

Introduction to Web Design and Application Development

Lecture Overview

- **CSS Positioning and Visibility**
 - Work with **position** property
 - Work with **z-index** property
 - Work with **display** property
 - Work with **visibility** property
 - Work with **float** property
 - Work with **clear** property

Element Flow

- The flow is the way in which elements are laid out
- By default, sibling elements are all in the same flow and positioned statically on the page; the order elements appear on the page is the same as the order they appear in the code
- With CSS, we can move elements into a separate flow.
- This allows us more control over the design of the page and over the layout of your code

Position

- The **position** property is used to determine how an element is positioned
- The default value is **static**. Other options are:
 - **absolute**
 - **relative**
 - **fixed**

Absolute Positioning

- When elements are positioned absolutely, they are removed from the normal flow
- As a result, they do not affect the positioning of subsequent sibling elements
- Elements are positioned absolutely by setting the position property to **absolute** and specifying one or more "offset" properties

Offset Properties: top, right, bottom, and left

Absolute Positioning

- The "offset" properties are **top**, **right**, **bottom**, and **left**.
- Their values can be specified in number of units (e.g, 10px) or percentage of the containing block (e.g, 20%)
- These properties offset the element from its nearest non-statically positioned containing block element (i.e, with position set to absolute, relative or fixed)
- If it has no ancestor that is non-statically positioned, then it is offset from the browser window

In-Class Exercise

- Download **PositioningAbsolute.html** from E-Learning Site, and view it
- Inspect the `<style>` contents of the page
- Change the **top**, and **left** properties values
- Add more elements to the text (e.g. `<p>`)
- Use **right** and **bottom** properties instead

In-Class Exercise

From the Left and the Top

Notice how this text is in the upper corner

CSS Absolute Positioning

That's because the preceding `div` element has been absolutely positioned.

Positioning an element absolutely takes the element out of the regular flow of the document.

Relative Positioning

- When elements are positioned relatively, they are positioned relative to where they would normally appear in the flow
- Unlike absolutely positioned elements, relatively positioned elements *do* affect the positioning of subsequent sibling elements
- Elements are positioned relatively by setting the position property to **relative** and specifying one or more "offset" properties

In-Class Exercise

- Download **PositioningRelative.html** from E-Learning Site, and view it
- Inspect the `<style>` contents of the page
- Change the **top**, and **left** properties values
- Add more elements to the text (e.g. `<p>`)
- Use **right** and **bottom** properties instead

In-Class Exercise

From **CSS Relative Positioning**

The h1 element on this page has been positioned relative to where it otherwise would be.

All other content on the page (including these sentences) will show up in the same position it would have if the h1 had not been positioned at all.

Fixed Positioning

- Elements with fixed positioning stay in the same position in the browser window even when the page is scrolled
- It can be used to keep an element (e.g, a navigation menu) on the page at all times

In-Class Exercise

- Download **PositioningFixed.html** from E-Learning Site, and view it
- Inspect the `<style>` contents of the page
- Change the **top**, and **left** properties values
- Add more elements to the text (e.g. `<p>`)
- Use **right** and **bottom** properties instead

In-Class Exercise



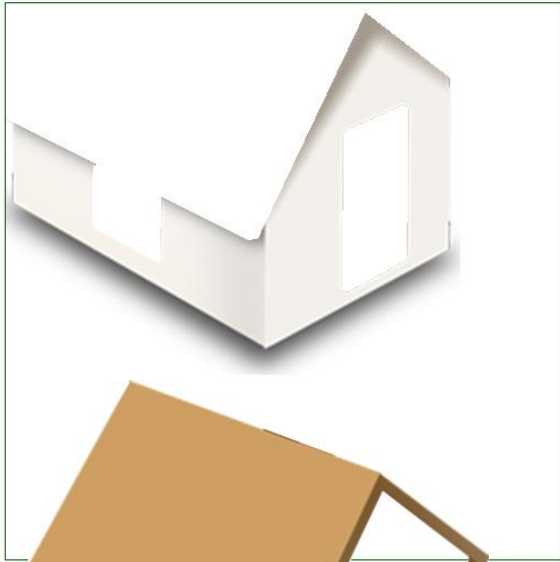
CSS Fixed

In Upper-Left Corner

The h1 element on this page has fixed positioning.

It will not move from its place in the upper-left corner when the window is scrolled.

In-Class Exercise



TO



In-Class Exercise

- Download **House.zip** from E-Learning Site, and extract it
- I have solved the exercise for you!!, just need to change the values of the CSS classes
- Try to solve the problem using **absolute** instead of **relative** positioning

Z-Index

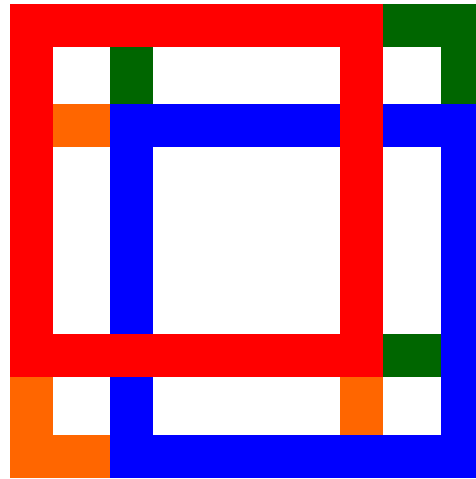
- The z-index property specifies the stack level of an element on the page compared to other elements in its same flow
- It takes a number as a value
- The higher an element's z-index, the closer to the user it appears

In-Class Exercise

- Download **ZIndex.html** from E-Learning Site, and view it
- Inspect the **<style>** contents of the page
- Change the **z-index** values

In-Class Exercise

CSS Z-Index Webucator



Display

- The display property is used to determine if and how an element appears. The most common values are shown below.
 - **block**
 - **inline**
 - **none**

Visibility

- The visibility property is used to make an element invisible. Possible values are:
 - visible
 - hidden
- The major difference between setting an element's visibility to hidden and setting its display to none is that an hidden element still affects the layout of the page; whereas an element that has a display of none does not

Display

- The most common uses of display are:
 - To show and hide elements based on user interaction. A common example is a drop-down menu. This dynamic change of style is done with JavaScript
 - To hide elements for certain media. *For example*, the images might be "**turned off**" by setting the display to none in a style sheet for print
 - Converting an inline element such as a link to a block element by setting its display property to block

Float

- Float can be applied to any element that is not absolutely positioned
- It is used to specify whether an element should float to the left, to the right, or not at all
- Possible values are listed below:
 - **left**
 - **right**
 - **none**

In-Class Exercise

- Download **Float.html** from E-Learning Site, and view it
- Inspect the **<style>** contents of the page
- Change the **float** values

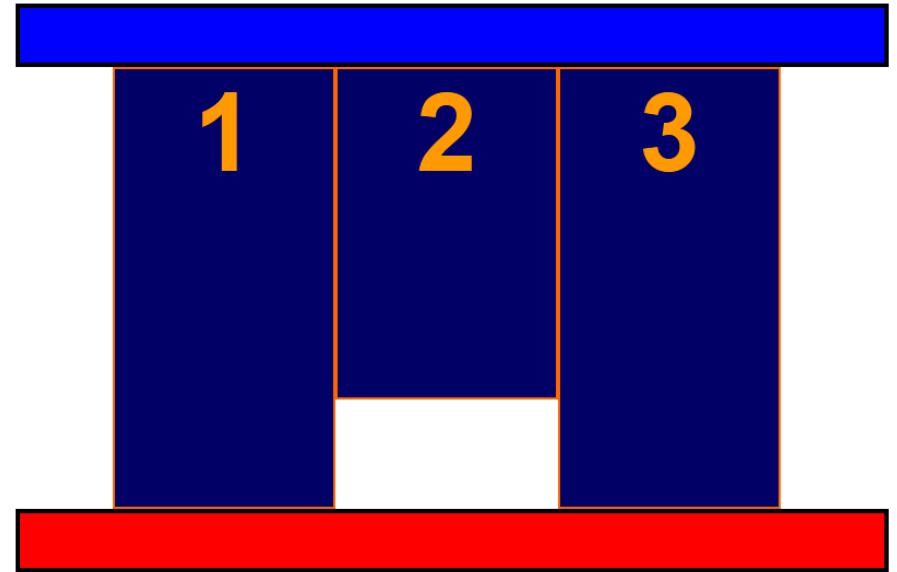
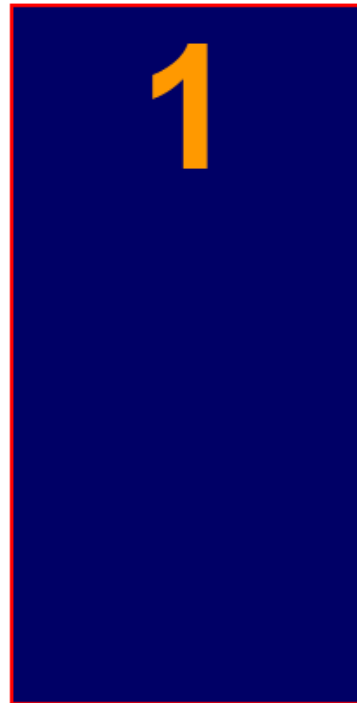
Clear Property

- The clear **property** is used to specify whether content that is flowing to the side of a floating block should drop down beneath that block
- Possible values are shown below.
 - left
 - right
 - both
 - none

In-Class Exercise

- Download **FloatPosition1a.html** , **FloatPosition1b.html** , **FloatPosition2a.html** , and **FloatPosition2b.html** from E-Learning Site, and view them
- Inspect the **<style>** contents of the page
- Change the **float** and **clear** values

In-Class Exercise



Resources

- <http://www.learn-css-tutorial.com/PositioningAndVisibility.cfm>

Questions

