs Uses

- Background Image

- Tabs

- Transition

animation.html

```
13    <nav id="main-nav" role=navigation>
14      <ul class="tabs">
15        <li><h3 class="tab-label"><a href=index.html>Home</a></h3></li>
16        <li><h3 class="tab-label"><a href=about.html>About</a></h3></li>
17        <li><h3 class="tab-label"><a href=products.html>Products</a></h3></li>
18        <li><h3 class="tab-label"><a href=events.html>Events</a></h3></li>
19      </ul>
20    </nav>
```

animation.css (background image)

```css
1  #main-nav {
2    position: relative;
3    padding: 1em 0;
4    width: 600px;
5    height: 50px;
6    overflow: hidden;
7  }
8
9  ul.tabs {
10   position: absolute;
11   width: 600px;
12   height: 50px;
13   left: 0;
14   top: 0;
15   background: url(clouds2.jpg) no-repeat;
16 }
```

outside-in

```css
40  ul.tabs li {
41      float: left;
42      width: 25%;
43  }
44
45  ul.tabs .tab-label {
46      border: 1px solid #FFFF66;
47      margin: 0;
48      padding: 0.6em;
```

Transition

```
45 ▼ ul.tabs .tab-label {
46      border: 1px solid #FFFF66;
47      margin: 0;
48      padding: 0.6em;
49      text-align: center;
50      font-weight: normal;
51      font-family: Futura, Arial, sans-serif;
52      text-shadow: 2px 2px 1px rgba(0, 0, 0, 0.6);
53      -webkit-transition: background .85s ease-in-out;
54      -moz-transition: background .85s ease-in-out;
55      -o-transition: background .85s ease-in-out;
56      transition: background .85s ease-in-out;
57   }
58
59   ul.tabs .tab-label:hover {
60      background: rgba(100, 100, 100, 0.7);
61   }
```

Transition

```
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```

What we have done

- Introduced the "outside-in" design pattern

- Used it for creating a tabbed Nav Bar

- Added in Background Image and Transition to animate the Nav Bar