# Web Development

Produced by

Eamonn de Leastar (edeleastar@wit.ie)

Department of Computing, Maths & Physics
Waterford Institute of Technology
http://www.wit.ie
http://elearning.wit.ie

Waterford Institute *of* Technology
INSTITIÚID TEICNEOLAÍOCHTA PHORT LÁIRGE

# Multicolumn Page Layout

Web Development

# Agenda

- The DOM, HTML Parsing & Rendering

- Formatting concepts in CSS

- A simple, worked example of multicolumn layout

- A worked example of a "tabbed" multicolumn layout

# Parsing & Rendering

- A web browser typically reads and renders HTML documents in two phases:

  - the parsing phase

  - the rendering phase.

- During the parsing phase, the browser reads the markup in the document, breaks it down into components, and builds a Document Object Model (DOM) tree.

- The DOM is a in-memory data structure, typically traversed by Java Script code

# DOM Tree

```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01//EN"
    "http://www.w3.org/TR/html4/strict.dtd">
<html>
  <head>
    <title>Widgets</title>
  </head>
  <body>
    <h1>Widgets</h1>
    <p>Welcome to Widgets, the number one company
    in the world for selling widgets!</p>
  </body>
</html>
```

- Each object in the DOM tree is called a node.

- There are several types of nodes, including element nodes and text nodes.

- At the top of the tree is a document node, which contains an element node called the root node; this is always the html element in HTML documents.

- It branches into two child element nodes—head and body—which then branch into other children.
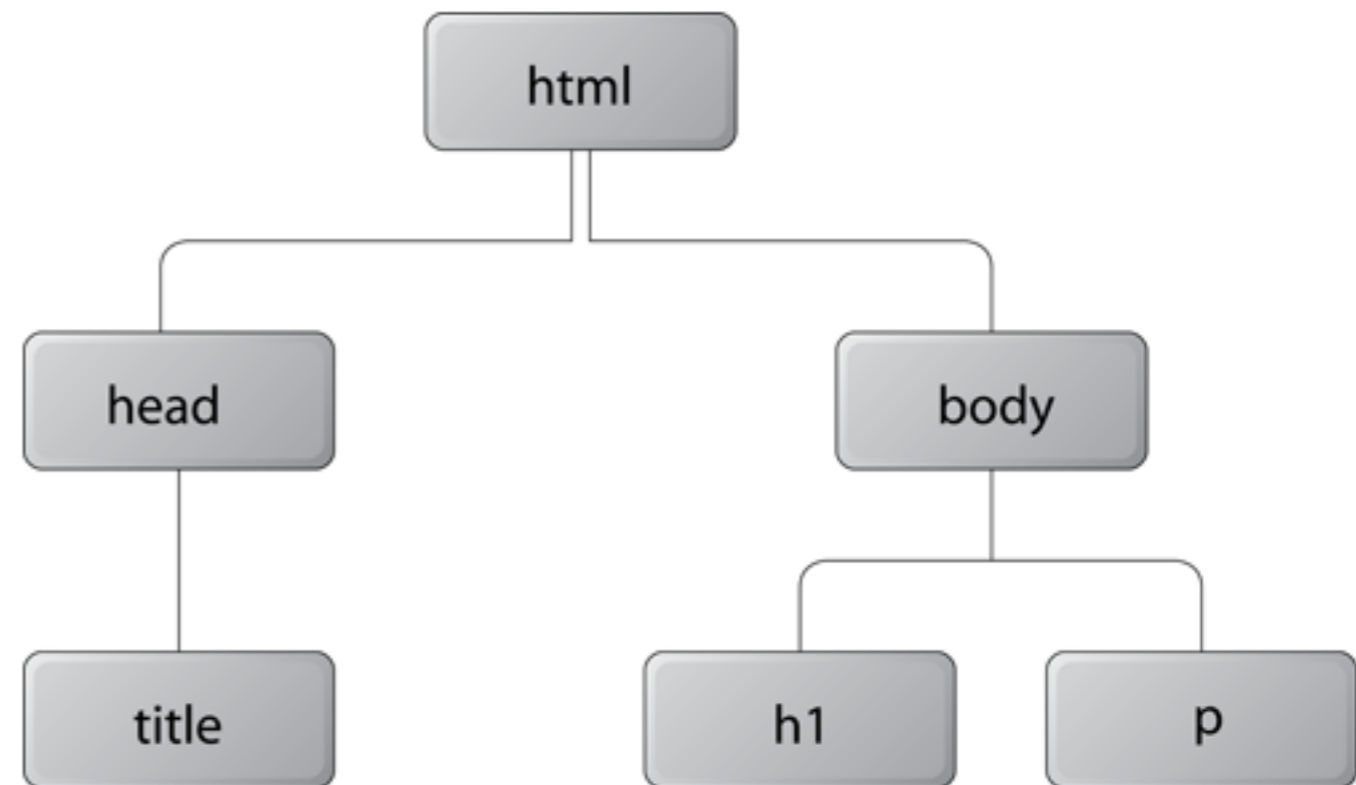
# Parents, Grandparents, Children, Grandchildren Siblings
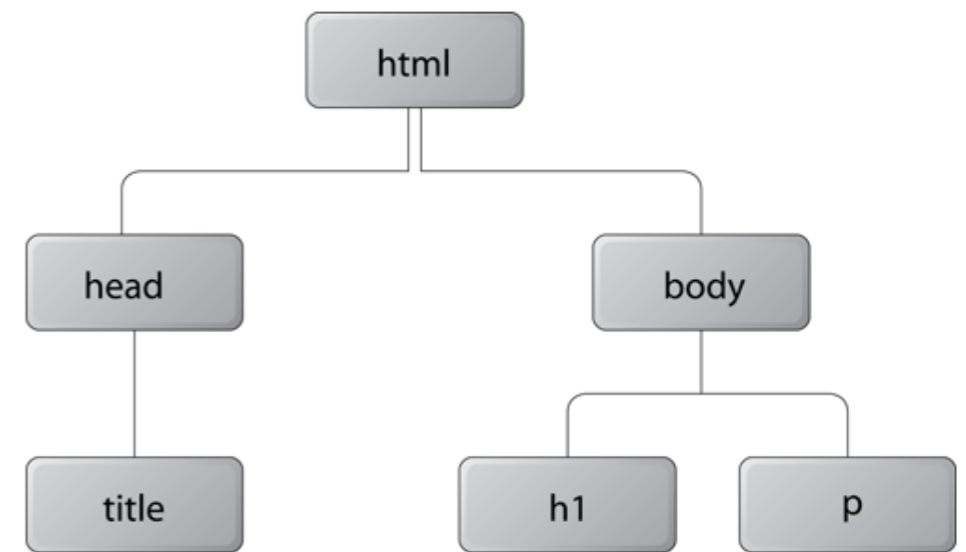


- A child node is structurally subordinate to its parent node - the child's tags are nested inside the tags of the parent.

- A node can be called a descendant node if it's a child, grandchild, and so on, of another node.

- A node can be called an ancestor node if it's a parent, grandparent, and so on, of another node.

- Nodes that have the same parent are called siblings. .

# Block & Inline

- When the DOM tree has been constructed, and any CSS style sheets have been loaded and parsed, the browser starts the rendering phase.

- Each node in the DOM tree will be rendered as zero or more boxes.

- A  box is always rectangular, it has four sides with a 90° angle between each side.

- HTML Elements are either block-level or inline-level.

  - block-level HTML elements generate block boxes,

  - while inline-level HTML elements generate inline boxes.

- The separation into block-level and inline elements in HTML is specified in the HTML document type definition

# CSS Box Model

- The box model is the central mechanism for determining how an element is positioned on a web page.

- Some key concepts:

  - Box Structure

  - Calculating Box Dimensions

  - The Containing Block

  - Collapsing Margins

# Box Structure

- The content area in the center, the padding around the content area, the border area, and the margin area.

- The outer edge of the content area is called the content edge or inner edge; the outer edge of the padding area is called the padding edge; the outer edge of the border area is called the border edge; and the outer edge of the margin area is called the margin edge or outer edge

```
.box
{
  width: 300px;
  height: 200px;
  padding: 10px;
  border: 1px solid #000;
  margin: 15px;
}
```
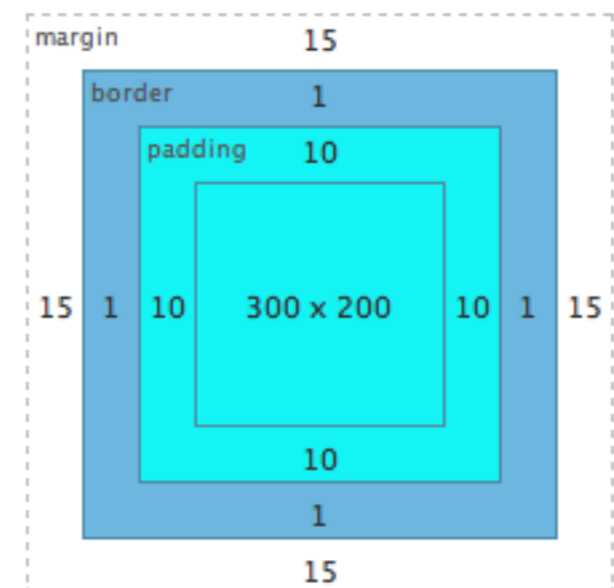
# Calculating Box Dimensions

- Block-level elements can only be rectangular.

- Calculate the overall dimensions of a block-level element by taking into account the height and width of the content area, as well as any margins, padding, and borders that are applied to the element.

- Define the content width of an element by declaring its width and height properties. If no declarations are applied, the default value for the width and height properties is auto.

# The Containing Block

- CSS rendering comprises the tasks of laying out and rendering numerous boxes. Element boxes are positioned within a formatting context, which, by default, is provided by the box generated by a parent element.

- When we specify the positions or dimensions of element boxes, we're doing so relative to what's known as the containing block, which is a very important concept in CSS layout.

- The containing block for the root element is called the initial containing block, and has the same dimensions as the viewport - generally the browser window

- The containing block for other elements is generally the immediate parent

# Collapsing Margins

- When the vertical margins of two elements are touching, only the margin of the element with the largest margin value will be honored, while the margin of the element with the smaller margin value will be collapsed to zero

- In this example, the gap between the elements is only 25px, and the smaller margin has collapsed to zero

- Exceptions to this rule:

    - floated elements

    - absolutely positioned elements

    - 4 other special cases....

```
h1
{
  margin: 0 0 25px 0;
  background: #cfc;
}
p
{
  margin: 20px 0 0 0;
  background: #cf9;
}
```

**Heading Content**

Paragraph content

25px gap

# Formatting Concepts

- Layout Rules

  - Block Formatting

  - Inline Formatting

  - List Formatting

  - Table Formatting

  - Replaced Elements

- Positioning Rules

- Relative Positioning

- Absolute Positioning

- Fixed Positioning

- Stacking Contexts

- Floating & Clearing

http://reference.sitepoint.com/css/formattingcontext

http://reference.sitepoint.com/css/positioning

# Liquid Layout vs Fixed Layout

- Liquid Layout:

  - All containers on the page have their widths defined in percents.

  - A liquid layout will move in and out when you resize your browser window.

- Fixed Layout:

  - All containers on the page have their widths defined in pixels or other fixed units

  - A fixed layout will not move in and out when you resize your browser window.

# References (1)



http://www.maxdesign.com.au/articles/liquid/

# References (2)

## Floating and Clearing

A floated element is one whose `float` property has a value other than `none`. The element can be shifted to the left (using the value `left`) or to the right (using the value `right`); non-floated content will flow along the side opposite the specified float direction.[1]

The floated box is shifted to the left or right until its margin edge touches the padding edge of the containing block, or the margin edge of another floated element. If the floated element is within a line box, the top of the floated box is aligned with the top of the line box. If there isn't enough horizontal room left for non-floated content to flow alongside the floated box on the current line, it's shifted down until it fits, or there are no more floated elements.

### Defining the Margin Edge
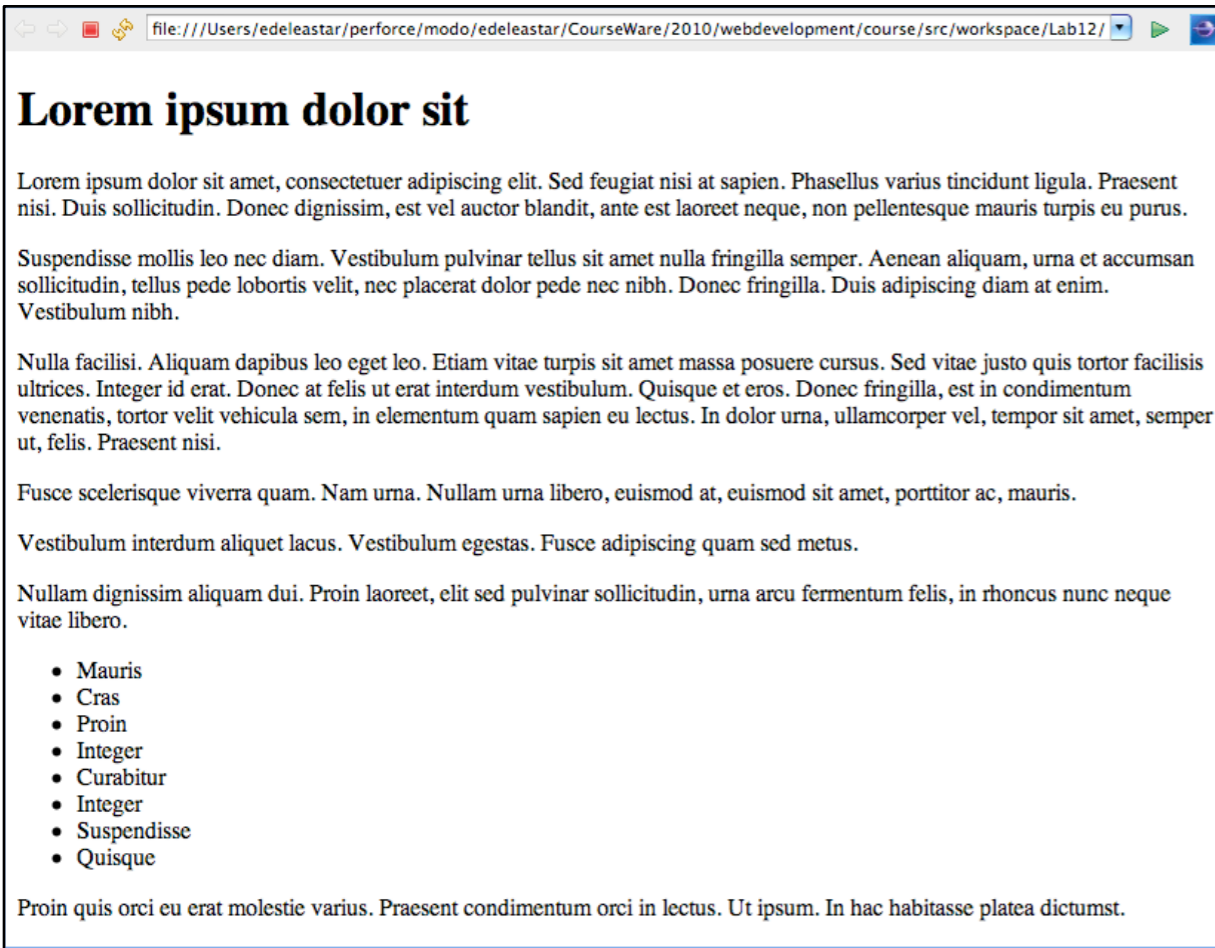
The **margin edge** of a box surrounds the margin of the box. If the box has no margins, the margin edge is the same as the border edge. See The CSS Box Model for more information.

A floated box is taken out of the flow, so it doesn't affect the block-level boxes around it. Line boxes located next to a floated box, however, are shortened to make room for the float. A containing block will not expand to accommodate a floating child box, unless the containing block is also floating, or has its `overflow` property set to something other than `visible`.[2]

Figure 1 shows a schematic view of the following HTML fragment, in which the image is floated to the left:

http://reference.sitepoint.com/css/csslayout

# Multi-Column Layout - A Worked Example

# Content

- 1 &lt;h1&gt;

- 6 &lt;p&gt;'s

- 1 &lt;ul&gt;

- 1 &lt;p&gt;

```
...
  <body>
    <h1>
      Lorem ipsum dolor sit
    </h1>
    <p>
      Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Sed feugiat nisi
      at sapien. Phasellus varius tincidunt ligula. Praesent nisi. Duis
      sollicitudin. Donec dignissim, est vel auctor blandit, ante est laoreet
      neque, non pellentesque mauris turpis eu purus.
    </p>
    <p>
      Suspendisse mollis leo nec diam. Vestibulum pulvinar tellus sit amet nulla
      fringilla semper. Aenean aliquam, urna et accumsan sollicitudin, tellus
      pede lobortis velit, nec placerat dolor pede nec nibh. Donec fringilla. Duis
      adipiscing diam at enim. Vestibulum nibh.
    </p>
    <p>
      Nulla facilisi. Aliquam dapibus leo eget leo. Etiam vitae turpis sit amet
      massa posuere cursus. Sed vitae justo quis tortor facilisis ultrices.
      Integer id erat. Donec at felis ut erat interdum vestibulum. Quisque et eros.
      Donec fringilla, est in condimentum venenatis, tortor velit vehicula sem, in
      elementum quam sapien eu lectus. In dolor urna, ullamcorper vel, tempor sit
      amet, semper ut, felis. Praesent nisi.
    </p>
    <p>
      Fusce scelerisque viverra quam. Nam urna. Nullam urna libero, euismod at,
      euismod sit amet, porttitor ac, mauris.
    </p>
    <p>
      Vestibulum interdum aliquet lacus. Vestibulum egestas. Fusce adipiscing
      quam sed metus.
    </p>
    <p>
      Nullam dignissim aliquam dui. Proin laoreet, elit sed pulvinar
      sollicitudin, urna arcu fermentum felis, in rhoncus nunc neque vitae
      libero.
    </p>
    <ul>
      <li>Mauris</li>
      <li>Cras</li>
      <li>Proin</li>
      <li>Integer</li>
      <li>Curabitur</li>
      <li>Integer</li>
      <li>Suspendisse</li>
      <li>Quisque</li>
    </ul>
    <p>
      Proin quis orci eu erat molestie varius. Praesent condimentum
      orci in lectus. Ut ipsum. In hac habitasse platea dictumst.
    </p>
  </body>
...
```
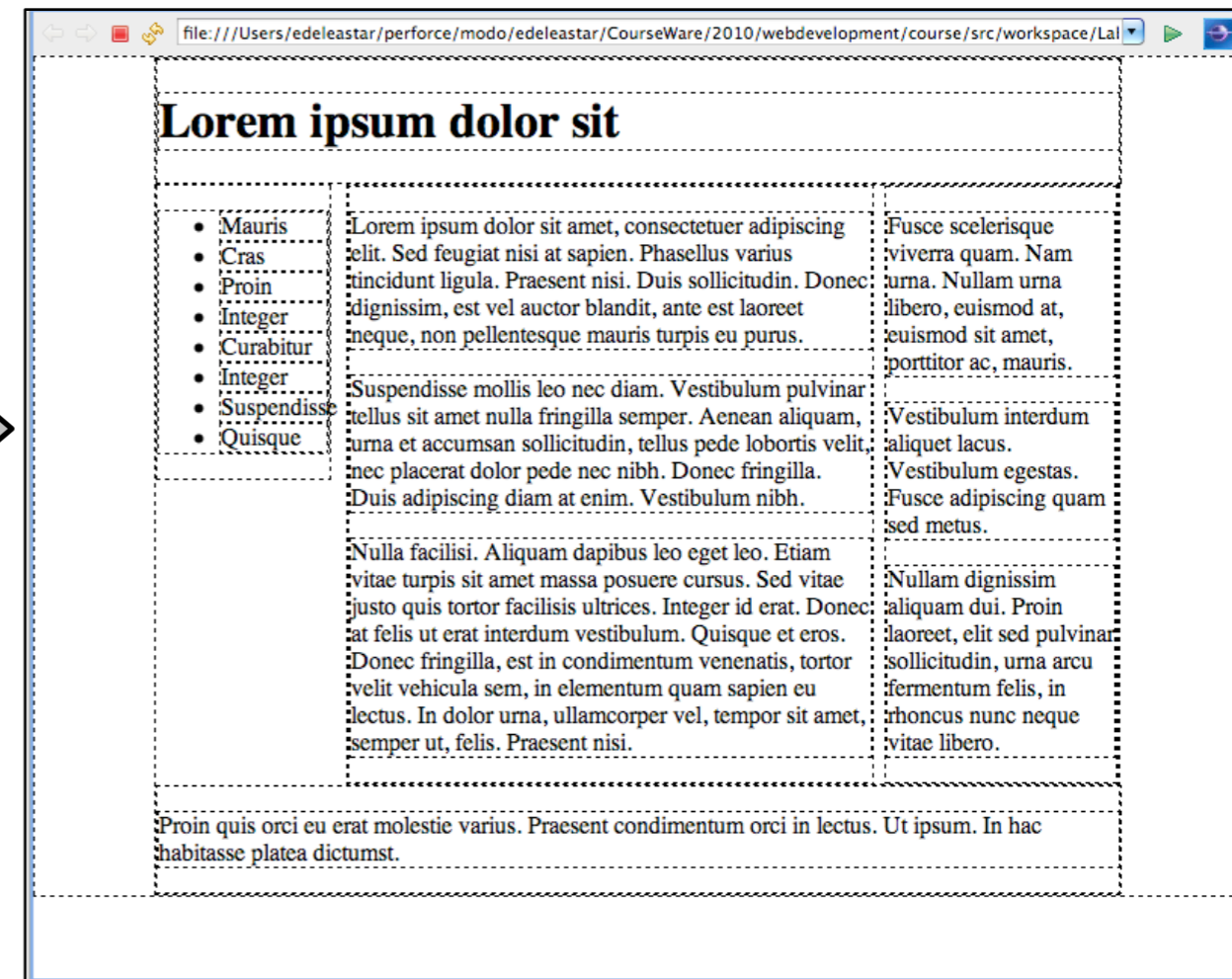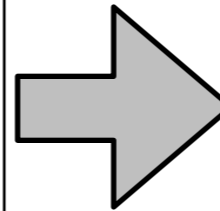
17

# Content

- header

- maincontent

    - primary

    - second

- navigation

- footer

```
...
  <body>
    <h1>
    Lorem ipsum dolor sit
    </h1>
    <p>
    Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Sed feugiat nisi
    at sapien. Phasellus varius tincidunt ligula. Praesent nisi. Duis
    sollicitudin. Donec dignissim, est vel auctor blandit, ante est laoreet
    neque, non pellentesque mauris turpis eu purus.
    </p>
    <p>
    Suspendisse mollis leo nec diam. Vestibulum pulvinar tellus sit amet nulla
    fringilla semper. Aenean aliquam, urna et accumsan sollicitudin, tellus
    pede lobortis velit, nec placerat dolor pede nec nibh. Donec fringilla. Duis
    adipiscing diam at enim. Vestibulum nibh.
    </p>
    <p>
    Nulla facilisi. Aliquam dapibus leo eget leo. Etiam vitae turpis sit amet
    massa posuere cursus. Sed vitae justo quis tortor facilisis ultrices.
    Integer id erat. Donec at felis ut erat interdum vestibulum. Quisque et eros.
    Donec fringilla, est in condimentum venenatis, tortor velit vehicula sem, in
    elementum quam sapien eu lectus. In dolor urna, ullamcorper vel, tempor sit
    amet, semper ut, felis. Praesent nisi.
    </p>
    <p>
    Fusce scelerisque viverra quam. Nam urna. Nullam urna libero, euismod at,
    euismod sit amet, porttitor ac, mauris.
    </p>
    <p>
    Vestibulum interdum aliquet lacus. Vestibulum egestas. Fusce adipiscing
    quam sed metus.
    </p>
    <p>
    Nullam dignissim aliquam dui. Proin laoreet, elit sed pulvinar
    sollicitudin, urna arcu fermentum felis, in rhoncus nunc neque vitae
    libero.
    </p>
    <ul>
      <li>Mauris</li>
      <li>Cras</li>
      <li>Proin</li>
      <li>Integer</li>
      <li>Curabitur</li>
      <li>Integer</li>
      <li>Suspendisse</li>
      <li>Quisque</li>
    </ul>
    <p>
    Proin quis orci eu erat molestie varius. Praesent condimentum
    orci in lectus. Ut ipsum. In hac habitasse platea dictumst.
    </p>
  </body>
...
```
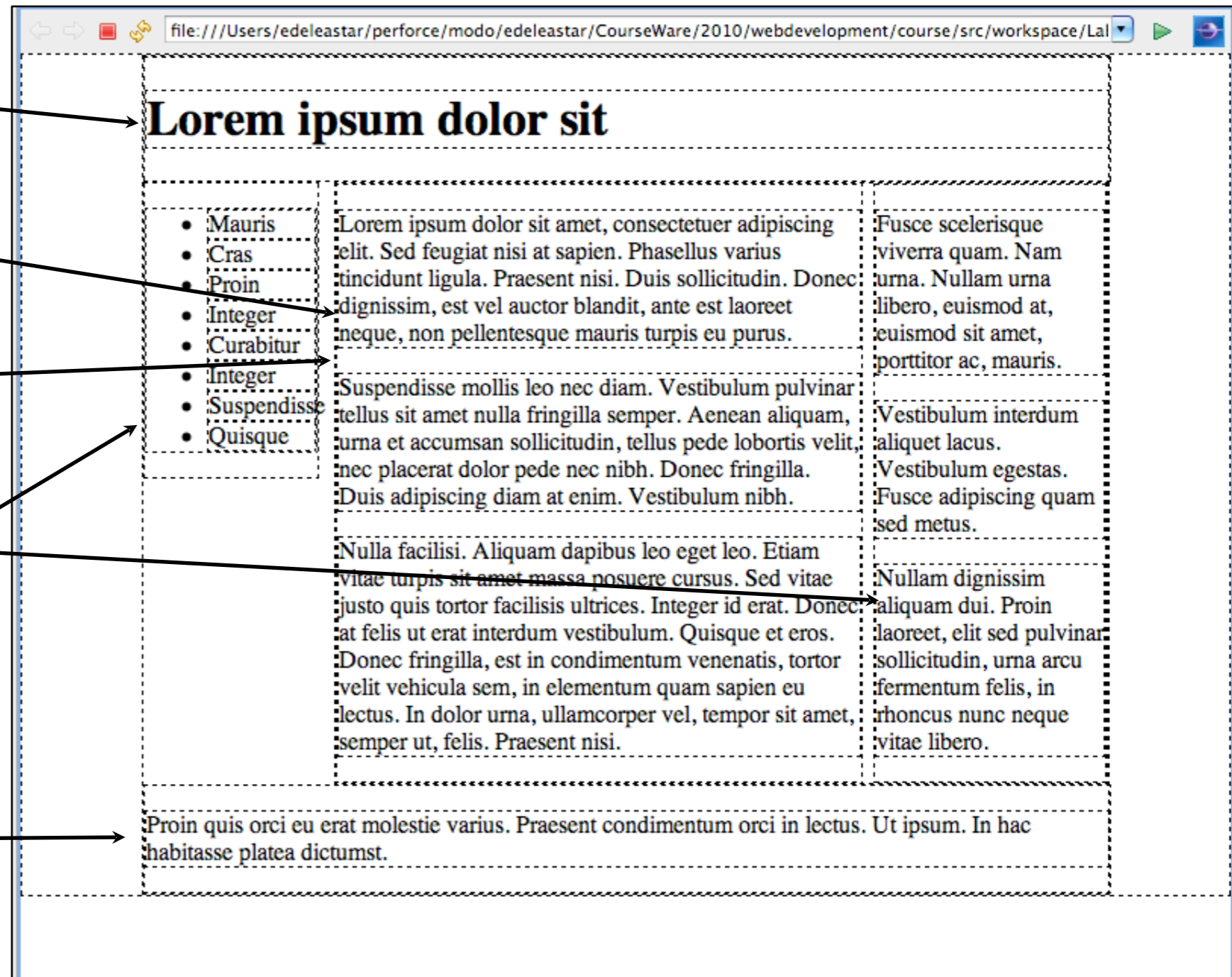
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# Target

- header

- maincontent
  - primary
  - secondary

- navigation

- footer



file:///Users/edeleastar/perforce/modo/edeleastar/CourseWare/2010/webdevelopment/course/src/workspace/Lal

**Lorem ipsum dolor sit**

- Mauris
- Cras
- Proin
- Integer
- Curabitur
- Integer
- Suspendisse
- Quisque

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Sed feugiat nisi at sapien. Phasellus varius tincidunt ligula. Praesent nisi. Duis sollicitudin. Donec dignissim, est vel auctor blandit, ante est laoreet neque, non pellentesque mauris turpis eu purus.

Suspendisse mollis leo nec diam. Vestibulum pulvinar tellus sit amet nulla fringilla semper. Aenean aliquam, urna et accumsan sollicitudin, tellus pede lobortis velit, nec placerat dolor pede nec nibh. Donec fringilla. Duis adipiscing diam at enim. Vestibulum nibh.

Nulla facilisi. Aliquam dapibus leo eget leo. Etiam vitae turpis sit amet massa posuere cursus. Sed vitae justo quis tortor facilisis ultrices. Integer id erat. Donec at felis ut erat interdum vestibulum. Quisque et eros. Donec fringilla, est in condimentum venenatis, tortor velit vehicula sem, in elementum quam sapien eu lectus. In dolor urna, ullamcorper vel, tempor sit amet, semper ut, felis. Praesent nisi.

Fusce scelerisque viverra quam. Nam urna. Nullam urna libero, euismod at, euismod sit amet, porttitor ac, mauris.

Vestibulum interdum aliquet lacus. Vestibulum egestas. Fusce adipiscing quam sed metus.

Nullam dignissim aliquam dui. Proin laoreet, elit sed pulvinar sollicitudin, urna arcu fermentum felis, in rhoncus nunc neque vitae libero.

Proin quis orci eu erat molestie varius. Praesent condimentum orci in lectus. Ut ipsum. In hac habitasse platea dictumst.

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# DIVs (1)

```html
<div id="header">
  <h1>
    Lorem ipsum dolor sit
  </h1>
</div>
```

- header

- maincontent

  - primary

  - second

```html
<div id="maincontent">
  <div id="primary">
    <p>
      Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Sed feugiat nisi
      at sapien. Phasellus varius tincidunt ligula. Praesent nisi. Duis
      sollicitudin. Donec dignissim, est vel auctor blandit, ante est laoreet
      neque, non pellentesque mauris turpis eu purus.
    </p>
    <p>
      Suspendisse mollis leo nec diam. Vestibulum pulvinar tellus sit amet nulla
      fringilla semper. Aenean aliquam, urna et accumsan sollicitudin, tellus
      pede lobortis velit, nec placerat dolor pede nec nibh. Donec fringilla. Duis
      adipiscing diam at enim. Vestibulum nibh.
    </p>
    <p>
      Nulla facilisi. Aliquam dapibus leo eget leo. Etiam vitae turpis sit amet
      massa posuere cursus. Sed vitae justo quis tortor facilisis ultrices.
      Integer id erat. Donec at felis ut erat interdum vestibulum. Quisque et eros.
      Donec fringilla, est in condimentum venenatis, tortor velit vehicula sem, in
      elementum quam sapien eu lectus. In dolor urna, ullamcorper vel, tempor sit
      amet, semper ut, felis. Praesent nisi.
    </p>
  </div>
  <div id="secondary">
    <p>
      Fusce scelerisque viverra quam. Nam urna. Nullam urna libero, euismod at,
      euismod sit amet, porttitor ac, mauris.
    </p>
    <p>
      Vestibulum interdum aliquet lacus. Vestibulum egestas. Fusce adipiscing
      quam sed metus.
    </p>
    <p>
      Nullam dignissim aliquam dui. Proin laoreet, elit sed pulvinar
      sollicitudin, urna arcu fermentum felis, in rhoncus nunc neque vitae
      libero.
    </p>
  </div>
</div>
```

# Divs (2)

- navigation

```html
<div id="navigation">
  <ul>
    <li><a href="home.html"> Mauris </a></li>
    <li><a href="page1.html"> Cras </a></li>
    <li>Proin</li>
    <li>Integer</li>
    <li>Curabitur</li>
    <li>Integer</li>
    <li>Suspendisse</li>
    <li>Quisque</li>
  </ul>
</div>
```

- footer

```html
<div id="footer">
  <p>
    Proin quis orci eu erat molestie varius. Praesent condimentum
    orci in lectus. Ut ipsum. In hac habitasse platea dictumst.
  </p>
</div>
```

# Eclipse Folding View

- Eclipse Folding editor can "Expand all" or "Collapse all" of the elements, facilitating a precise focus on the elements under consideration.

# Stylesheet

```
<link type="text/css" rel="stylesheet" href="home.css" media="screen" />
```

- Width of body to be 80% of "containing element" (the browser window)

```
body
{
  width: 80%;
  margin: 0 auto;
}
```

- No top/bottom margin for the page

shortcut for...

- "auto" for left and right

  - i.e. the margins to be proportional to the container width and equal in size.

```
body
{
  width: 80%;
  margin-top: 0;
  margin-bottom: 0;
  margin-left: auto;
  margin-right: auto;
}
```

# Lorem ipsum dolor sit

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Sed feugiat nisi at sapien. Phasellus varius tincidunt ligula. Praesent nisi. Duis sollicitudin. Donec dignissim, est vel auctor blandit, ante est laoreet neque, non pellentesque mauris turpis eu purus.

Suspendisse mollis leo nec diam. Vestibulum pulvinar tellus sit amet nulla fringilla semper. Aenean aliquam, urna et accumsan sollicitudin, tellus pede lobortis velit, nec placerat dolor pede nec nibh. Donec fringilla. Duis adipiscing diam at enim. Vestibulum nibh.

Nulla facilisi. Aliquam dapibus leo eget leo. Etiam vitae turpis sit amet massa posuere cursus. Sed vitae justo quis tortor facilisis ultrices. Integer id erat. Donec at felis ut erat interdum vestibulum. Quisque et eros. Donec fringilla, est in condimentum venenatis, tortor velit vehicula sem, in elementum quam sapien eu lectus. In dolor urna, ullamcorper vel, tempor sit amet, semper ut, felis. Praesent nisi.

Fusce scelerisque viverra quam. Nam urna. Nullam urna libero, euismod at, euismod sit amet, porttitor ac, mauris.

Vestibulum interdum aliquet lacus. Vestibulum egestas. Fusce adipiscing quam sed metus.

Nullam dignissim aliquam dui. Proin laoreet, elit sed pulvinar sollicitudin, urna arcu fermentum felis, in rhoncus nunc neque vitae libero.

- Mauris
- Cras
- Proin
- Integer
- Curabitur
- Integer
- Suspendisse
- Quisque

Proin quis orci eu erat molestie varius. Praesent condimentum orci in lectus. Ut ipsum. In hac habitasse platea dictumst.

```
body
{
  width: 80%;
  margin: 0 auto;
}
```

- Entire page is positioned centered within the browser

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# Float

```
#maincontent
{
    width: 80%;
    float: right;
}
```



- Width of maincontent is to be 80% of it's container , which in turn is 80% of its container.

- Maincontent is a "floated" box shifted to the right until its margin edge touches the padding edge of the containing block (or the margin edge of another floated element).

# Show Borders (temporarily)

```css
#maincontent
{
  width: 80%;
  float: right;
  border: dashed thin;
}
```



file:///Users/edeleastar/perforce/modo/edeleastar/CourseWare/2010/webdevelopment/course/src/workspace/Lab12/

## Lorem ipsum dolor sit

- Mauris
- Cras
- Proin
- Integer
- Curabitur
- Integer
- Suspendisse
- Quisque

Proin quis orci eu erat molestie varius. Praesent condimentum orci in lectus. Ut ipsum. In hac habitasse platea dictumst.

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Sed feugiat nisi at sapien. Phasellus varius tincidunt ligula. Praesent nisi. Duis sollicitudin. Donec dignissim, est vel auctor blandit, ante est laoreet neque, non pellentesque mauris turpis eu purus.

Suspendisse mollis leo nec diam. Vestibulum pulvinar tellus sit amet nulla fringilla semper. Aenean aliquam, urna et accumsan sollicitudin, tellus pede lobortis velit, nec placerat dolor pede nec nibh. Donec fringilla. Duis adipiscing diam at enim. Vestibulum nibh.

Nulla facilisi. Aliquam dapibus leo eget leo. Etiam vitae turpis sit amet massa posuere cursus. Sed vitae justo quis tortor facilisis ultrices. Integer id erat. Donec at felis ut erat interdum vestibulum. Quisque et eros. Donec fringilla, est in condimentum venenatis, tortor velit vehicula sem, in elementum quam sapien eu lectus. In dolor urna, ullamcorper vel, tempor sit amet, semper ut, felis. Praesent nisi.
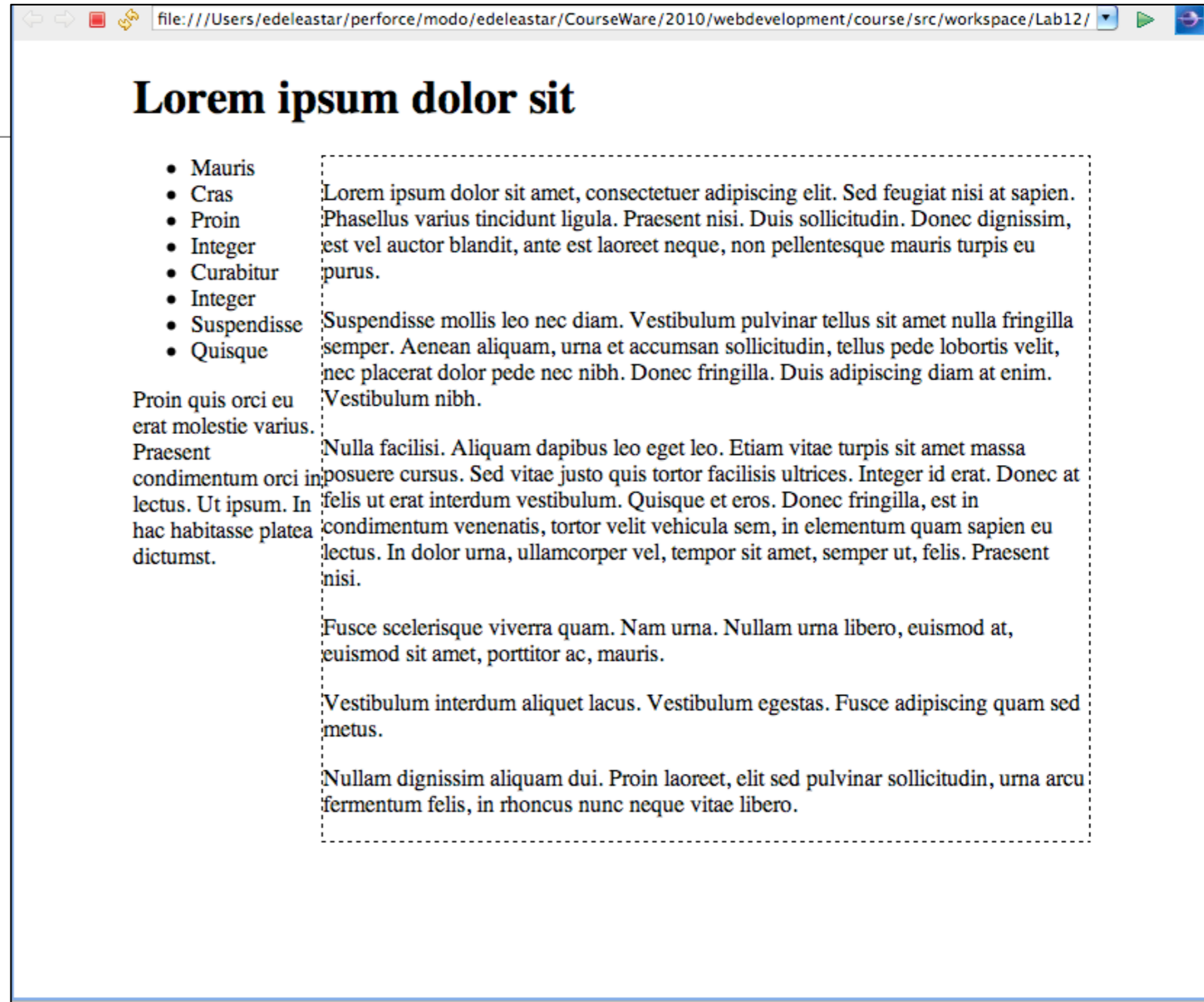
Fusce scelerisque viverra quam. Nam urna. Nullam urna libero, euismod at, euismod sit amet, porttitor ac, mauris.

Vestibulum interdum aliquet lacus. Vestibulum egestas. Fusce adipiscing quam sed metus.

Nullam dignissim aliquam dui. Proin laoreet, elit sed pulvinar sollicitudin, urna arcu fermentum felis, in rhoncus nunc neque vitae libero.

- Show a dashed border around the maincontent to better understand the layout behaviour

# Navigation - take 1



```
#navigation
{
  width: 20%;
  float: left;
  border: dashed thin;
}
```

- Resize the navigation to be 20% of container

- Float left

- However, as width does not include padding & margins, this is too wide to fit on "row" with maincontent, so "flows" below it

# Navigation
# - take 2

```
#navigation
{
  width: 18%;
  float: left;
  border: dashed thin;
}
```



## Lorem ipsum dolor sit

- Mauris
- Cras
- Proin
- Integer
- Curabitur
- Integer
- Suspendisse
- Quisque

Proin quis orci eu erat molestie varius. Praesent condimentum orci in lectus. Ut ipsum. In hac habitasse platea dictumst.

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Sed feugiat nisi at sapien. Phasellus varius tincidunt ligula. Praesent nisi. Duis sollicitudin. Donec dignissim, est vel auctor blandit, ante est laoreet neque, non pellentesque mauris turpis eu purus.

Suspendisse mollis leo nec diam. Vestibulum pulvinar tellus sit amet nulla fringilla semper. Aenean aliquam, urna et accumsan sollicitudin, tellus pede lobortis velit, nec placerat dolor pede nec nibh. Donec fringilla. Duis adipiscing diam at enim. Vestibulum nibh.

Nulla facilisi. Aliquam dapibus leo eget leo. Etiam vitae turpis sit amet massa posuere cursus. Sed vitae justo quis tortor facilisis ultrices. Integer id erat. Donec at felis ut erat interdum vestibulum. Quisque et eros. Donec fringilla, est in condimentum venenatis, tortor velit vehicula sem, in elementum quam sapien eu lectus. In dolor urna, ullamcorper vel, tempor sit amet, semper ut, felis. Praesent nisi.

Fusce scelerisque viverra quam. Nam urna. Nullam urna libero, euismod at, euismod sit amet, porttitor ac, mauris.

Vestibulum interdum aliquet lacus. Vestibulum egestas. Fusce adipiscing quam sed metus.

Nullam dignissim aliquam dui. Proin laoreet, elit sed pulvinar sollicitudin, urna arcu fermentum felis, in rhoncus nunc neque vitae libero.

- Reset width to 18% - now enough room for navigation & maincontent

# Header & Footer



```css
#header
{
  width: 100%;
  border: dashed thin;
}

#footer
{
  width: 100%;
  border: dashed thin;
}
```
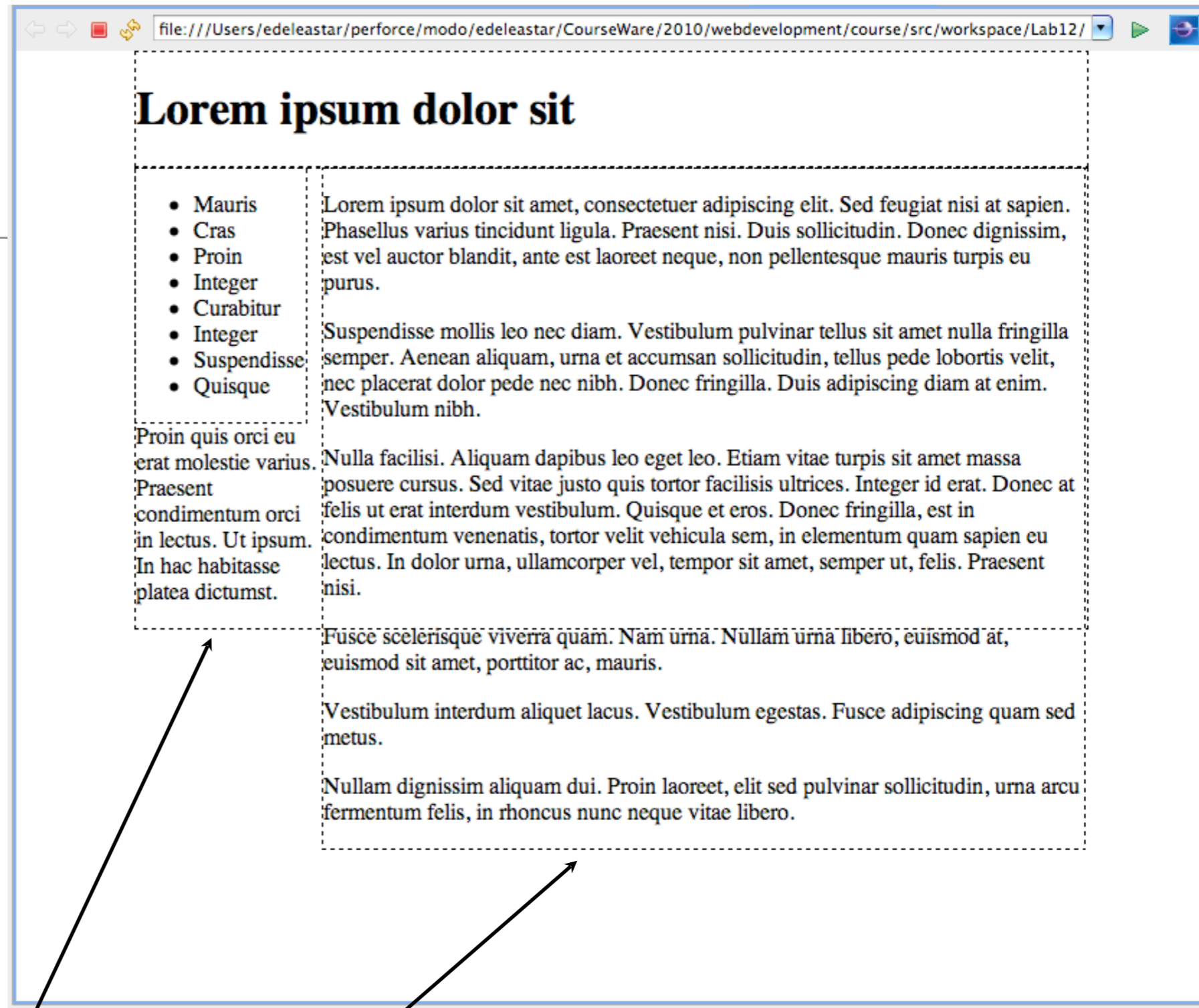
- Header & Footer to be 100% of the container

- Anomalies arise - footer (the text on the left) seem misplaced.

- These borders seem confused

# Clear

- "clear" forces an element to start below any floated elements

- An element whose clear property is set to "left" will start below all left-floated boxes in the same block formatting context

- A clear value of "right" will clear all right-floated boxes.

- If clear is set to "both", the element will start below any floated box in that context

# Footer:clear

## Lorem ipsum dolor sit

- Mauris
- Cras
- Proin
- Integer
- Curabitur
- Integer
- Suspendisse
- Quisque

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Sed feugiat nisi at sapien. Phasellus varius tincidunt ligula. Praesent nisi. Duis sollicitudin. Donec dignissim, est vel auctor blandit, ante est laoreet neque, non pellentesque mauris turpis eu purus.

Suspendisse mollis leo nec diam. Vestibulum pulvinar tellus sit amet nulla fringilla semper. Aenean aliquam, urna et accumsan sollicitudin, tellus pede lobortis velit, nec placerat dolor pede nec nibh. Donec fringilla. Duis adipiscing diam at enim. Vestibulum nibh.

Nulla facilisi. Aliquam dapibus leo eget leo. Etiam vitae turpis sit amet massa posuere cursus. Sed vitae justo quis tortor facilisis ultrices. Integer id erat. Donec at felis ut erat interdum vestibulum. Quisque et eros. Donec fringilla, est in condimentum venenatis, tortor velit vehicula sem, in elementum quam sapien eu lectus. In dolor urna, ullamcorper vel, tempor sit amet, semper ut, felis. Praesent nisi.

Fusce scelerisque viverra quam. Nam urna. Nullam urna libero, euismod at, euismod sit amet, porttitor ac, mauris.

Vestibulum interdum aliquet lacus. Vestibulum egestas. Fusce adipiscing quam sed metus.

Nullam dignissim aliquam dui. Proin laoreet, elit sed pulvinar sollicitudin, urna arcu fermentum felis, in rhoncus nunc neque vitae libero.

Proin quis orci eu erat molestie varius. Praesent condimentum orci in lectus. Ut ipsum. In hac habitasse platea dictumst.

```
#footer
{
  width: 100%;
  clear: both;
  border: dashed thin;
}
```

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# Pattern Matching Selectors

```css
body
{
  width: 80%;
  margin: 0 auto;
}


#maincontent
{
  width: 80%;
  float: right;
  border: dashed thin;
}


#navigation
{
  width: 18%;
  float: left;
  border: dashed thin;
}


#header
{
  width: 100%;
  border: dashed thin;
}


#footer
{
  width: 100%;
  clear: both;
  border: dashed thin;
}
```

- "*" matches all elements.

- Simplifies CSS, and can be removed when layout under control
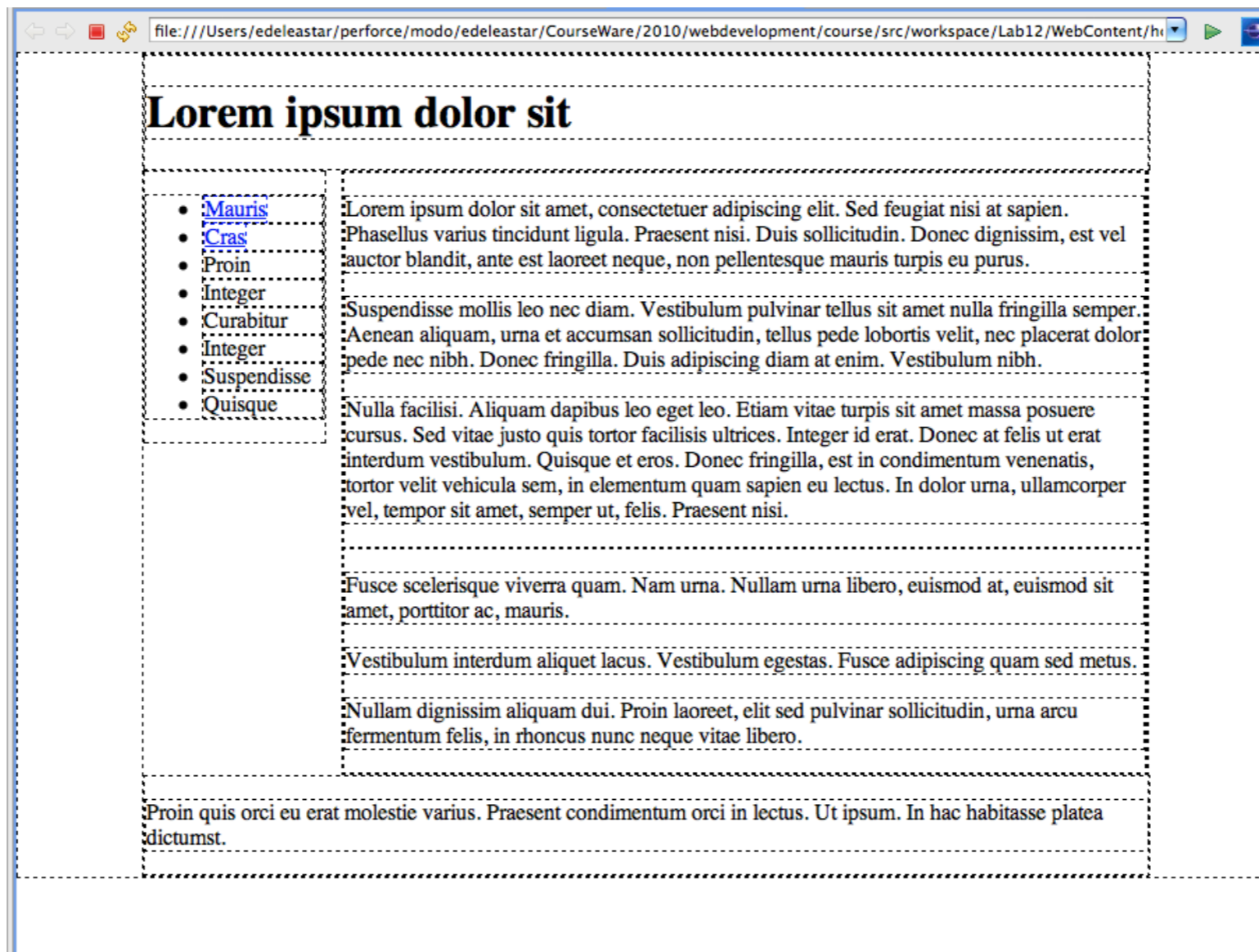
```css
*
{
  border: dashed thin;
}

body
{
  width: 80%;
  margin: 0 auto;
}

#maincontent
{
  width: 80%;
  float: right;
}

#navigation
{
  width: 18%;
  float: left;
}

#header
{
  width: 100%;
}

#footer
{
  width: 100%;
  clear: both;
}
```

32

# Primary & Secondary

```css
#primary
{
  width: 68%;
  float: left;
}

#secondary
{
  width: 30%;
  float: right;
}
```

# "CSS Craftsman"

```css
#header
{
  width: 100%;
}

#navigation
{
  width: 18%;
  float: left;
}

#maincontent
{
  width: 80%;
  float: right;
}

#primary
{
  width: 68%;
  float: left;
}

#secondary
{
  width: 30%;
  float: right;
}

#footer
{
  width: 100%;
  clear: both;
}
```
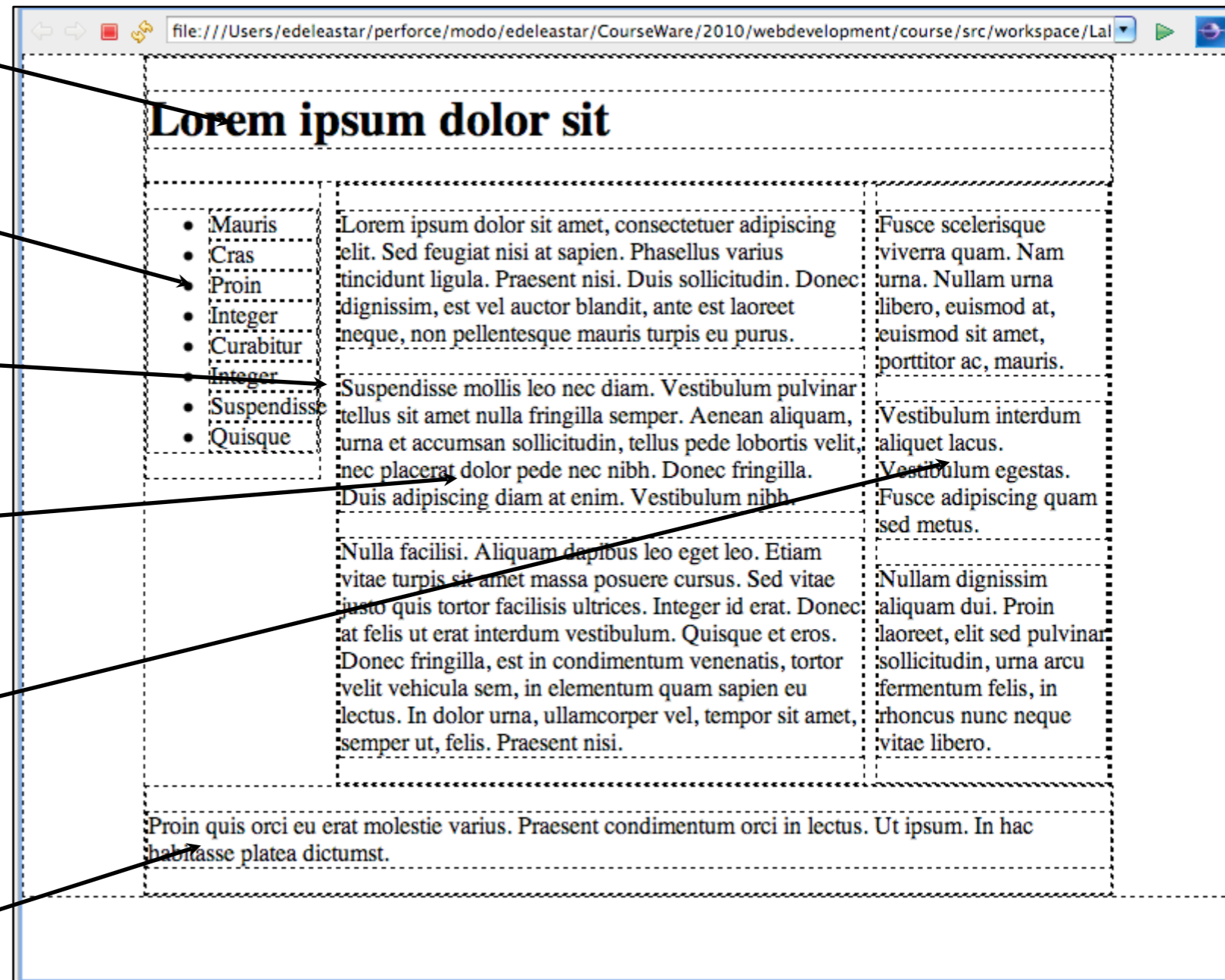
file:///Users/edeleastar/perforce/modo/edeleastar/CourseWare/2010/webdevelopment/course/src/workspace/Lal

## Lorem ipsum dolor sit

- Mauris
- Cras
- Proin
- Integer
- Curabitur
- Integer
- Suspendisse
- Quisque

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Sed feugiat nisi at sapien. Phasellus varius tincidunt ligula. Praesent nisi. Duis sollicitudin. Donec dignissim, est vel auctor blandit, ante est laoreet neque, non pellentesque mauris turpis eu purus.

Suspendisse mollis leo nec diam. Vestibulum pulvinar tellus sit amet nulla fringilla semper. Aenean aliquam, urna et accumsan sollicitudin, tellus pede lobortis velit, nec placerat dolor pede nec nibh. Donec fringilla. Duis adipiscing diam at enim. Vestibulum nibh.

Nulla facilisi. Aliquam dapibus leo eget leo. Etiam vitae turpis sit amet massa posuere cursus. Sed vitae justo quis tortor facilisis ultrices. Integer id erat. Donec at felis ut erat interdum vestibulum. Quisque et eros. Donec fringilla, est in condimentum venenatis, tortor velit vehicula sem, in elementum quam sapien eu lectus. In dolor urna, ullamcorper vel, tempor sit amet, semper ut, felis. Praesent nisi.

Fusce scelerisque viverra quam. Nam urna. Nullam urna libero, euismod at, euismod sit amet, porttitor ac, mauris.

Vestibulum interdum aliquet lacus. Vestibulum egestas. Fusce adipiscing quam sed metus.

Nullam dignissim aliquam dui. Proin laoreet, elit sed pulvinar sollicitudin, urna arcu fermentum felis, in rhoncus nunc neque vitae libero.

Proin quis orci eu erat molestie varius. Praesent condimentum orci in lectus. Ut ipsum. In hac habitasse platea dictumst.

34

# Lorem ipsum dolor sit

- [Mauris](#)
- [Cras](#)
- Proin
- Integer
- Curabitur
- Integer
- Suspendisse
- Quisque

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Sed feugiat nisi at sapien. Phasellus varius tincidunt ligula. Praesent nisi. Duis sollicitudin. Donec dignissim, est vel auctor blandit, ante est laoreet neque, non pellentesque mauris turpis eu purus.

Suspendisse mollis leo nec diam. Vestibulum pulvinar tellus sit amet nulla fringilla semper. Aenean aliquam, urna et accumsan sollicitudin, tellus pede lobortis velit, nec placerat dolor pede nec nibh. Donec fringilla. Duis adipiscing diam at enim. Vestibulum nibh.
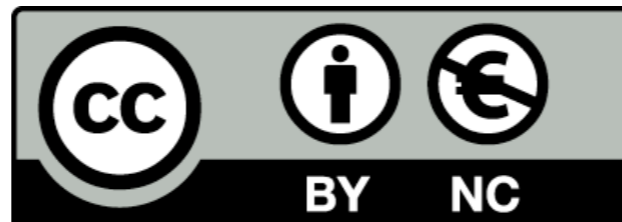
Nulla facilisi. Aliquam dapibus leo eget leo. Etiam vitae turpis sit amet massa posuere cursus. Sed vitae justo quis tortor facilisis ultrices. Integer id erat. Donec at felis ut erat interdum vestibulum. Quisque et eros. Donec fringilla, est in condimentum venenatis, tortor velit vehicula sem, in elementum quam sapien eu lectus. In dolor urna, ullamcorper vel, tempor sit amet, semper ut, felis. Praesent nisi.

Fusce scelerisque viverra quam. Nam urna. Nullam urna libero, euismod at, euismod sit amet, porttitor ac, mauris.

Vestibulum interdum aliquet lacus. Vestibulum egestas. Fusce adipiscing quam sed metus.

Nullam dignissim aliquam dui. Proin laoreet, elit sed pulvinar sollicitudin, urna arcu fermentum felis, in rhoncus nunc neque vitae libero.

Proin quis orci eu erat molestie varius. Praesent condimentum orci in lectus. Ut ipsum. In hac habitasse platea dictumst.

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