

TRAINER PREPARATION GUIDE 3.4: MANAGE THE GRAPHICAL INTERFACE BY USING CSS

Lesson Objective 3.4:

Manage the graphical interface by using CSS.

Required materials to teach this lesson:

1. Microsoft® Expression® Studio 4 (preferred)
2. 98-375-ENU-3.4-LP
3. 98-375-ENU-3.4-IC
4. 98-375-ENU-3.4-ICKey
5. 98-375-ENU-3.4-Resources
6. 98-375-ENU-3.4-PC

Preparation tasks

Technical preparation activities:

1. The lesson demonstration requires a browser with support for @font-face (Internet Explorer® 8 or later).
2. Unzip the resources file, which contains an HTML file and a font file. The font file has an .eot extension, which is supported by Microsoft. As mentioned in the Microsoft PowerPoint® presentation, you can download a free converter to help with a file that is set up as TrueType Font (ttf extension).
3. When you preview the page in a browser, discuss the possible uses of these new properties. Ask the students to think of existing websites that could benefit from a unique font.

4. Vocabulary:

filter effect: Consists of a series of graphics operations that are applied to a given source vector graphic to produce a modified bitmapped result.

SVG: an acronym for Scalable Vector Graphic.

typography: the art of font design and typesetting.

translate: to move an image in the display "space" without turning (rotating) the image.

WOFF (Web Open Font Format): files that allow web developers to use custom fonts instead of the standard web fonts. WOFF files are typically compressed TTF files with additional metadata.

5. Additional readings and resources:

MSDN®:

Microsoft Typography: <http://www.microsoft.com/typography/WEFT.mspx>

How to Add Rounded Corners with CSS: <http://msdn.microsoft.com/library/gg589503.aspx>

Internet Explorer Learning – CSS3: <http://msdn.microsoft.com/en-us/ie/gg593671>

Other resources (books, e-reference):

Google Web Fonts: <http://code.google.com/webfonts>

W3Schools: <http://www.w3schools.com/css3/default.asp>

Note: Support for HTML5 and CSS3 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. A workstation with Expression Web 4 (with Service Pack 2).

Instructional preparation activities:

1. Review the instructor notes in the notes view of PowerPoint presentation 98-375-ENU-3.4-LP.
2. Make copies of student documents available as needed.
3. Complete the instructions for the demonstration before class. Check to see if the available browsers support the HTML5 features in the demonstration.

Lesson sequence (50 minutes)

Activating prior knowledge/lesson staging (5 minutes):

Instruct 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. **How can the new CSS3 properties enable the use of fonts that are not pre-loaded on a client PC?** With the introduction of Web Open Font Format (WOFF), the developer can include new fonts with the website files. This allows the developer to use fonts other than the current standards fonts (Arial, Helvetica, and Times New Roman).
2. **What are the benefits of adding graphic visual effects such as border-radius, 2D and 3D transformations, and SVG filters?** These new styles, combined with regions and the new flexible box model, can make it easy for even beginning designers to add style to a site.
3. **What impact does CSS3 have on the new HTML5 tags used for a drawing canvas and SVG elements?** The new properties for applying rounded corners, background color, and shadow effects can be applied to these new elements. It also provides filters that can be applied to the SVG graphic before it is rendered.

Lesson activity (35 minutes):

1. Teacher instruction
 - a. Use the PowerPoint presentation 98-375-ENU-3.4-LP to review managing the graphical interface by using CSS.
 - b. An In-class Activity document is available for use as needed. Students are asked to create an online newspaper and apply rounded corners, background color, and box-shadow to the columns.

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. Have students refer to the W3Schools website and view the CSS3 Browser Support link to check for updates.
3. Provide the Post-class Activity document for additional review.