Web Development

Week 5: Page Layout and Wireframing

Notes By: **Jonathan McCarthy**

Overview

↗ Revision:: File Paths, Padding and the Box Model

↗ Prototyping

↗ High Fidelity and Low Fidelity Prototypes

↗ Sketching

↗ Storyboards

↗ Wireframes

↗ Laying out a page with HTML and CSS

Revision:: Absolute Path

↗ An absolute path gives the full file path, including the domain name.

↗ Eg. http://www.amitycode.com/img/about-bg.jpg

Revision:: Relative Path

↗ Relative paths do not use the full path or the domain name.

↗ Eg.

↗ Index.html

↗ /img/pict.jpg

↗ Img/pict.jpg

	Description	Example
/	Root Directory	/img/pict.jpg
../	Back one directory	../img/pict.jpg
../../	Back two directories	../../img/pict.jpg
Img/pict.jpg	For the current folder were in, there is an Img folder containing a file pict.jpg	

Revision:: Files, Folders and Paths

↗ When creating a web application it is important to structure the project folder.

↗ Similar content items should be grouped together in folders.

↗ Eg: Images, CSS files, JavaScript files, videos etc.....

Revision:: Box Model

All elements added to the page can be referred to as boxes. Each box on the page can be styled on the page. Each box has a margin, a border, padding and its content. This is referred to as the box model.

Margin

Border
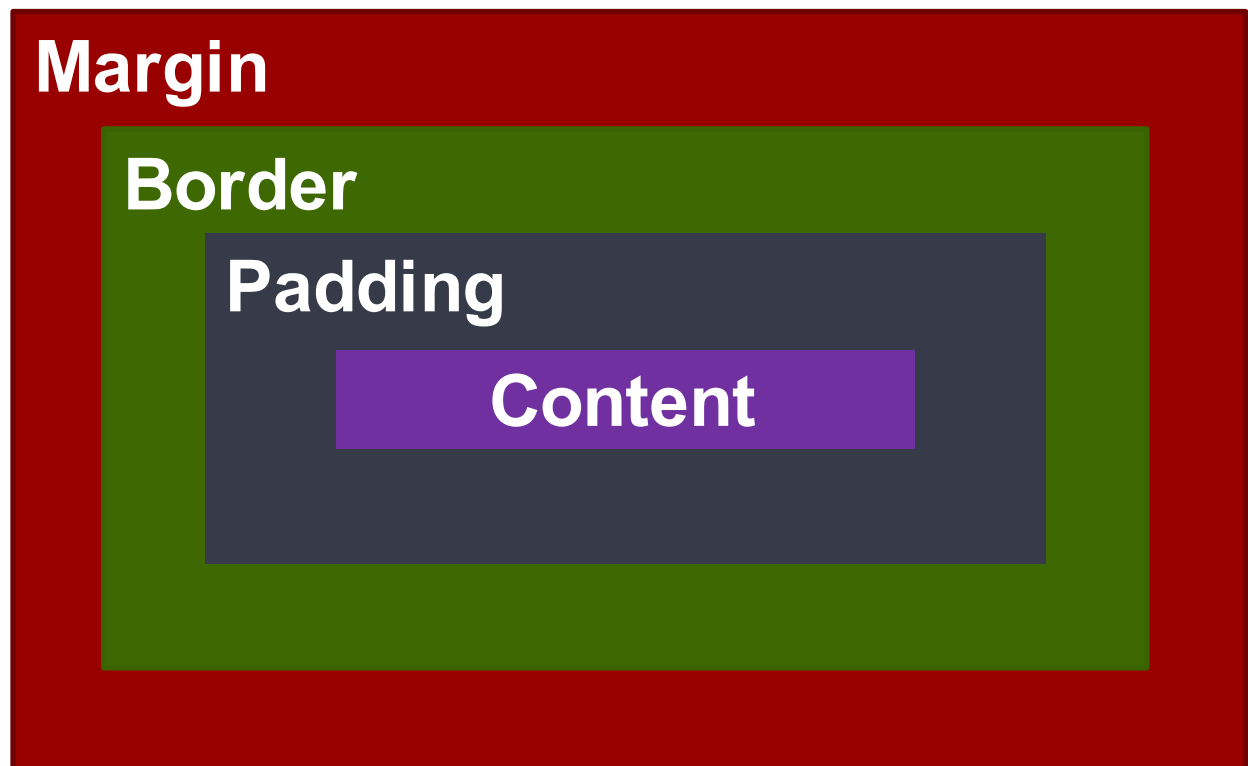
Padding

Content

Revision:: Box Model

↗ **Content**

    ↗ The content is what displays on the page.

    ↗ This can be thought of as the content of the box!!

↗ **Padding**

    ↗ Padding adds some area around the content in the box.

    ↗ The padding will be transparent.

Revision:: Box Model

↗ Border

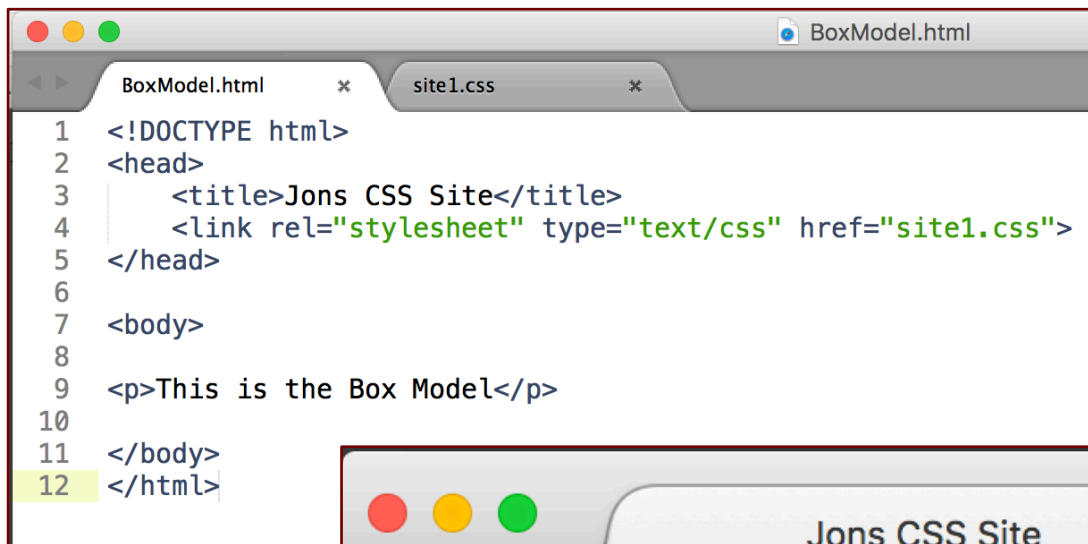 ↗ The border goes around the padding and the content.

↗ Margin

  ↗ Margin adds some area outside the border.

  ↗ The margin will be transparent.

Revision:: Box Model-> Example

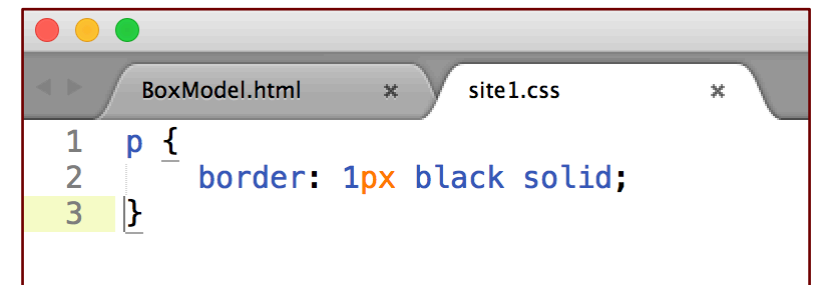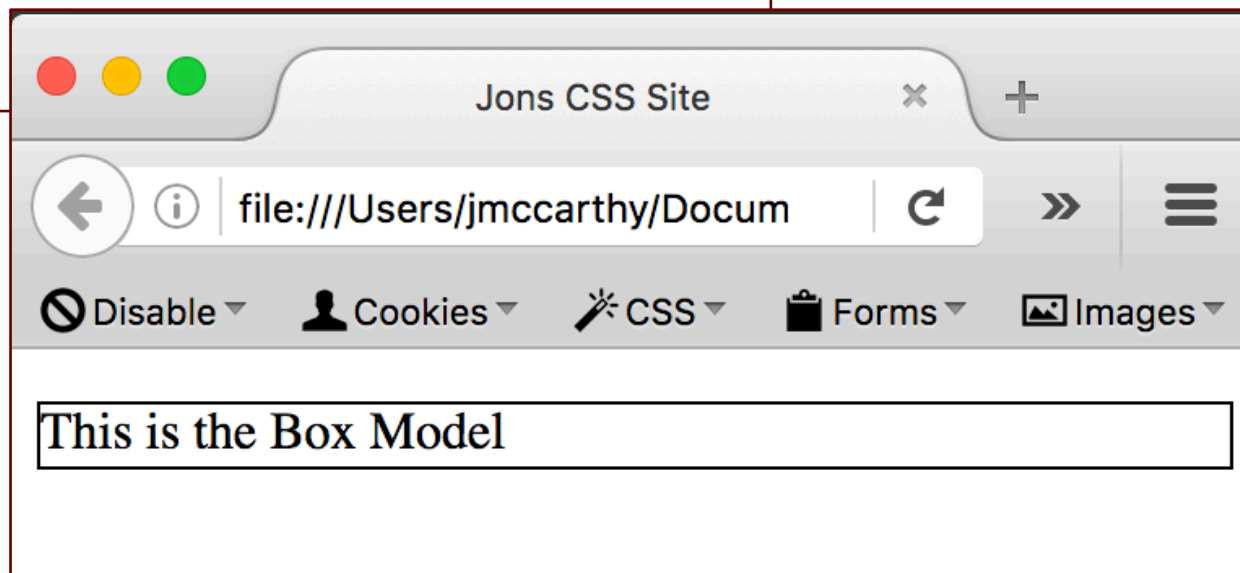↗ Step 1. Add content to page and set a border.

```
1  <!DOCTYPE html>
2  <head>
3      <title>Jons CSS Site</title>
4      <link rel="stylesheet" type="text/css" href="site1.css">
5  </head>
6
7  <body>
8
9  <p>This is the Box Model</p>
10
11 </body>
12 </html>
```
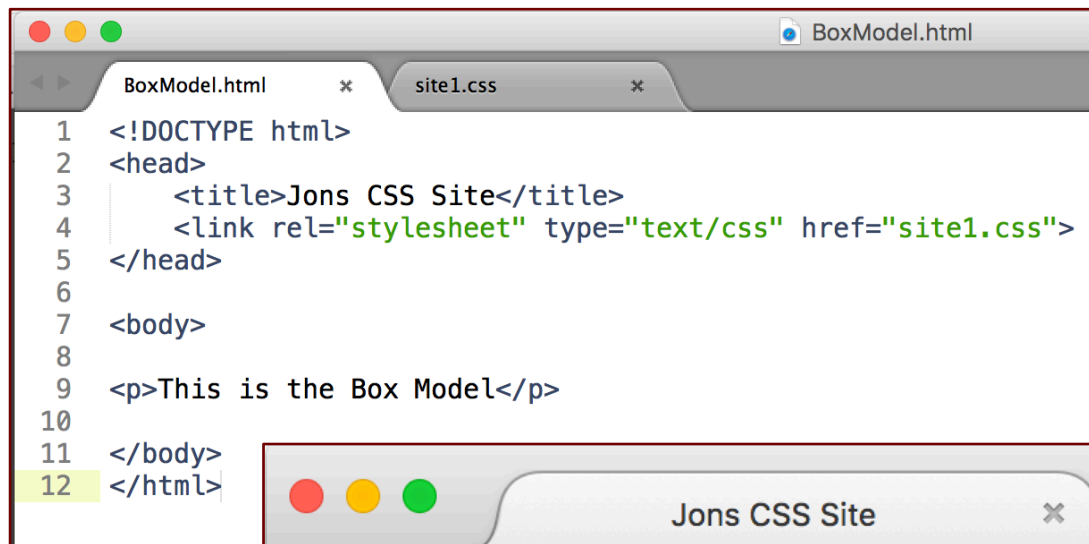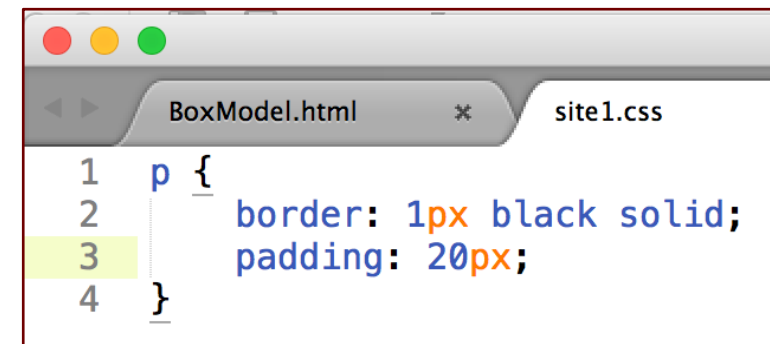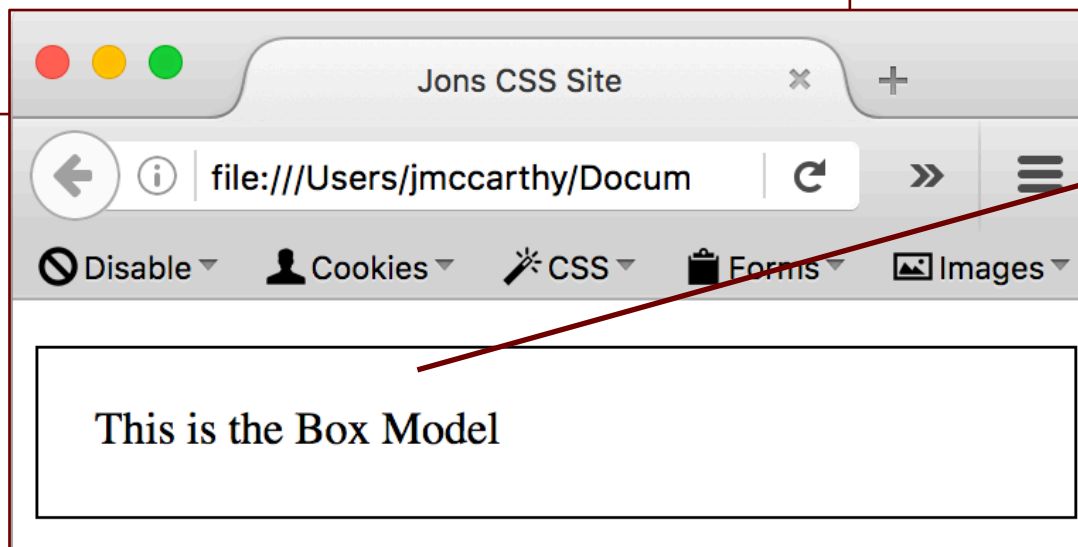
```
1  p {
2      border: 1px black solid;
3  }
```

This is the Box Model

Revision:: Box Model-> Example

↗ Step 2. Add padding to CSS.


```
BoxModel.html        site1.css
1  <!DOCTYPE html>
2  <head>
3      <title>Jons CSS Site</title>
4      <link rel="stylesheet" type="text/css" href="site1.css">
5  </head>
6
7  <body>
8
9  <p>This is the Box Model</p>
10
11  </body>
12  </html>
```

```
BoxModel.html        site1.css
1  p {
2      border: 1px black solid;
3      padding: 20px;
4  }
```

Jons CSS Site

file:///Users/jmccarthy/Docum

Disable   Cookies   CSS   Forms   Images

This is the Box Model

Padding space around the content

Revision:: Box Model-> Example

↗ Step 2. Add margin to CSS.


```html
<!DOCTYPE html>
<head>
    <title>Jons CSS Site</title>
    <link rel="stylesheet" type="text/css" href="site1.css">
</head>

<body>

<p>This is the Box Model</p>

</body>
</html>
```
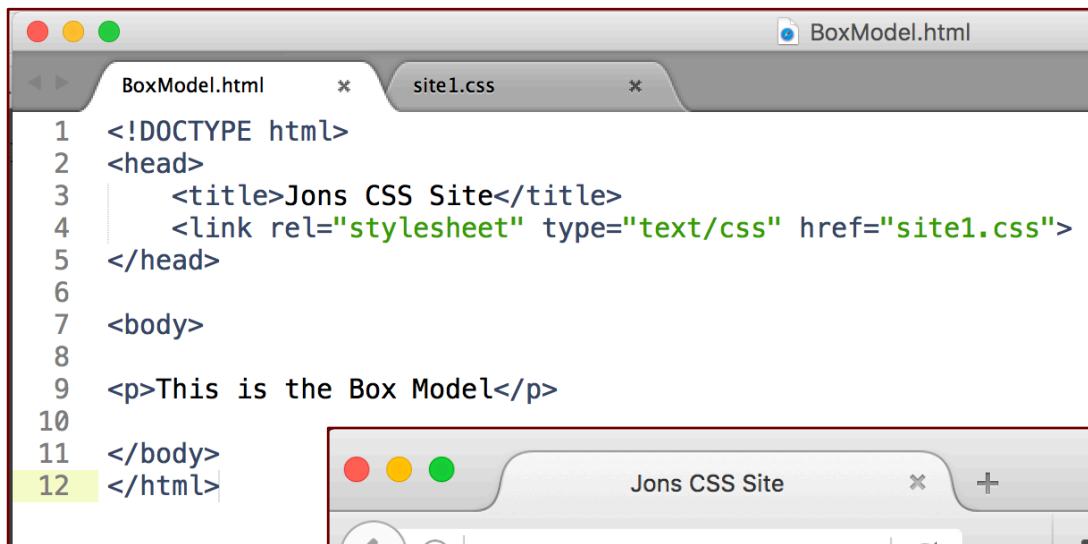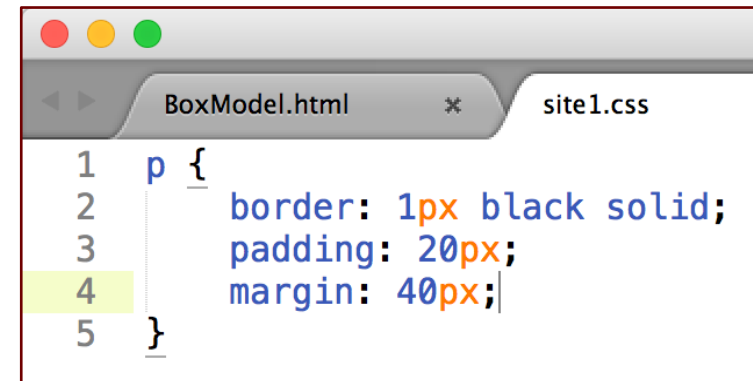
```css
p {
    border: 1px black solid;
    padding: 20px;
    margin: 40px;
}
```

Jons CSS Site

file:///Users/jmccarthy/Docum

Disable ▾   Cookies ▾   CSS ▾   Forms ▾   Images ▾

This is the Box Model
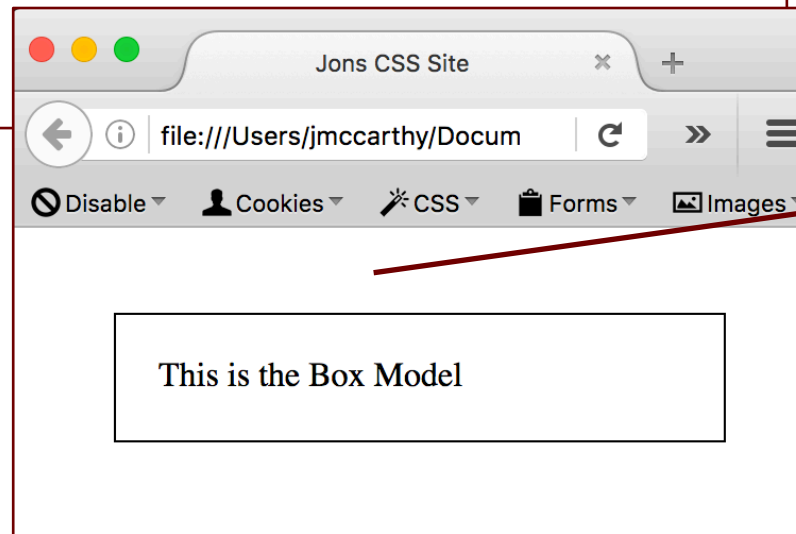
Margin space around the border

Revision:: Padding

↗ Padding adds space around the content of a given element.

↗ This can be thought of as space between the content and border for a given element.

↗ Using the padding property puts the space on all four sides of the element. To just put padding space on one side use:

- ↗ padding-top
- ↗ padding-right
- ↗ padding-bottom
- ↗ padding-left

Revision:: Margin

↗ The margin adds space outside the border of a given element.

↗ This can be thought of as space between the border and the other elements on the page.

↗ Using the margin property puts the space on all four sides of the element. To just put padding space on one side use:

   ↗ margin-top
   ↗ margin-right
   ↗ margin-bottom
   ↗ margin-left

Prototyping

↗ Prototyping is the creation of an incomplete representation of the system to demonstrate the operation and functionality of the system.

↗ The prototype can be used to demonstrate/test the system to the customer or stakeholder to ensure the requirements and the functionality are correct.

Types of Prototyping

↗ High Fidelity Prototype

↗ Low Fidelity Prototype

Low Fidelity Prototype

↗ A Low Fidelity (Lo-Fi) prototype can be created using a rough drawing on paper, whiteboards etc...

↗ The Lo-Fi drawing or sketches are crude in appearance and are used to capture the structural design of the website.

↗ The Lo-Fi sketch is not a complete representation of the design of the website. It just gives an overview of the structure and visual appearance of the content on the page.

Low Fidelity Example

Low Fidelity Prototyping

↗ Examples:

  ↗ Sketching

  ↗ Wireframing

  ↗ Storyboards

Advantages of Lo-Fi Prototyping

↗ A cheap and quick way to design the structure of a system.

↗ Gives a clear way to communicate the design of the site with all the stakeholders in the project. The client can be engaged in development of the Lo-Fi prototype and gives them a sense of ownership and engagement.

↗ Lo-Fi prototypes are disposable.

↗ No learning curve associated with creating Lo-Fi prototypes, anybody can do it!!

↗ Gives a good overview of the complete system, by onlg giving minimal information on styling etc…

Sketching

↗ Sketching can be used to initially capture the structure and content of the system.

↗ This can be used to communicate with project stakeholders.

↗ The sketches may not be appropriate to present to a customer for feedback (not professional looking!!)
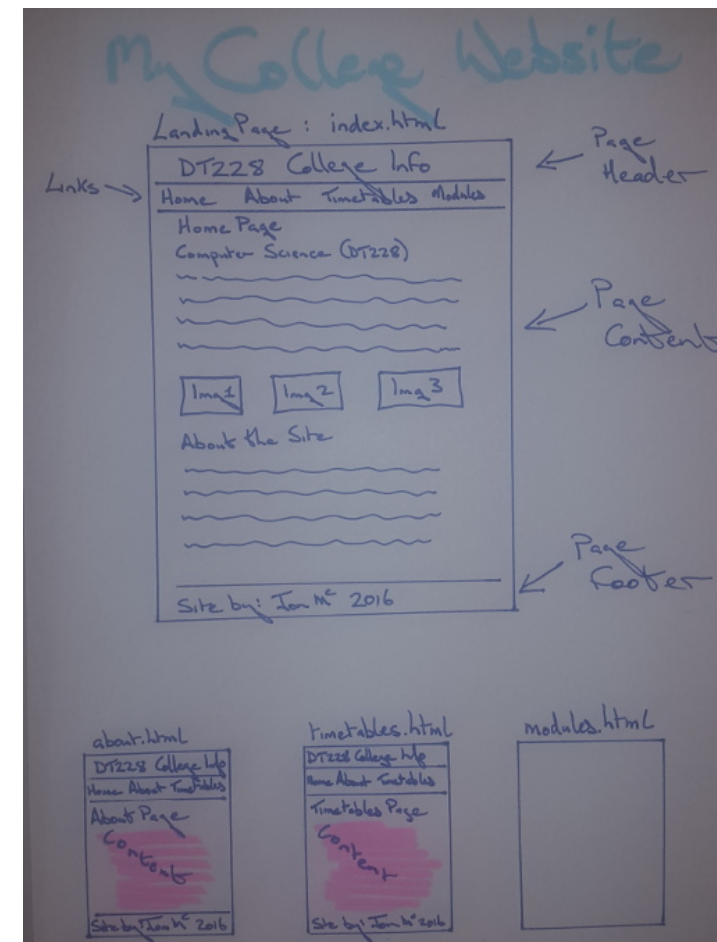
Storyboards

↗ A storyboard is a sequence of illustrations displayed is a sequence to shop how a use can perform a specific task.

↗ Can be time consuming to create.

↗ Can represent user interaction and application flow for a system.

Wireframes

↗ Wireframes are black and white structural layouts of a webpage.

↗ It shows where specific content will be positioned on a page.

↗ A wireframe contains no colour or styling. The main objective is to show the page structure and content. Color and styling can distract someone looking at the wireframe from seeing the layout and content on the page.

↗ The wireframes are like a blueprint for the structure of the website.

Wireframing

⌐ A wireframe is used to design the structure of a website.

⌐ The wireframe shows where the functionality and content will reside on the page.

⌐ Wireframes contain no information about styling, it only contains structural information.
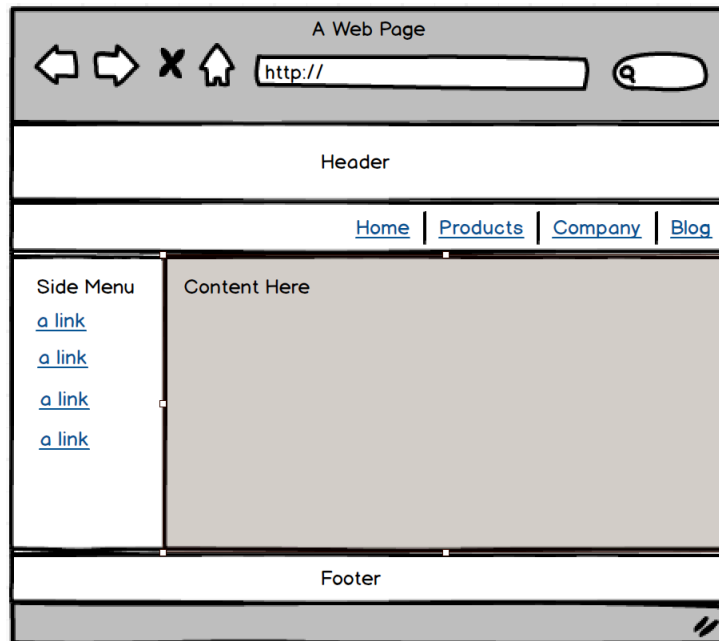
Wireframe Example
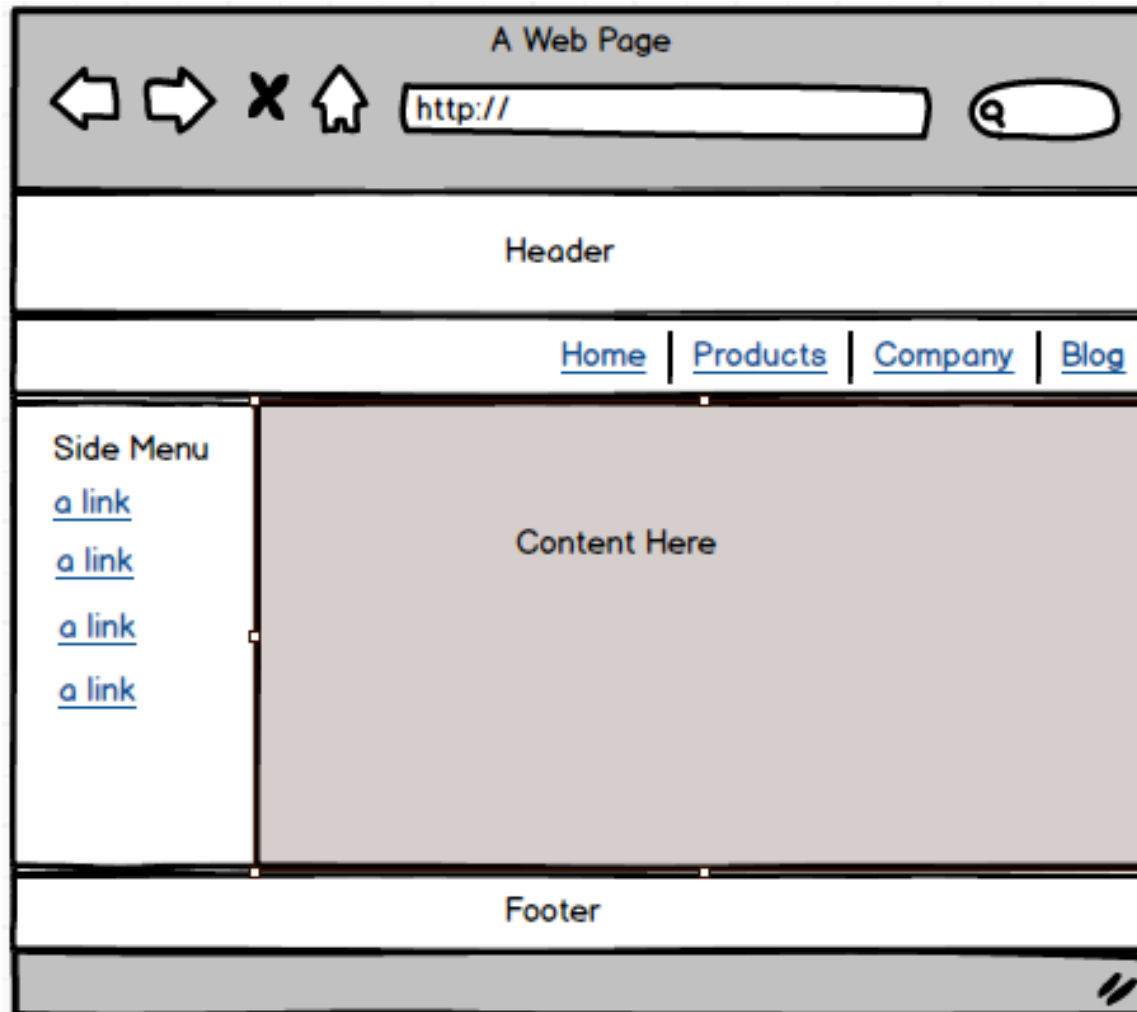
High Fidelity

↗ High Fidelity prototypes are created using computing tools.

↗ They are very professional looking and contain a good level of detail.

↗ The Hi-Fi prototype is a working demo of the system.

↗ Examples created using Dreamweaver, Photoshop etc…

Laying out a page with HTML and CSS

Example 1


```
 8  <body>
 9      <div id="main">
10          <header>Header</header>
11
12          <section id="content">
13
14              <section id="subContainer">
15                  <section id="leftMenu">
16                      <h3>Menu</h3>
17                  </section><section id="rightContent">
18                      <h3>Home Page</h3>
19                  </section>
20              </section>
21
22          </section>
23
24          <footer>Footer</footer>
25      </div>
26  </body>
```
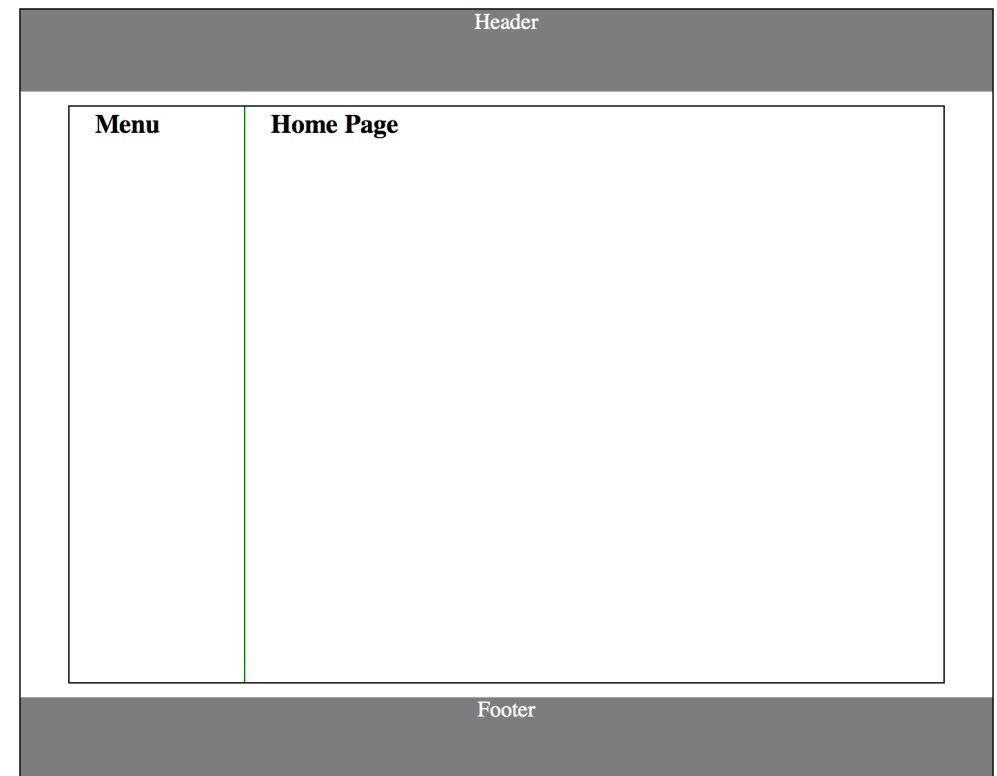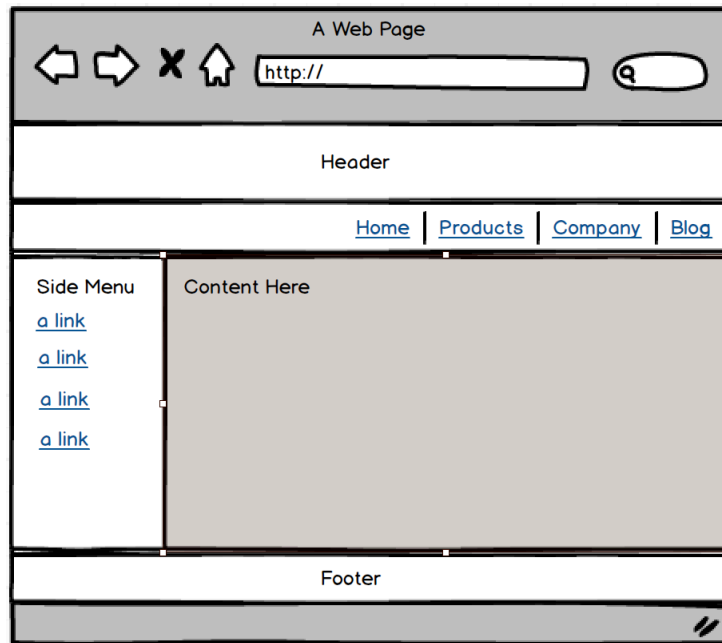
Example 1

```css
1   body {
2       background-color: white;
3   }
4
5   #main {
6       background-color: white;
7       width: 70%;
8       margin: auto;
9       border: 1px black solid;
10  }
11
12  header, footer {
13      background-color: grey;
14      height: 10%;
15      text-align: center;
16      color: white;
17  }
```
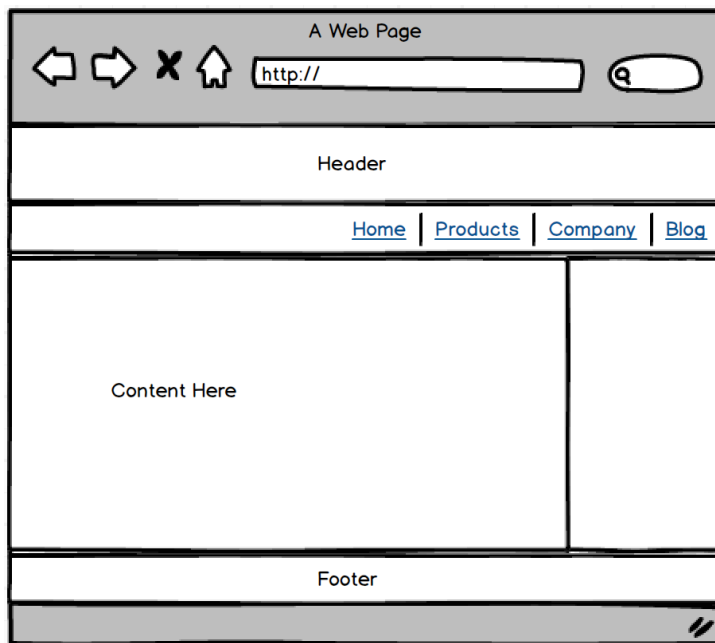
```css
19  #content {
20      position: relative;
21      min-height: 70%;
22  }
23
24  #subContainer {
25      width: 90%;
26      height: 70%;
27      margin: auto;
28      margin-top: 10px;
29      margin-bottom: 10px;
30      border: 1px black solid;
31  }
32
33  #leftMenu {
34      display: inline-block;
35      width: 20%;
36      height: 100%;
37      border-right: 1px green solid;
38      margin: 0px;
39  }
```

```css
41  #main h3 {
42      margin: 1em;
43      margin-top: 2px;
44  }
45
46
47  #rightContent {
48      vertical-align: top;
49      display: inline-block;
50      border-right: 0px black solid;
51      width: 60%;
52      height: 90%;
53      margin: 0px;
54  }
```

Example 1

Example 2


```
8    <body>
9        <div id="main">
10           <header>Header</header>
11
12           <section id="content">
13
14           <section id="subContainer">
15               <section id="leftContent">
16                   <h3>Home Page</h3>
17               </section><section id="rightMenu">
18                   <h3>Menu Right</h3>
19               </section>
20           </section>
21       </section>
22
23           <footer>Footer</footer>
24       </div>
25   </body>
```
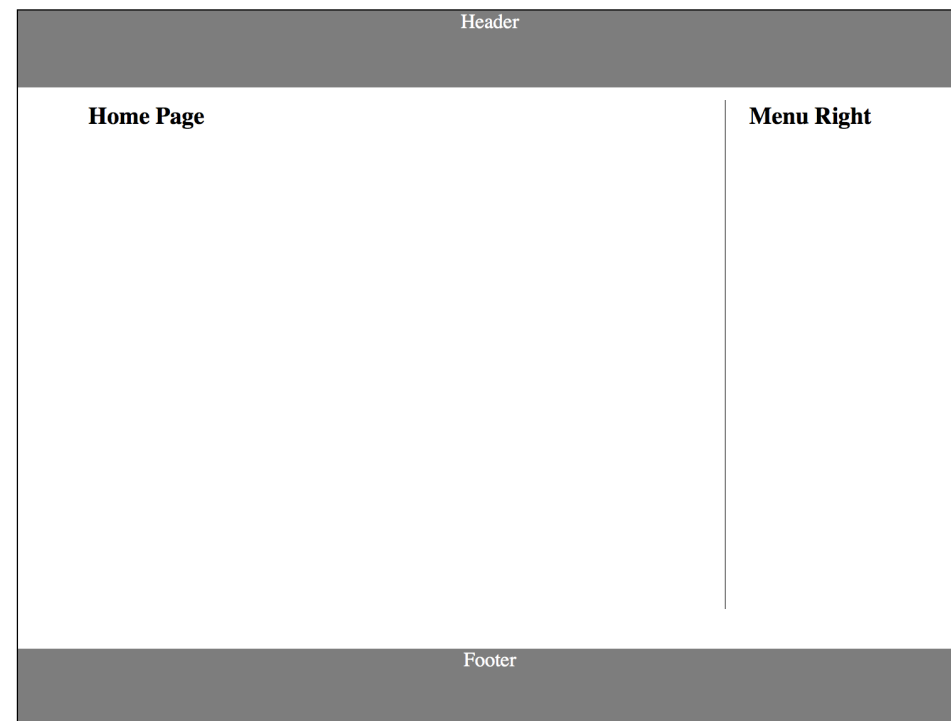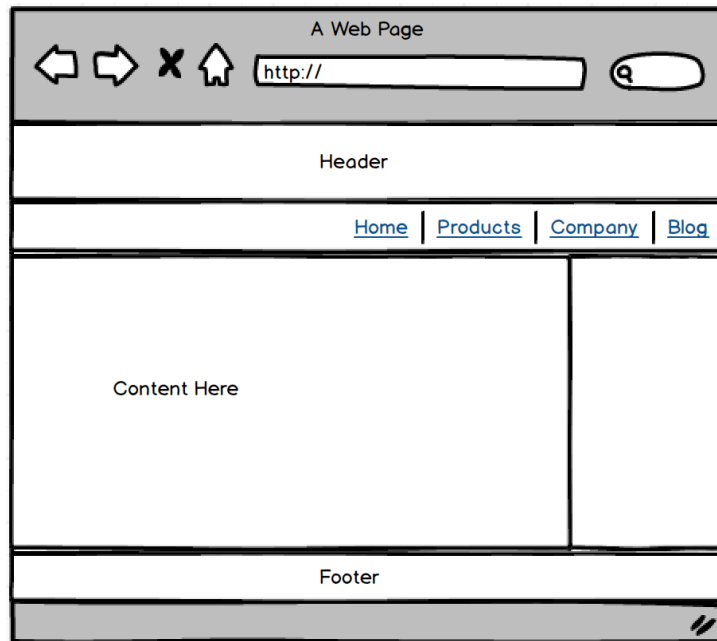
Example 2
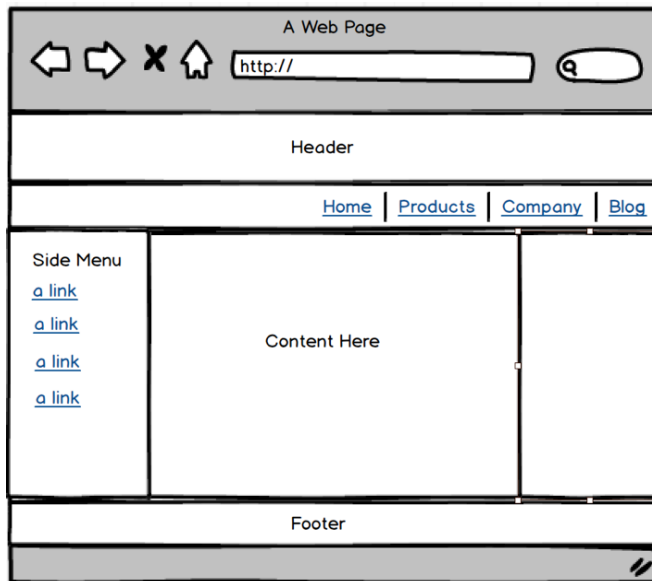
```
 1    body {
 2        background-color: white;
 3    }
 4
 5    #main {
 6        background-color: white;
 7        width: 70%;
 8        margin: auto;
 9        border: 1px black solid;
10    }
11
12    header, footer {
13        background-color: grey;
14        height: 10%;
15        text-align: center;
16        color: white;
17    }
18
19    #content {
20        position: relative;
21        min-height: 70%;
22    }
23
24    #subContainer {
25        width: 90%;
26        height: 70%;
27        margin: auto;
28        margin-top: 10px;
29        margin-bottom: 10px;
30        border: 0px black solid;
31    }
32
```

```
33    #rightMenu {
34        float: left;
35        position: absolute;
36        right: 0px;
37        width: 25%;
38        height: 95%;
39        border-left: 1px grey solid;
40        margin: 0px;
41    }
42
43    #main h3 {
44        margin: 1em;
45        margin-top: 2px;
46    }
47
48
49    #leftContent {
50        vertical-align: top;
51        float: left;
52        width: 75%;
53        height: 95%;
54        margin: 0px;
55    }
56
```

Example 2

Example 3

```
8   <body>
9       <div id="main">
10          <header>Header</header>
11
12          <section id="content">
13
14              <section id="subContainer">
15                  <section id="leftMenu">
16                      <h3>Menu Left</h3>
17                  </section><section id="centerArea">
18                      <h3>Home Page</h3>
19                  </section><section id="rightMenu">
20                      <h3>Menu Right</h3>
21                  </section>
22              </section>
23
24          </section>
25
26          <footer>Footer</footer>
27      </div>
28  </body>
```
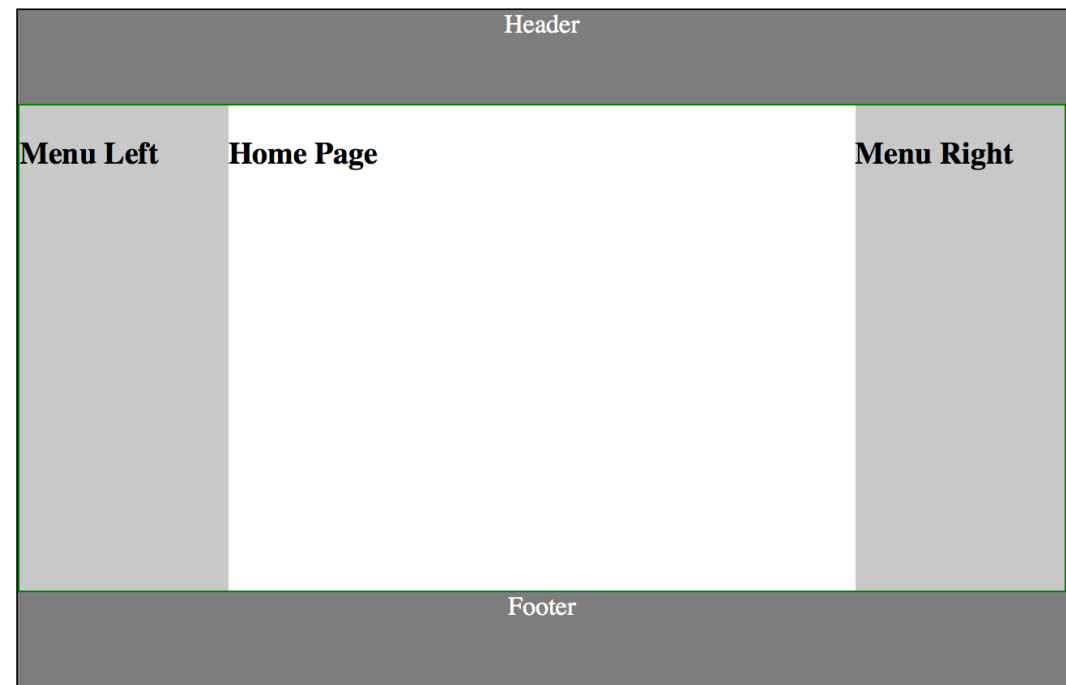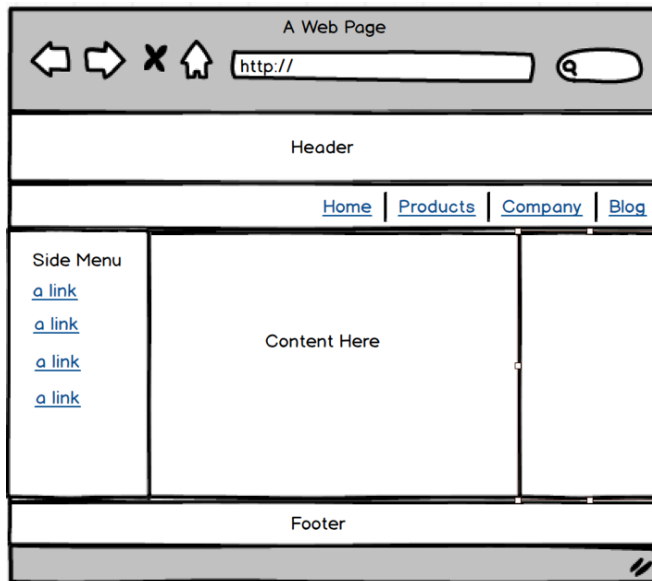
A Web Page

http://

Header

Home | Products | Company | Blog

Side Menu
a link
a link
a link
a link

Content Here

Footer

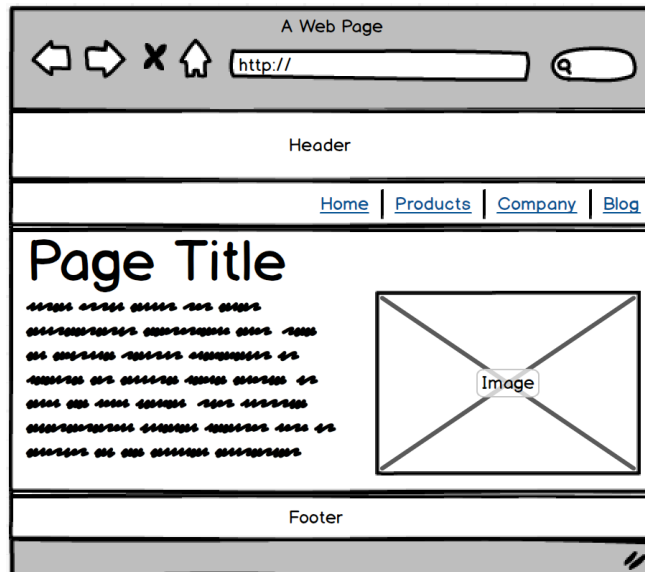# Example 3

```
1   body {
2       background-color: white;
3   }
4
5   #main {
6       background-color: white;
7       width: 70%;
8       margin: auto;
9       border: 1px black solid;
10  }
11
12  header, footer {
13      background-color: grey;
14      height: 10%;
15      text-align: center;
16      color: white;
17  }
18
19  #subContainer {
20      border: 1px green solid;
21  }
22
```

```
23  #leftMenu {
24      display: inline-block;
25      width: 20%;
26      min-height: 300px;
27      background-color: #cccccc;
28  }
29
30  #centerArea {
31      display: inline-block;
32      width: 60%;
33      min-height: 300px;
34  }
35
36  #rightMenu {
37      display: inline-block;
38      width: 20%;
39      min-height: 300px;
40      background-color: #cccccc;
41  }
```
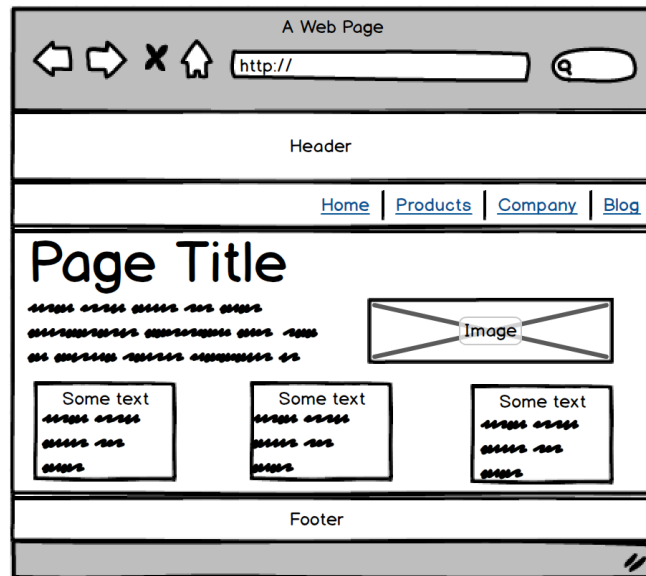
Example 3

Example 4

Example 5

Questions

Notes By: Jonathan McCarthy