

# TRAINER PREPARATION GUIDE 3.1: UNDERSTAND THE CORE CSS CONCEPTS

## Lesson Objective 3.1:

Understand the core CSS concepts.

## Required materials to teach this lesson:

1. Microsoft® Expression® Studio 4 (preferred)
2. 98-375-ENU-3.1-LP
3. 98-375-ENU-3.1-IC
4. 98-375-ENU-3.1-ICKEY
5. 98-375-ENU-3.1-PC

## Preparation tasks

### Technical preparation activities:

1. The lesson demonstration requires an application (either Expression Web or Notepad) to create an HTML5 document.
2. The demonstration shows how to use basic CSS styling.
3. Copy the following code into an HTML page:

```
<!DOCTYPE html>
<html>
<head>
  <title>Basic CSS Styling</title>
</head>
<body>
  <header>
    <h1>Welcome to CSS</h1>
  </header>
  <p>This web page shows how to use <strong>CSS</strong> to create
  attractive and easy-to-use web pages.</p>
  <p id="highlight">This section is highlighted using a CSS style. </p>
  <footer>
    <p class="footer"><small>Copyright 2011 is written using the small
    tag.</small> All rights reserved.</p>
  </footer>
</body>
</html>
```

4. Create a CSS file with the following selectors. Don't forget to attach the style sheet to the HTML page before previewing in a browser.

```
h1{
  font-family:"Lucida Sans", sans-serif;
```

```
        font-size:xx-large;
        color:maroon;
    }
    p{
        font-family:"Franklin Gothic Medium", sans-serif;
        font-size:medium;
        color:navy;
    }
    #highlight{
        background-color:lime;
    }
    .footer{
        font-family:"Gill Sans", "Gill Sans MT", sans-serif;
        font-size:small;
        color:orange;
    }
}
```

5. **Vocabulary:**

**Cascading Style Sheets (CSS):** a Hypertext Markup Language (HTML) specification developed by the World Wide Web Consortium (W3C) that allows authors of HTML documents and users to attach style sheets to HTML documents. The style sheets include typographical information on how the page should appear, such as the font of the text on the page. This specification also directs the way in which the style sheets of the HTML document and the user's style will blend.

**font:** a set of characters of the same typeface (such as Garamond), style (such as italic), and weight (such as bold). A font consists of all the characters available in a particular style and weight for a particular design; a typeface consists of the design itself. Fonts are used by computers for onscreen displays and by printers for hard-copy output.

**typography:** the art of font design and typesetting.

6. **Additional readings and resources:**

**MSDN®:**

**Internet Explorer® Learning:** <http://msdn.microsoft.com/en-us/ie/gg593671>

**Cascading Style Sheets:** [http://msdn.microsoft.com/en-us/library/ms531205\(v=vs.85\).aspx](http://msdn.microsoft.com/en-us/library/ms531205(v=vs.85).aspx)

**Other resources (books, e-reference):**

**About: What is CSS?:** <http://webdesign.about.com/od/xhtml/u/htmlcssxml.htm#s5>

**W3 Schools CSS Tutorial:** <http://www.w3schools.com/css/default.asp>

Note: HTML5 is changing and developing quickly. The list of resources is current as of January 2012. Check resources for current and up-to-date information at the time of classroom use.

**Instructor computer setup:**

1. Expression Web 4 (with Service Pack 2).

**Instructional preparation activities:**

1. Review the instructor notes in the notes view of Microsoft PowerPoint® presentation 98-375-ENU-3.1-LP.

2. Make copies of student documents available as needed.
3. Practice the demonstration before class to determine whether the browsers you have available support the HTML5 features in the demonstration.

## **Lesson sequence (50 minutes)**

### **Activating prior knowledge/lesson staging (5 minutes):**

1. Ask students to answer each question in the "Guiding questions" section of the In-class Activity document or in their personal class notes.

### **Guiding questions:**

1. **Why is it important to separate style from content?** Separating style from content drastically reduces the developer's work in ensuring consistency and repetition in a website. It allows for font, color, positioning, and other styles to be changed in one place and reflected on all of the pages in the site.
2. **How does CSS manage positioning elements on a page?** When CSS is used to define the position of elements on a web page, it uses the CSS Box Model to define the padding, border, and margin. CSS also defines whether the elements are placed in an absolute position or a relative position.
3. **How does CSS apply presentation to content?** CSS uses both HTML tag names and ids to work together to apply style to the HTML content.

### **Lesson activity (35 minutes):**

1. Teacher instruction (35 minutes)
  - a. Use the PowerPoint presentation 98-375-ENU-3.1-LP to review CSS concepts.
  - b. An In-class Activity document is available for use as needed.

### **Lesson review (10 minutes):**

1. Lead students in a discussion of the guiding questions.
2. During and after the discussion, have students list any questions they have or any topics with which they would like more assistance.
3. Have students work in pairs to answer the additional questions written by students. Answer any questions that cannot be answered by students, or collect them for follow-up later.
4. Provide the Post-class Activity document for additional review.