PSEUDO CLASSES AND PROPERTIES IN HTML

■ Pseudo classes are styles that apply when something happens, rather than because the target element simply exists
■ Names begin with colons
■ hover classes apply when the mouse cursor is over the element
■ focus classes apply when an element has focus

Pseudo Class Example

<!-- pseudo.html -->
<html xmlns = "http://www.w3.org/1999/xhtml">
<head> <title> Checkboxes </title>
    <style type = "text/css">
        input:hover {color: red;}
        input:focus {color: green;}
    </style>
</head>
<body>
    <form action = "">
        <p>
            Your name: 
            <input type = "text" />
        </p>
    </form>
</body>
</html>

Properties

■ There are 60 different properties in 7 categories:
  ○ Fonts
  ○ Lists
  ○ Alignment of text
  ○ Margins
  ○ Colors
  ○ Backgrounds
  ○ Borders

Property Values

■ Keywords - left, small, …
  ○ Not case sensitive
■ Length - numbers, maybe with decimal points
Units:
- px - pixels
- in - inches
- cm - centimeters
- mm - millimeters
- pt - points
- pc - picas (12 points)
- em - height of the letter ‘m’
- ex-height - height of the letter ‘x’
- No space is allowed between the number and the unit specification e.g., 1.5 in is illegal!

Percentage - just a number followed immediately by a percent sign

URL values
- url(protocol://server pathname)

Colors
- Color name
- rgb(n1, n2, n3)
  - Numbers can be decimal or percentages
- Hex form: #XXXXXX

Property values are inherited by all nested tags, unless overridden

Font Properties
- font-family
  - Value is a list of font names - browser uses the first in the list it has
  - font-family: Arial, Helvetica, Courier
  - Generic fonts: serif, sans-serif, cursive, fantasy, and monospace (defined in CSS)
  - Browser has a specific font for each
  - If a font name has more than one word, it should be single-quoted

- font-size
  - Possible values: a length number or a name, such as smaller, xx-large, etc.

- font-style
  - italic, oblique (useless), normal

- font-weight - degrees of boldness
  - bolder, lighter, bold, normal
  - Could specify as a multiple of 100 (100 – 900)

- font
  - For specifying a list of font properties

font: bolder 14pt Arial Helvetica
  - Order must be: style, weight, size, name(s)

> SHOW fonts.html and display
SHOW fonts2.html and display

The text-decoration property

- line-through, overline, underline, none
- letter-spacing – value is any length property value

List properties

- list-style-type

Unordered lists

- Bullet can be a disc (default), a square, or a circle
- Set it on either the <ul> or <li> tag
  - On <ul>, it applies to list items

<h3> Some Common Single-Engine Aircraft </h3>
<ul style="list-style-type: square">
  <li> Cessna Skyhawk </li>
  <li> Beechcraft Bonanza </li>
  <li> Piper Cherokee </li>
</ul>

- On <li>, list-style-type applies to just that item

<h3> Some Common Single-Engine Aircraft </h3>
<ul>
  <li style="list-style-type: disc">
    Cessna Skyhawk
  </li>
  <li style="list-style-type: square">
    Beechcraft Bonanza
  </li>
  <li style="list-style-type: circle">
    Piper Cherokee
  </li>
</ul>

Could use an image for the bullets in an unordered list
Example:

```html
<li style = "list-style-image:
url(bird.jpg)">
  <ul>
    <li>On ordered lists - list-style-type can be used to change the sequence values

Property value Sequence type First four
Decimal Arabic numerals 1, 2, 3, 4
upper-alpha Uc letters A, B, C, D
lower-alpha Lc letters a, b, c, d
upper-roman Uc Roman I, II, III, IV
lower-roman Lc Roman i, ii, iii, iv
→ SHOW sequence_types.html and display
  ■ CSS2 has more, like lower-greek and hebrew

Colors
  ■ Color is a problem for the Web for two reasons:
    1. Monitors vary widely
    2. Browsers vary widely

- There are three color collections
  1. There is a set of 16 colors that are guaranteed to be displayable by all graphical browsers on all color monitors

black 000000 green 008000
silver C0C0C0 lime 00FF00
gray 808080 olive 808000
white FFFFFF yellow FFFF00
maroon 800000 navy 000080
red FF0000 blue 0000FF
purple 800080 teal 008080
fuchia FF00FF aqua 00FFFF

2. There is a much larger set, the Web Palette
  ■ 216 colors
  ■ Use hex color values of 00, 33, 66, 99, CC, and FF
  ■ Inside back cover of this book has them!

3. Any one of 16 million different colors

The color property specifies the foreground color of elements

```
The background-color property specifies the background color of elements
SHOW back_color.html and display

Alignment of Text

The text-indent property allows indentation
- Takes either a length or a % value
The text-align property has the possible values, left (the default), center, right, or justify
Sometimes we want text to flow around another element - the float property
- The float property has the possible values, left, right, and none (the default)
- If we have an element we want on the right, with text flowing on its left, we use the default text-align value (left) for the text and the right value for float on the element we want on the right

Some text with the default alignment - left