

CIT125 Web Design & Development

For this lesson read chapter(s).

- Chapters 7 and 8

AREA OF CONCENTRATION:

- Character-Level Elements (Chp07)
- Character Formatting Using CSS (Chp07)
- Selectors, Classes and IDs Pages (Chp08)
- Units of Measure (Chp08)
- The Box Model (Chp08)

FILES PROVIDED:

- Kelley's Island.txt
- Kelley's Island Video ([Instructor's version of website](#))
- Creating Box Elements Video 1 ([Course Documents on Blackboard](#))
- Creating Box Elements Video 2 ([Course Documents on Blackboard](#))

ASSIGNMENT:

Create a two-page website using Kelley's Island.txt ([See Kelley's Island Video](#)). The website is to be created using **Box Elements**, **Embedded Styling** and **Page-Level Styling**.

NOTE: NO HEADER TAGS <h1> ARE TO BE USED!

A webpage is divided into two parts, the head and the body. The head contains information and styling for the webpage and the body contains the visible portion of the webpage.

The styling for the embedded styling and box elements will go in the head section using the style tags:

```
<style type="text/css">  
  
</style>
```

The style tag goes below the <title> tags.

The styling hierarchy:

1. External Style Sheet
2. Embedded Styling – over-rides External Style Sheet
3. Page Level Styling – over-rides Embedded Styling and External Style Sheet

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The Box Element

The core of the box is defined by the width and height of an element, which may be determined by the `display` property, by the contents of the element, or by specified `width` and `height` properties. `padding` and then `border` expand the dimensions of the box outward from the element's width and height. Lastly, any `margin` we have specified will follow the border.

Absolute Positioning

You can use absolute positioning to create an HTML5 and CSS3 page layout. This process involves some trade-offs. You tend to get better control of your page with absolute positioning (compared to floating techniques), but absolute layout requires more planning and more attention to detail.

This style of positioning that allows you to literally place any page element exactly where you want it. You use the positioning attributes `top`, `left`, `bottom`, and `right` to set the location. Remember that these values will be relative to the next parent element with relative (or absolute) positioning. If there is no such parent, it will default all the way back up to the `<html>` element itself meaning it will be placed relative to the page itself.

The trade-off (and most important thing to remember) about absolute positioning is that these elements are removed from the flow of elements on the page. An element with this type of positioning is not affected by other elements and it doesn't affect other elements. This is a serious thing to consider every time you use absolute positioning.

Styling for the Box Elements:

```
position: absolute;
padding: 0px;
border: 1px solid #000;
background-color: #fff;
width: 0px;
height: 0px;
top: 0px;
left: 0px
```

The first two box elements that will be used are the 'wrapper' and 'master'. These are NOT HTML5 names, but names used to describe their function.

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```
#wrapper
```

```
{  
    width: 1000px;  
    margin: 0 auto;  
}
```

Styling

```
<div id="wrapper">  
</div>
```

Visible portion of the webpage

The 'wrapper' will hold the 'master' centered on the screen. The 'master' will contain the rest of the elements for the web page. The 'wrapper' and 'master' will ALWAYS have the same width!

```
#master
```

```
{  
    position: absolute;  
    padding: 0px;  
    border: 1px solid #000;  
    background-color: #fff;  
    width: 1000px;  
    height: 0px;  
    top: 0px;  
}
```

Styling

```
<div id="master">  
</div>
```

Visible portion of the webpage

You are to use the correct folder structure ([See Folder Structure Guide](#)).

UNITS OF MEASURE – EMS:

Elastic design uses em values for all elements. em's are a relative size, written like this: 1em, 0.5em, 1.5em etc. Ems can be specified to three decimal places like so: 1.063em. "Relative" means:

They are calculated based on the font size of the parent element. E.g. If a <div> has a computed font size of 16px then any element inside that layer —a child— inherits the same font size unless it is changed. If the child font size is changed to 0.75em then the computed size would be $0.75 \times 16\text{px} = 12\text{px}$.

If the user increases (or decreases) text size in their browser, the whole interface stretches (or shrinks.)

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CHECK LIST

- Create master folder: lastnameChp7-8
- Create home page: index.htm
- Create subfolder: index_files
- Spelling counts
- **MUST** include document segment
- **HEADER TAGS ARE NOT TO BE USED**
- **BOX ELEMENTS AND ABSOLUTE POSITIONING MUST BE USED**
- The master box element **MUST** be 1000px wide
- All paragraph text **MUST** be left aligned
- All work **MUST** be your own
- Your master folder **MUST** be compressed
- Submit assignment to blackboard by mid-night Tuesday **September 24**

"All assignments must be submitted compressed to Blackboard"

This section is HTML 5 Standard, not all apply to this assignment

- All Web page documents will begin with; <!DOCTYPE html> and <html lang="en">
- All XHTML elements, tags and their attributes, must be lower case
- All tags on the example template document are required
- The <title> tag is the first tag in the header section
- All tags must be closed
- All attribute values must be contained in quotation marks
- All attribute values must have values
- There should be no line breaks or extra blank spaces between attributes
- All tags must be properly nested
- Tag-specific nesting restrictions apply
- Formatting will be configured with embedded styling or style sheets
- ALL work **MUST** be you own
- The will not be used - **deprecated**
- The <center> will not be used - **deprecated**
- All color attributes must be hexadecimal - **required by instructor**

NOTES:

Toolbox

When you begin to create a Web page there will be tags and attributes that you will use over and over. There is also code that you only use for a specific type of Web page. How great would it be if you could just open a text file and have this code readily available to copy and

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paste into your Web page? This is what a toolbox is all about! Even better, it is free and all you need to do is create one!

To begin your toolbox, open your text editor. You want to use this because it supports only very basic formatting, you cannot accidentally save special formatting in documents that need to remain pure text. This is especially useful when creating HTML documents for a Web page because special characters or other formatting may not appear in your published Web page or may even cause errors.

Type in at the top in comment tags, <-- toolbox updated month.year --> and you will know how old your code is. Web page development is always changing. Save your toolbox as toolbox.txt, you want to keep it as a text file to copy and paste code.

The first item in my toolbox is my page template, because that is the first code structure I use. All you need to do if type in titles, name, date and filename.htm

White Space

In industry, Web designers run all the text and tags together making it difficult for someone to copy code. In education, while students are learning how to write code, white space is used to make that code easy to read. You are to use white space in your code. For an example of this, look at the code for Linking Example.htm.

The graphic design term whitespace (or negative space) literally refers to any area of a page that's not covered by type or illustrations. While many novice web designers (and most clients) feel a need to fill every inch of a web page with photos, text, tables, and data, having empty space on a page is every bit as important as having content. Without carefully planned whitespace, a design will feel closed in, like a crowded room. Whitespace helps a design to "breathe" by guiding the user's eye around a page, but also helps to create balance and unity. (SitePoint)

The file extension .htm or .html?

At one time both file extensions were used, but now Windows accepts three-character extensions and is the one preferred by industry. All your documents are to have the three-letter (.htm) file extension.