

Lecture 03: Compound Selectors, Page Layouts

ITP 303 Full-Stack Web Development

id vs class selectors review

id Attribute

Uniquely names an HTML element on the page.

All ID values must be unique per page.

Naming rules:

- Must start with a letter, underscore (_), or dash (-),
- Can only contain letters, numbers, underscores, or dashes.

```
<!DOCTYPE html>
<html>
<head>
  <title>Page Title</title>
</head>
<body>
  <p id="example-id">Paragraph 1</p>
  <p id="example-id">Paragraph 2</p>
</body>
</html>
```

Invalid: Same ID values.

```
<!DOCTYPE html>
<html>
<head>
  <title>Page Title</title>
</head>
<body>
  <p id="example-id">Paragraph 1</p>
  <p id="different-id">Paragraph 2</p>
</body>
</html>
```

Valid: Different ID Values.

id Attribute

IDs are often used to apply styles to a single element.

CSS Selector Syntax: #id-name

Result:

This is the first paragraph.

This is the second paragraph.

This is the third paragraph.

```
<!DOCTYPE html>
<html>
<head>
  <title>Page Title</title>
  <style>
    p {
      background-color: lightblue;
    }
    #first-p {
      background-color: yellow;
    }
  </style>
</head>
<body>
  <p id="first-p">This is the first paragraph.</p>
  <p>This is the second paragraph.</p>
  <p>This is the third paragraph.</p>
</body>
</html>
```

class Attribute

Names one or more elements on the page.

Naming rules: same as for `id` attribute.

CSS Selector Syntax: `.class-name`

Result:

This is the first paragraph.

This is the second paragraph.

This is the third paragraph.

```
<!DOCTYPE html>
<html>
<head>
  <title>Page Title</title>
  <style>
    p {
      background-color: lightblue;
    }
    .example-class {
      background-color: yellow;
    }
  </style>
</head>
<body>
  <p>This is the first paragraph.</p>
  <p class="example-class">This is the second paragraph.</p>
  <p class="example-class">This is the third paragraph.</p>
</body>
</html>
```

class Attribute

An element can have more than one class values.

An element can only have ONE id value.

Result:

This is the first paragraph

This is the second paragraph

This is the third paragraph

```
<!DOCTYPE html>
<html>
<head>
  <title>Page Title</title>
  <style>
    p {
      background-color: lightblue;
    }
    .example-class {
      background-color: yellow;
    }
    .another-class {
      color: red;
    }
  </style>
</head>
<body>
  <p>This is the first paragraph</p>
  <p class="example-class another-class">This is the second paragraph</p>
  <p class="example-class">This is the third paragraph</p>
</body>
</html>
```

Key Takeaways Today

1. CSS compound selectors
2. Using `float` to create columns

Compound selectors

Compound CSS Selectors

<code>elt-1, elt-2</code>	<code>elt-1 and elt-2</code>
<code>elt-1 elt-2</code>	<code>elt-2</code> that are descendants of <code>elt-1</code>
<code>elt-1 > elt-2</code>	<code>elt-2</code> with <code>elt-1</code> parent
<code>elt-1 + elt-2</code>	<code>elt-2</code> that is the immediate next sibling of <code>elt-1</code>
<code>elt-1 ~ elt-2</code>	<code>elt-2</code> with preceding <code>elt-1</code> sibling

```
#header, #footer {
```

```
  ...
```

```
}
```

```
<div id="header">
```

```
  <h1>Lorem Ipsum</h1>
```

```
</div> <!-- #header -->
```

```
<div id="content">
```

```
  <p>Morbi rutrum ex enim.</p>
```

```
  <div>
```

```
    
```

```
    <p>Morbi rutrum ex enim.</p>
```

```
  </div>
```

```
  <ul>
```

```
    <li>Consectetur adipiscing elit.</li>
```

```
    <li>Phasellus tempus posuere scelerisque.</li>
```

```
  </ul>
```

```
</div> <!-- #content -->
```

```
<div id="footer">
```

```
  <p>Suspendisse potenti.</p>
```

```
</div> <!-- #footer -->
```

Compound CSS Selectors

<code>elt-1, elt-2</code>	<code>elt-1 and elt-2</code>
<code>elt-1 elt-2</code>	<code>elt-2</code> that are descendants of <code>elt-1</code>
<code>elt-1 > elt-2</code>	<code>elt-2</code> with <code>elt-1</code> parent
<code>elt-1 + elt-2</code>	<code>elt-2</code> that is the immediate next sibling of <code>elt-1</code>
<code>elt-1 ~ elt-2</code>	<code>elt-2</code> with preceding <code>elt-1</code> sibling

```
#content p {  
  ...  
}
```

```
<div id="header">  
  <h1>Lorem Ipsum</h1>  
</div> <!-- #header -->  
<div id="content">  
  <p>Morbi rutrum ex enim.</p>  
  <div>  
      
    <p>Morbi rutrum ex enim.</p>  
  </div>  
  <ul>  
    <li>Consectetur adipiscing elit.</li>  
    <li>Phasellus tempus posuere scelerisque.</li>  
  </ul>  
</div> <!-- #content -->  
<div id="footer">  
  <p>Suspendisse potenti.</p>  
</div> <!-- #footer -->
```

Compound CSS Selectors

<code>elt-1, elt-2</code>	<code>elt-1 and elt-2</code>
<code>elt-1 elt-2</code>	<code>elt-2</code> that are descendants of <code>elt-1</code>
<code>elt-1 > elt-2</code>	<code>elt-2</code> with <code>elt-1</code> parent
<code>elt-1 + elt-2</code>	<code>elt-2</code> that is the immediate next sibling of <code>elt-1</code>
<code>elt-1 ~ elt-2</code>	<code>elt-2</code> with preceding <code>elt-1</code> sibling

```
#content > p {
```

```
  ...
```

```
}
```

```
<div id="header">
```

```
  <h1>Lorem Ipsum</h1>
```

```
</div> <!-- #header -->
```

```
<div id="content">
```

```
  <p>Morbi rutrum ex enim.</p>
```

```
  <div>
```

```
    
```

```
    <p>Morbi rutrum ex enim.</p>
```

```
  </div>
```

```
  <ul>
```

```
    <li>Consectetur adipiscing elit.</li>
```

```
    <li>Phasellus tempus posuere scelerisque.</li>
```

```
  </ul>
```

```
</div> <!-- #content -->
```

```
<div id="footer">
```

```
  <p>Suspendisse potenti.</p>
```

```
</div> <!-- #footer -->
```

Compound CSS Selectors

<code>elt-1, elt-2</code>	<code>elt-1 and elt-2</code>
<code>elt-1 elt-2</code>	<code>elt-2</code> that are descendants of <code>elt-1</code>
<code>elt-1 > elt-2</code>	<code>elt-2</code> with <code>elt-1</code> parent
<code>elt-1 + elt-2</code>	<code>elt-2</code> that is the immediate next sibling of <code>elt-1</code>
<code>elt-1 ~ elt-2</code>	<code>elt-2</code> with preceding <code>elt-1</code> sibling

```
p + div {  
  ...  
}
```

```
<div id="header">  
  <h1>Lorem Ipsum</h1>  
</div> <!-- #header -->  
<div id="content">  
  <p>Morbi rutrum ex enim.</p>  
  <div>  
      
    <p>Morbi rutrum ex enim.</p>  
  </div>  
  <ul>  
    <li>Consectetur adipiscing elit.</li>  
    <li>Phasellus tempus posuere scelerisque.</li>  
  </ul>  
</div> <!-- #content -->  
<div id="footer">  
  <p>Suspendisse potenti.</p>  
</div> <!-- #footer -->
```

Compound CSS Selectors

<code>elt-1, elt-2</code>	<code>elt-1 and elt-2</code>
<code>elt-1 elt-2</code>	<code>elt-2</code> that are descendants of <code>elt-1</code>
<code>elt-1 > elt-2</code>	<code>elt-2</code> with <code>elt-1</code> parent
<code>elt-1 + elt-2</code>	<code>elt-2</code> that is the immediate next sibling of <code>elt-1</code>
<code>elt-1 ~ elt-2</code>	<code>elt-2</code> with preceding <code>elt-1</code> sibling

```
p ~ ul {  
  ...  
}
```

```
<div id="header">  
  <h1>Lorem Ipsum</h1>  
</div> <!-- #header -->  
<div id="content">  
  <p>Morbi rutrum ex enim.</p>  
  <div>  
      
    <p>Morbi rutrum ex enim.</p>  
  </div>  
  <ul>  
    <li>Consectetur adipiscing elit.</li>  
    <li>Phasellus tempus posuere scelerisque.</li>  
  </ul>  
</div> <!-- #content -->  
<div id="footer">  
  <p>Suspendisse potenti.</p>  
</div> <!-- #footer -->
```

Page Layouts

CSS float

Positions elements and creates page layouts.

Allows text to wrap around floating elements.

Result:

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Morbi euismod non purus eget tincidunt. Suspendisse sed nisl id sem luctus elementum vitae in elit. Fusce luctus enim iaculis orci fringilla facilisis.



Etiam fermentum lacinia massa et volutpat. Sed ac tempor lectus, a accumsan magna. Sed aliquam ligula a cursus scelerisque.

Phasellus at elit consectetur, vehicula magna id, aliquet dui. Integer id eros est. Nullam rhoncus accumsan metus quis sollicitudin.

Ut sollicitudin diam a dui aliquam molestie. Nunc non libero dignissim, suscipit dui eget, luctus odio. Cras nulla tellus, dictum facilisis turpis vel, tempor aliquet nulla.

Nulla odio lectus, aliquam non ex ac, porttitor laoreet felis. Aliquam at enim gravida, finibus ante in, porttitor massa.

```
<p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Morbi euismod non purus eget tincidunt. Suspendisse sed nisl id sem luctus elementum vitae in elit. Fusce luctus enim iaculis orci fringilla facilisis.</p>
```

```
<p>Etiam fermentum lacinia massa et volutpat. Sed ac tempor lectus, a accumsan magna. Sed aliquam ligula a cursus scelerisque.</p>
```

```
<p>Phasellus at elit consectetur, vehicula magna id, aliquet dui. Integer id eros est. Nullam rhoncus accumsan metus quis sollicitudin.</p>
```

```
<p>Ut sollicitudin diam a dui aliquam molestie. Nunc non libero dignissim, suscipit dui eget, luctus odio. Cras nulla tellus, dictum facilisis turpis vel, tempor aliquet nulla.</p>
```

```
<p>Nulla odio lectus, aliquam non ex ac, porttitor laoreet felis. Aliquam at enim gravida, finibus ante in, porttitor massa.</p>
```

CSS float

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Result:

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Morbi euismod non purus eget tincidunt. Suspendisse sed nisl id sem luctus elementum vitae in elit. Fusce luctus enim iaculis orci fringilla facilisis.



USC

Etiam fermentum lacinia massa et volutpat. Sed ac tempor lectus, a accumsan magna. Sed aliquam ligula a cursus scelerisque.

Phasellus at elit consectetur, vehicula magna id, aliquet dui. Integer id eros est. Nullam rhoncus accumsan metus quis sollicitudin.

Ut sollicitudin diam a dui aliquam molestie. Nunc non libero dignissim, suscipit dui eget, luctus odio. Cras nulla tellus, dictum facilisis turpis vel, tempor aliquet nulla.

Nulla odio lectus, aliquam non ex ac, porttitor laoreet felis. Aliquam at enim gravida, finibus ante in, porttitor massa.

Ut sollicitudin diam a dui aliquam molestie. Nunc non libero dignissim, suscipit dui eget, luctus odio. Cras nulla tellus, dictum facilisis turpis vel, tempor aliquet nulla.

Nulla odio lectus, aliquam non ex ac, porttitor laoreet felis. Aliquam at enim gravida, finibus ante in, porttitor massa.

```
img {  
  float: left;  
}
```

<p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Morbi euismod non purus eget tincidunt. Suspendisse sed nisl id sem luctus elementum vitae in elit. Fusce luctus enim iaculis orci fringilla facilisis.</p>

<p>Etiam fermentum lacinia massa et volutpat. Sed ac tempor lectus, a accumsan magna. Sed aliquam ligula a cursus scelerisque.</p>

<p>Phasellus at elit consectetur, vehicula magna id, aliquet dui. Integer id eros est. Nullam rhoncus accumsan metus quis sollicitudin.</p>

<p>Ut sollicitudin diam a dui aliquam molestie. Nunc non libero dignissim, suscipit dui eget, luctus odio. Cras nulla tellus, dictum facilisis turpis vel, tempor aliquet nulla.</p>

<p>Nulla odio lectus, aliquam non ex ac, porttitor laoreet felis. Aliquam at enim gravida, finibus ante in, porttitor massa.</p>

CSS float

Positions elements and creates page layouts.

Allows text to wrap around floating elements.

Result:

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Morbi euismod non purus eget tincidunt. Suspendisse sed nisl id sem luctus elementum vitae in elit. Fusce luctus enim iaculis orci fringilla facilisis.

Etiam fermentum lacinia massa et volutpat. Sed ac tempor lectus, a accumsan magna. Sed aliquam ligula a cursus scelerisque.

Phasellus at elit consectetur, vehicula magna id, aliquet dui. Integer id eros est. Nullam rhoncus accumsan metus quis sollicitudin.

Ut sollicitudin diam a dui aliquam molestie. Nunc non libero dignissim, suscipit dui eget, luctus odio. Cras nulla tellus, dictum facilisis turpis vel, tempor aliquet nulla.

Nulla odio lectus, aliquam non ex ac, porttitor laoreet felis. Aliquam at enim gravida, finibus ante in, porttitor massa.



```
img {  
  float: right;   
}
```

```
<p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Morbi euismod non purus eget tincidunt. Suspendisse sed nisl id sem luctus elementum vitae in elit. Fusce luctus enim iaculis orci fringilla facilisis.</p>
```

```

```

```
<p>Etiam fermentum lacinia massa et volutpat. Sed ac tempor lectus, a accumsan magna. Sed aliquam ligula a cursus scelerisque.</p>
```

```
<p>Phasellus at elit consectetur, vehicula magna id, aliquet dui. Integer id eros est. Nullam rhoncus accumsan metus quis sollicitudin.</p>
```

```
<p>Ut sollicitudin diam a dui aliquam molestie. Nunc non libero dignissim, suscipit dui eget, luctus odio. Cras nulla tellus, dictum facilisis turpis vel, tempor aliquet nulla.</p>
```

```
<p>Nulla odio lectus, aliquam non ex ac, porttitor laoreet felis. Aliquam at enim gravida, finibus ante in, porttitor massa.</p>
```

CSS clear

Elements with `clear` property set do not flow around floating elements.

Result:

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Morbi euismod non purus eget tincidunt. Suspendisse sed nisl id sem luctus elementum vitae in elit. Fusce luctus enim iaculis orci fringilla facilisis.

Etiam fermentum lacinia massa et volutpat. Sed ac tempor lectus, a accumsan magna. Sed aliquam ligula a cursus scelerisque.



Phasellus at elit consectetur, vehicula magna id, aliquet dui. Integer id eros est. Nullam rhoncus accumsan metus quis sollicitudin.

Ut sollicitudin diam a dui aliquam molestie. Nunc non libero dignissim, suscipit dui eget, luctus odio. Cras nulla tellus, dictum facilisis turpis vel, tempor aliquet nulla.

Nulla odio lectus, aliquam non ex ac, porttitor laoreet felis. Aliquam at enim gravida, finibus ante in, porttitor massa.

```
.clearfloat {  
  clear: both;  
}
```

<p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Morbi euismod non purus eget tincidunt. Suspendisse sed nisl id sem luctus elementum vitae in elit. Fusce luctus enim iaculis orci fringilla facilisis.</p>

<p>Etiam fermentum lacinia massa et volutpat. Sed ac tempor lectus, a accumsan magna. Sed aliquam ligula a cursus scelerisque.</p>

<p>Phasellus at elit consectetur, vehicula magna id, aliquet dui. Integer id eros est. Nullam rhoncus accumsan metus quis sollicitudin.</p>

<p>Ut sollicitudin diam a dui aliquam molestie. Nunc non libero dignissim, suscipit dui eget, luctus odio. Cras nulla tellus, dictum facilisis turpis vel, tempor aliquet nulla.</p>

<p>Nulla odio lectus, aliquam non ex ac, porttitor laoreet felis. Aliquam at enim gravida, finibus ante in, porttitor massa.</p>

Page Layouts

float CSS properties can be used to create page layouts.

Result:

800px

Lorem ipsum dolor

Sit amet, consectetur adipiscing elit. Quisque efficitur dolor at diam ornare, sit amet aliquet magna bibendum.

Integer augue massa

Laoreet quis mattis id, sollicitudin et tellus. Fusce id massa vitae eros ultrices posuere. Duis vitae ullamcorper sapien.

Integer pulvinar eget

Dolor non venenatis. Morbi viverra velit ut nulla semper suscipit. Vestibulum egestas lacus neque, eget pulvinar leo ornare eu.

```
<div class="column">
  <h2>Lorem ipsum dolor</h2>
  <p>Sit amet, consectetur adipiscing elit. Quisque efficitur dolor at diam
  ornare, sit amet aliquet magna bibendum.</p>
</div> <!-- .column -->

<div class="column">
  <h2>Integer augue massa</h2>
  <p>Laoreet quis mattis id, sollicitudin et tellus. Fusce id massa vitae eros
  ultrices posuere. Duis vitae ullamcorper sapien.</p>
</div> <!-- .column -->

<div id="footer">
  <h2>Integer pulvinar eget</h2>
  <p>Dolor non venenatis. Morbi viverra velit ut nulla semper suscipit.
  Vestibulum egestas lacus neque, eget pulvinar leo ornare eu.</p>
</div> <!-- #footer -->
```

Page Layouts

`float` CSS properties can be used to create page layouts.

Result:

800px

Lorem ipsum dolor

Sit amet, consectetur adipiscing elit. Quisque efficitur dolor at diam ornare, sit amet aliquet magna bibendum.

Morbi viverra velit ut nulla semper suscipit. Vestibulum egestas lacus neque, eget pulvinar leo ornare eu.

Integer augue massa

Laoreet quis mattis id, sollicitudin et tellus. Fusce id massa vitae eros ultrices posuere. Duis vitae ullamcorper sapien.

Integer pulvinar eget

Dolor non venenatis.

```
.column {  
  width: 350px;  
  float: left;  
}
```

```
<div class="column">  
  <h2>Lorem ipsum dolor</h2>  
  <p>Sit amet, consectetur adipiscing elit. Quisque efficitur dolor at diam ornare, sit amet aliquet magna bibendum.</p>  
</div> <!-- .column -->
```

```
<div class="column">  
  <h2>Integer augue massa</h2>  
  <p>Laoreet quis mattis id, sollicitudin et tellus. Fusce id massa vitae eros ultrices posuere. Duis vitae ullamcorper sapien.</p>  
</div> <!-- .column -->
```

```
<div id="footer">  
  <h2>Integer pulvinar eget</h2>  
  <p>Dolor non venenatis. Morbi viverra velit ut nulla semper suscipit. Vestibulum egestas lacus neque, eget pulvinar leo ornare eu.</p>  
</div> <!-- #footer -->
```

Page Layouts

float CSS properties can be used to create page layouts.

Result:

800px

Lorem ipsum dolor

Sit amet, consectetur adipiscing elit. Quisque efficitur dolor at diam ornare, sit amet aliquet magna bibendum.


Integer augue massa

Laoreet quis mattis id, sollicitudin et tellus. Fusce id massa vitae eros ultrices posuere. Duis vitae ullamcorper sapien.

Integer pulvinar eget

Dolor non venenatis. Morbi viverra velit ut nulla semper suscipit. Vestibulum egestas lacus neque, eget pulvinar leo ornare eu.

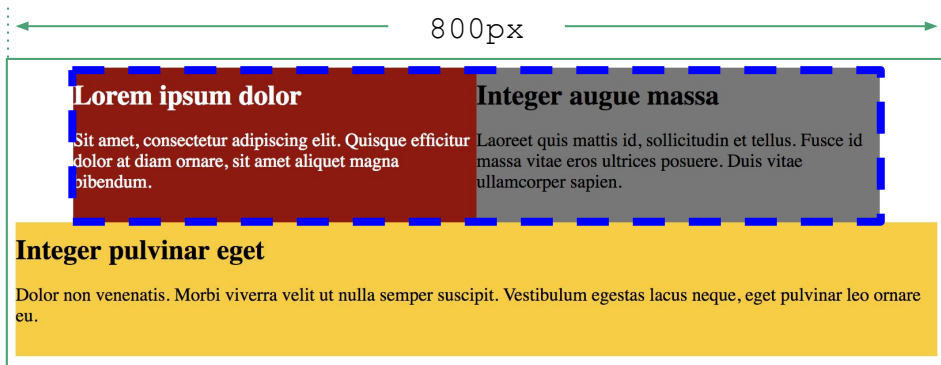
```
.column {  
  width: 350px;  
  float: left;  
}  
  
.clearfix {  
  clear: both;  
}
```

```
<div class="column">  
  <h2>Lorem ipsum dolor</h2>  
  <p>Sit amet, consectetur adipiscing elit. Quisque efficitur dolor at diam  
  ornare, sit amet aliquet magna bibendum.</p>  
</div> <!-- .column -->  
  
<div class="column">  
  <h2>Integer augue massa</h2>  
  <p>Laoreet quis mattis id, sollicitudin et tellus. Fusce id massa vitae eros  
  ultrices posuere. Duis vitae ullamcorper sapien.</p>  
</div> <!-- .column -->  
  
<div class="clearfix"></div>   
  
<div id="footer">  
  <h2>Integer pulvinar eget</h2>  
  <p>Dolor non venenatis. Morbi viverra velit ut nulla semper suscipit.  
  Vestibulum egestas lacus neque, eget pulvinar leo ornare eu.</p>  
</div> <!-- #footer -->
```

Page Layouts

`float` CSS properties can be used to create page layouts.

Result:



```
.column {  
  width: 350px;  
  float: left;  
}  
  
.clearfix {  
  clear: both;  
}  
  
#wrapper {  
  width: 700px;  
  margin-left: auto;  
  margin-right: auto;  
}
```

```
<div id="wrapper">  
  <div class="column">  
    <h2>Lorem ipsum dolor</h2>  
    <p>Sit amet, consectetur adipiscing elit. Quisque efficitur dolor at diam  
    ornare, sit amet aliquet magna bibendum.</p>  
  </div> <!-- .column -->  
  
  <div class="column">  
    <h2>Integer augue massa</h2>  
    <p>Laoreet quis mattis id, sollicitudin et tellus. Fusce id massa vitae  
    eros ultrices posuere. Duis vitae ullamcorper sapien.</p>  
  </div> <!-- .column -->  
  
  <div class="clearfix"></div>  
</div> <!-- #wrapper -->  
  
<div id="footer">  
  <h2>Integer pulvinar eget</h2>  
  <p>Dolor non venenatis. Morbi viverra velit ut nulla semper suscipit.  
  Vestibulum egestas lacus neque, eget pulvinar leo ornare eu.</p>  
</div> <!-- #footer -->
```