Module 6

Styling HTML5 by Using CSS3

# Module Overview

- Styling Text by Using CSS3
- Styling Block Elements
- Pseudo-Classes and Pseudo-Elements
- Enhancing Graphical Effects by Using CSS3

# Lesson 1: Styling Text by Using CSS3

- Fonts and Measurements
- Implementing Text Effects

# Fonts and Measurements

- CSS3 font and text properties support:

  - External fonts

    ```
    @font-face {
      font-family: newGroovyFont;
      src: url('CandaraPlus.ttf')
    }
    ```

  - Absolute text sizes

    ```
    font-size : 16pt;
    line-height : 0.5in;
    letter-spacing : 12mm;
    ```

  - Relative text sizes

    ```
    font-size : 1em;
    border-width : 300px;
    padding : 16rem;
    ```

# Implementing Text Effects

- CSS3 includes further text styling support for:

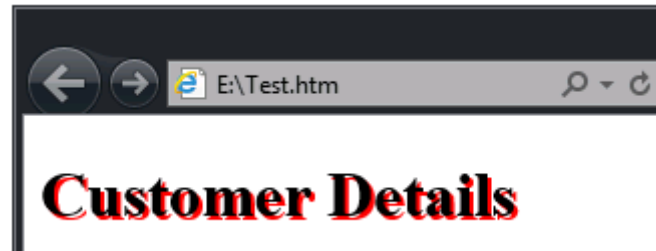  - Paragraph indentation

    `text-indent: 3rem;`

  - Line wrapping

    `hyphens: manual;`
    `word-wrap: break-word;`

  - Text spacing

    `word-spacing: 2rem;`

  - Shadow effects

    `text-shadow: 2px 2px 0 red;`

# Lesson 2: Styling Block Elements

- New Block Properties in CSS3
- Block Layout Models
- Demonstration: Switching Between CSS Layout Models

# New Block Properties in CSS3

- CSS3 adds new box-level support for:

  - Outlines

    ```
    outline: 2px solid green;
    outline-offset: 5rem;
    ```

  - Presentation

    ```
    border-radius: 50% / 30%;
    overflow: hidden;
    resize: horizontal;
    ```

  - Multiple column layouts

    ```
    column-count: 3;
    column-gap: 5rem;
    column-rule: 1px solid black;
    ```

# Block Layout Models

- CSS3 supports several block layout methods:

  - Block

    ```
    display: block;
    ```

  - Inline

    ```
    display: inline;
    display: inline-block;
    ```

  - Table

    ```
    display: table;
    ```

  - Positioned

    ```
    position: relative;
    position: absolute;
    position: fixed;
    ```

  - Flexbox

    ```
    display: flexbox;
    ```

# Demonstration: Switching Between CSS Layout Models

- In this demonstration, you will see how to:

  - Switch between layout modes in a web page
  - Switch between positioning modes in a web page

# Lesson 3: Pseudo-Classes and Pseudo-Elements

- Text Pseudo-Elements
- Link and Form Pseudo-Classes
- DOM-Related Pseudo-Classes

# Text Pseudo-Elements

CSS pseudo-elements enable you to select:

- The first letter of a text element

  `p::first-letter`

- The first line of a text element

  `p::first-line`

- The space before or after a text element

  `p::before`
  `p::after`

- Text selected by the user

  `::selection`

# Link and Form Pseudo-Classes

CSS defines two sets of contextual pseudo-classes:

- Link classes

  a:link
  a:visited
  a:focus
  a:hover
  a:active

- Form classes

  input:enabled
  input:disabled
  input:checked

# DOM-Related Pseudo-Classes

Use positional pseudo-classes to select a single element from a set based on:

- Position

```
p:first-child
p:nth-child(2)
```

- Position and type

```
p:last-of-type
p:nth-last-of-type(4)
```

- Document structure

```
:empty
:root
:not(p, h1)
:target
```

# Lesson 4: Enhancing Graphical Effects by Using CSS3

- Specifying Color Values
- Defining Backgrounds and Effects
- Implementing Transformations and Graphics
- Demonstration: Styling Text and Block Elements by Using CSS3

# Specifying Color Values

CSS3 defines several different sets of color values:

- Keywords

```
color:  red;
color: transparent;
color: currentColor;
```

- RGB \ RGBA model values

```
color: #ff0000;
color: rgb(255,0,0);
color: rgba(100%,0,0,0.5);
```

- HSL \ HSLA model values

```
color: hsl(240, 100%, 50%);
color: hsl(120, 100%, 50%, 0.5);
```
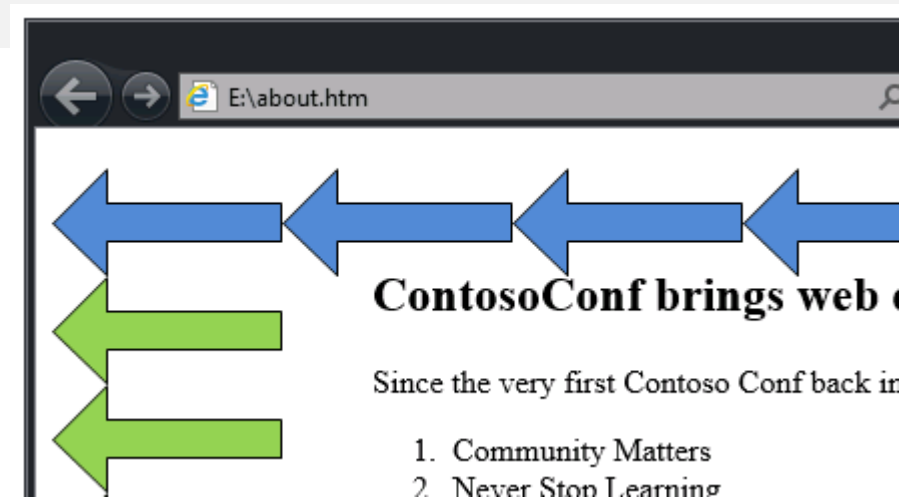
# Defining Backgrounds and Effects

## CSS3 supports:

- Multi-image backgrounds

```
article {
    background-image: url('bluearrow.png'), url('greenarrow.png');
    background-repeat: repeat-x, repeat-y;
}
```



- Gradients

```
background: linear-gradient(direction, start-color, [mid-color-list,] end-color);
```

```
background: radial-gradient(top right, ellipse, red, blue);
```

# Implementing Transformations and Graphics
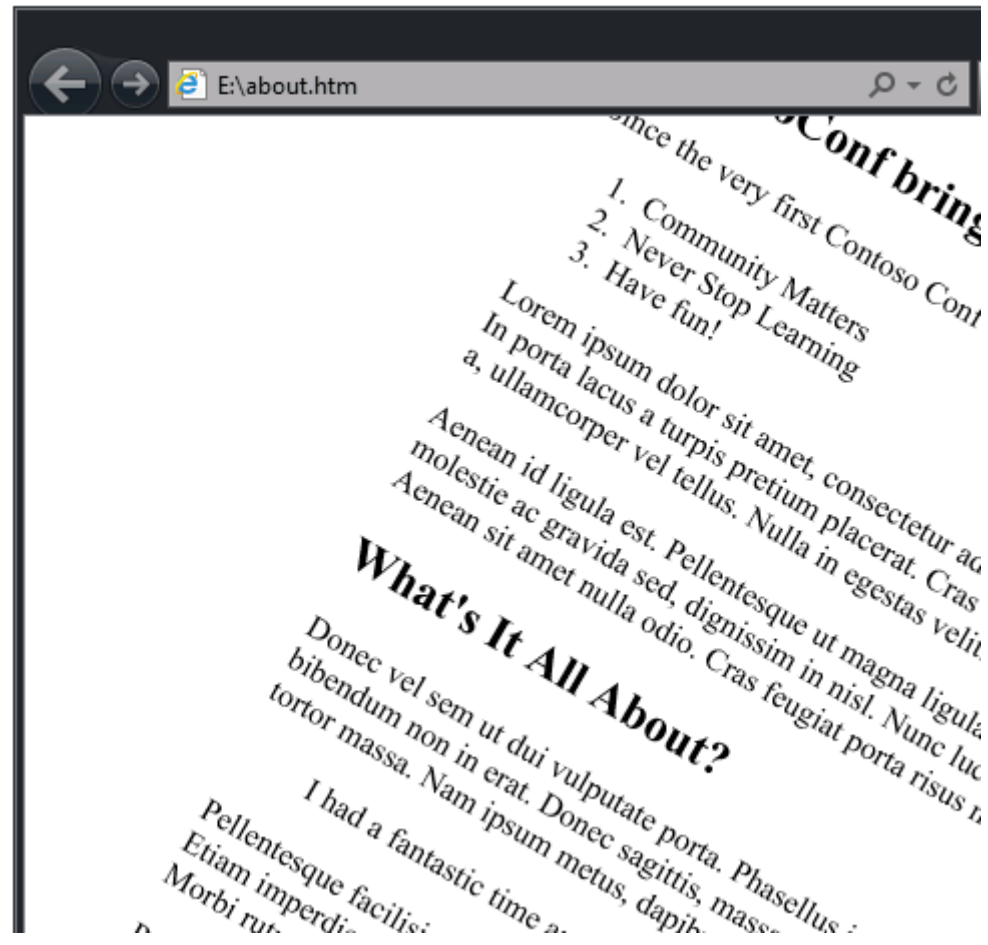
Using CSS3, you can:

- Transform, rotate, and skew elements

```
article {
    transform: rotate(30deg);
}
```

- Generate shapes

```
#circle {
        width: 200px;
        height: 200px;
        background: blue;
        border-radius: 50%;
}
```

# Demonstration: Styling Text and Block Elements by Using CSS3

In this demonstration, you will learn about the tasks that you will perform in the lab for this module.

# Lab: Styling Text and Block Elements by Using CSS3

- Exercise 1: Styling the Navigation Bar
- Exercise 2: Styling the Register Link
- Exercise 3: Styling the About Page

Logon Information
- Virtual Machines: 20480B-SEA-DEV11, MSL-TMG1
- User Name: Student
- Password: Pa$$w0rd

Estimated Time: 60 minutes

# Lab Scenario

The Contoso Conference web application needs to be visually appealing. A designer has produced mock-up designs of some of the pages that you have been asked to implement for the website.

You will be working on the Home and About pages. The HTML page structure has already been created. You will use CSS to style various parts of the pages, to make them match the designs. Much of the CSS that you create, such as the navigation links bar, will be reused by other pages.

Some aspects of the design are complicated and would have required images with previous versions of CSS. However, by using CSS3, you will not need to create any images.

# Module Review and Takeaways

- Review Question(s)