



WEBD 162

Class 11
Chapter 16 - Page Layout w/ CSS

1

Page Layout Strategies (desktop)

- ▶ **Fixed layout** (px)
 - ▶ Fixed width regardless of browser size
- ▶ **Fluid / liquid layout** (%)
 - ▶ Resizes proportionally when browser resizes
- ▶ **Elastic layout** (em)
 - ▶ Resizes proportionally based on the text size
- ▶ **Hybrid layout**
 - ▶ Combines fixed and fluid

▶ 2

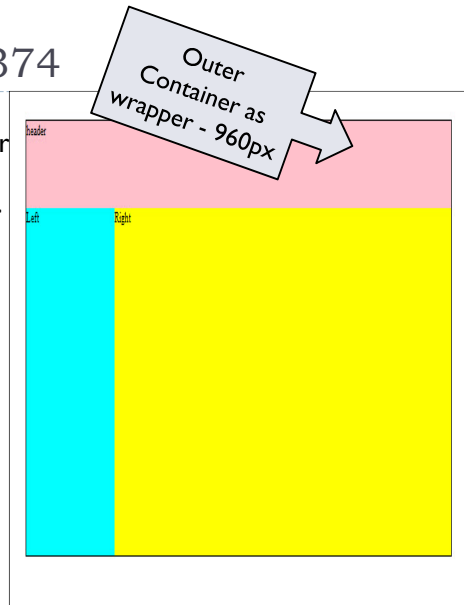
Fixed Layout – pg 374

```
<div id="wrapper">
<header id="header">header</header>
  <section id="left">Left</section>
  <section id="right">Right</section>
</div>
```

```
#wrapper { width: 960px;
            margin-left: auto;
            margin-right: auto; }
```

```
#left { width: 200px;
         float: left; }
```

```
#right { margin-left: 200px; }
```



Fixed Layout with full width header

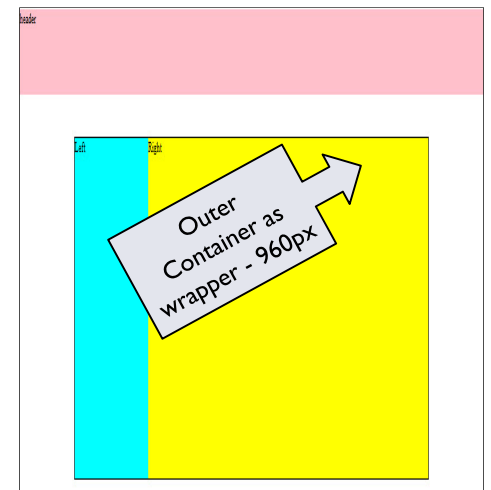
```
<header id="header">header</header>
<div id="wrapper">
  <section id="left">Left</section>
  <section id="right">Right</section>
</div>
```

```
body { margin: 0px; }
```

```
#wrapper { width: 960px;
            margin-left: auto;
            margin-right: auto; }
```

```
#left { width: 200px;
         float: left; }
```

```
#right { margin-left: 200px; }
```



▶ 4

▶ 3

Fixed Layout - Pros and Cons

Advantages

- ▶ Easy to do
- ▶ Predictable on all screens
- ▶ Very common approach

Disadvantages

- ▶ Horizontal scroll on small screens
- ▶ Too much extra space on large screen

▶ 5

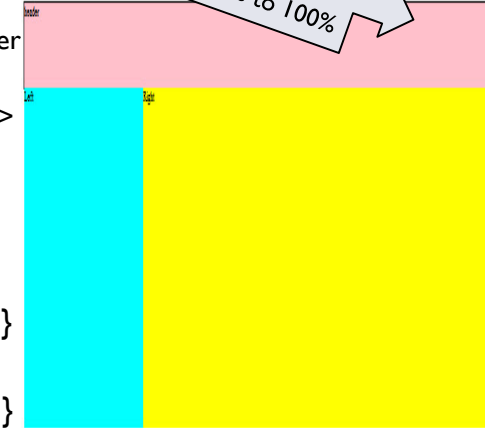
Fluid Layout – pg 376

```
<div id="wrapper">  
<header id="header">header</header>  
<section id="left">Left</section>  
<section id="right">Right</section>  
</div>
```

```
#wrapper { }
```

```
#left { width: 25%; float: left; }
```

```
#right {width: 75%; float: left;}
```



▶ 6

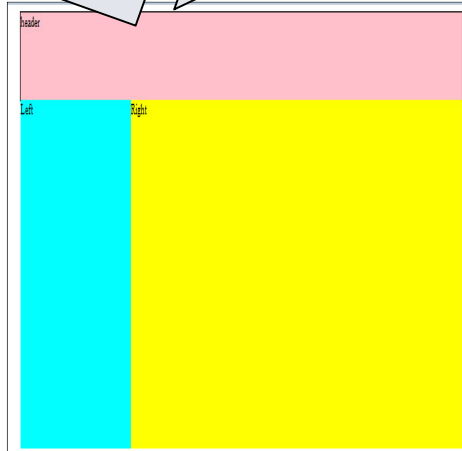
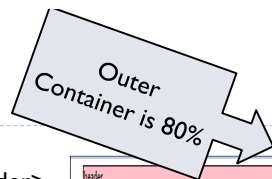
Fluid Layout

```
<div id="wrapper">  
<header id="header">header</header>  
<section id="left">Left</section>  
<section id="right">Right</section>  
</div>
```

```
#wrapper { width: 80%;  
margin-left: auto;  
margin-right: auto; }
```

```
#left { width: 25%; float: left; }
```

```
#right {width: 75%; float: left;}
```



▶ 7

Fluid Layout – using min-width / max-width pg 377, 383

```
<div id="wrapper">  
<header id="header">header</header>  
<section id="left">Left</section>  
<section id="right">Right</section>  
</div>
```

```
#wrapper { width: 80%;  
min-width: 800px;  
max-width: 1600px;  
margin-left: auto;  
margin-right: auto; }
```

```
#left { width: 25%; float: left; }
```

```
#right {width: 75%; float: left;}
```



▶ 8

Fluid Layout - Pros and Cons

Advantages

- ▶ No horizontal scrolling
- ▶ Fills the browser window

Disadvantages

- ▶ Long lines of text
- ▶ Too cramped or too much space
- ▶ Less predictable

▶ 9

Fluid Layout



Liquid layouts fill the browser window.
Content reflows when the browser window and columns resize.

www.w3.org

▶ 10

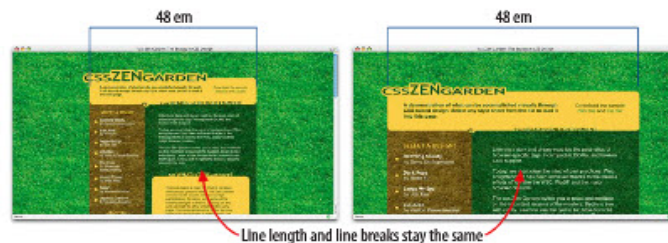
Elastic Layout - Pros and Cons

Advantages

- ▶ Uses em widths
- ▶ Text scales with the width
- ▶ Predictable line height and length

Disadvantages

- ▶ Not useful for images and videos
- ▶ Complicated to do



Line length and line breaks stay the same

▶ 11

Hybrid Layout - Pros and Cons

Advantages

- ▶ Commonly used with fixed width column and a percent column within a percent wrapper

Disadvantages

- ▶ Depends on your content



▶ 12

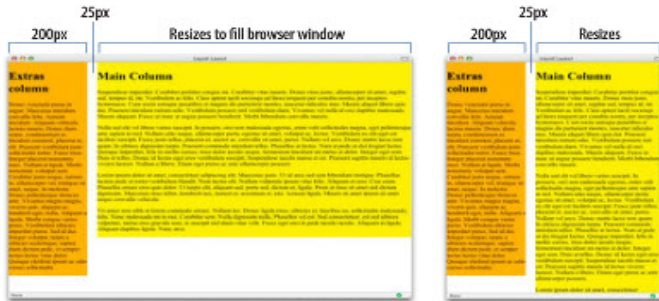
Hybrid Layout - Pros and Cons

Advantages

- ▶ Commonly used with fixed width column and a percent column within a percent wrapper

Disadvantages

- ▶ Depends on your content



▶ 13

CSS Outline Property – pg 380

- ▶ Adds a border but does not add to the width
- ▶ Use to see your layout structure instead of using the 'border' property
- ▶ `outline-width: 1px;`
- ▶ `outline-style: solid;`
- ▶ `outline-color: red;`
- ▶ `outline: 1px solid red;`

▶ 14

Future of CSS Layout – pg 381

- ▶ Frameworks that use a grid system – pg 375
- ▶ Multi-column layouts
- ▶ Flexbox
- ▶ Grid system

▶ 15

Three column fluid layout – pg 387



Source order



Layout

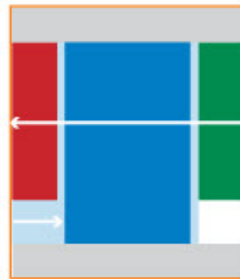
The styles

```
#links {
  float: left;
  width: 22.5%;
  margin: 0 0 0 2.5%;
}
#main {
  float: left;
  width: 45%;
  margin: 0 2.5%;
}
#news {
  float: left;
  width: 22.5%;
  margin: 0 2.5% 0 0;
}
#footer {
  clear: left;
}
```

▶ 16

Negative margin trick– pg 388

(so the main content is read first)



```
<div id="wrapper">
  <div id="header">Masthead and headline</div>
  <div id="main">Main article</div>
  <div id="news">News items</div>
  <div id="links">List of links</div>
  <div id="footer">Copyright information</div>
</div>
```

The styles

```
#wrapper {
  width: 960px;
  margin: 0 auto;
}
#main {
  float: left;
  width: 520px;
  margin-top: 0;
  margin-left: 220px;
  margin-right: 20px;
}
#news {
  float: left;
  width: 200px;
  margin: 0;
}
#footer {
  clear: left;
}
```

```
#links {
  float: left;
  width: 200px;
  margin-top: 0;
  margin-left: -960px;
}
#footer {
  clear: left;
}
```

17

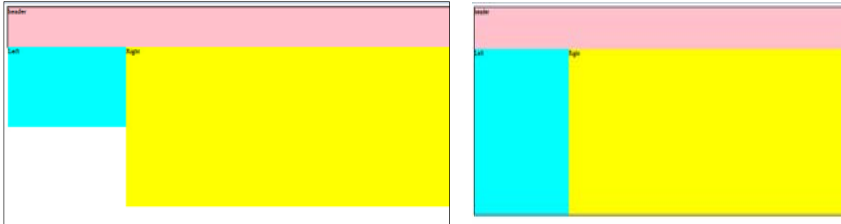
Background image in columns– pg 395

two_columns.png



```
#wrapper {
  width: 960px;
  margin: 0 auto;
  background-image: url(two_columns.png);
  background-repeat: repeat-y;
}
```

Faux columns– pg 396



```
<div id="inner">
```

```
  <section id="left">Left</section>
```

```
  <section id="right">Right</section>
```

```
</div>
```

```
#inner {
  background-color: aqua;
}
```

19