# Web Basics – CSS 3.0

# Lab Book

## Document Revision History

| Date | Revision No. | Author | Summary of Changes |
|---|---|---|---|
| 31-Dec-2012 | 1.0 | Mohan Chinnaiah | Initial Draft |
| 21-Apr-2015 | 2.0 | Rathnajothi P | Revamp/Refinement as per revised TOC |
| May-2016 | 2.1 | Anjulata | Refinement as per revised TOC |

## Table of Contents

## Getting Started

**Overview**

This lab book is a guided tour for learning CSS 3.0. It comprises solved examples and 'To Do' assignments. Follow the steps provided in the solved examples and work out the 'ToDo' assignments given.

**Setup Checklist for CSS 3.0**

Here is what is expected on your machine in order to work with the lab assignments.

**Minimum System Requirements**

**Hardware:** Networked PCs with minimum 64 MB RAM and 60 MB HDD.

**Software:**

Window based Operating System having the latest version of Browser (Google Chrome 20.0, Mozilla Firefox 13.0, Opera 12.0 and Internet Explorer 9.0 or higher) is installed.

Eclipse Luna or Visual Studio 2008 or an editor like Notepad, Edit Plus etc is installed.

**Instructions**

- For all coding standards refer Appendix A. All lab assignments should refer coding standards.
- Create a directory by your name in drive <drive>. In this directory, create a subdirectory css_assgn. For each lab exercise create a directory as lab<lab number>.
- You may also look up the on-line help provided in the MSDN library.
- The faculty will introduce you to the editor to be used.

**Learning More (Bibliography)**

www.w3Schools.com
www.csssitepoint.com

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# 1. Introduction to CSS

| Goals | • Learn and understand the process of:<br>○ Using inline, embedded and external CSS |
|---|---|
| Time | 10 minutes |

## 1.1 Create an HTML file as shown below

```
<!DOCTYPE html>
<html>
  <body>


        <h1> Introduction to CSS</h1>


        <p> A CSS (cascading style sheet) file allows you to separate your web sites
        (X)HTML content from it's style. As always you use your (X)HTML file to arrange the
        content, but all of the presentation (fonts, colors, background, borders, text
        formatting, link effects & so on...) are accomplished within a CSS. </p>


     </body>
</html>
```

**Example 1: Introduction.html**

|

**1.2    Add the following styles to above html file using inline style sheet**

Header Font Color        :        Red

Paragraph Font Color    :        Blue

Background Color          :        Light Grey

**1.3    Add the above styles using embedded style sheet**

**1.4    Add the above styles using external style sheet**

## 2. Working with Text and Fonts

| Goals | • At the end of this lab session, you will be able to work with: |
|---|---|
| | o Text formatting |
| | o Text effects |
| | o Fonts |
| **Time** | 30 min |

**2.1 Use introduction.html from above exercise and apply following styles using external style sheet**

```
h1
{
        font-family: calibri;
        font-size: 30px;
        font-style: normal;
        font-weight: bold;
        color: grey;
        text-decoration: underline;
        text-align: center;
}


p
{
        font-family: verdana;
        font-size: 20px;
        font-style: italic;
}
```

**Example 2: Introduction.css**

**2.2 Use introduction.css and apply the following properties**

- Text Transformation
- Text Indentation
- Specify text color using Hex value

**2.3 Use introduction.css and apply text-shadow property**

## 3.   CSS Selectors

| Goals | • At the end of this lab session, you will be able to understand:<br> o Universal Selector<br> o Type Selector<br> o Class Selector<br> o ID Selector<br> o Attribute Selector<br> o Pseudo-classes |
|---|---|
| **Time** | 30 min |

### 3.1   Given

```
<!DOCTYPE html>
<html>
<body>

  <h1>Learn CSS 3.0 for better web design</h1>

  <div>Do not go where the path may lead, go instead where there is no path and leave a trail. </div>

  <div>It is always the simple that produces the marvelous. </div>

  <div>As knowledge increases, wonder deepens.</div>

  <p>For beautiful eyes, look for the good in others; for beautiful lips, speak only words of kindness; and
for poise, walk with the knowledge that you are never alone.</p>

  <p>The best and most beautiful things in the world cannot be seen or even touched - they must be felt
with the heart.</p>

  <p>It is during our darkest moments that we must focus to see the light. </p>

  <p>Happiness is not something you postpone for the future; it is something you design for the
present.</p>

  <p>Be faithful to that which exists within yourself. </p>
```

```
</body>
</html>
```

**Example 3: Selector1.html**

**3.2**  **Use selector.html and apply color attribute using universal selector**

**3.3**  **Use selector.html apply different colors to text based on type selectors - H1, Div and P.**

**3.4**  **Use selector.html apply id attribute by specifying different values to every paragraph and division (use p1, p2, p3 … for paragraph and d1, d2, d3 …for div).**

**3.5**  **Apply text and font properties using external style sheet**

**3.6**  **Use selector.html apply class attribute for paragraphs and divisions. All the paragraphs under para_class class and all divisions under div_class class. Apply different CSS font and text styles.**

**3.7**  **Create an html file as shown**

```
<!DOCTYPE html>
<html>
<body>

  <h1>Learn CSS 3.0 for better web design</h1>

  <img  src="image1.jpg" title="title-1"  width="100" height="100"/>

  <img  src="image2.jpg" title="title-2"  width="150" height="150"/>

  <img  src="image3.jpg" title="title-3"  width="200" height="200"/>

  <img  src="picture1.jpg"  width="100" height="100"/>

  <img  src="picture2.jpg"  width="150" height="150"/>

  <img  src="picture3.jpg"  width="200" height="200"/>

</body>
</html>
```

**Example 4: Selector2.html**

**Note: Use your own images and pictures of proper size**

Create an external CSS file and apply following styles using attribute selector.

- img[title]      { border: 1px solid #000; }
- img[width]      { border: 1px solid #000; }
- img[title|="title"] { border: 1px solid #000; }

### 3.8    Create an html file as show below.

```
<!DOCTYPE html>
<html>
<body>


<h2>CSS Pseudo Classes or Links</h2>
<p>This is a <a href="">link with Pseudo Classes</a> ! </p>


</body>
</html>
```

**Example 5: Selector3.html**

**Apply below css to given html file using pseudo classes and understand how pseudo classes works**

```
a:link{
       text-decoration: none;
        color: gray;
}

a:visited{
        text-decoration: none;
        color: gray;
}

a:hover{
        text-decoration: none;
        color: green;
        font-weight: bolder;
```

```
        letter-spacing: 2px;
}
```

**Example 6: Selector4.css**

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## 4. Colors and Borders

| | |
|---|---|
| **Goals** | • At the end of this lab session, you will be able to understand:<br>   o Background<br>   o Multiple Image Background<br>   o Applying Colors<br>   o Borders<br>   o Rounded Corners<br>   o Applying Shadows in border |
| **Time** | 30 minutes |

**4.1 Refer problem 4.3's solution and set appropriate background and foreground colors using following mechanism.**

- Hexadecimal colors
- RGB colors
- RGBA colors
- HSL colors
- HSLA colors

**4.2 Refer to the assignment 3.5 and apply border to the images.**

**Appendix A: Table of Examples**