

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 or tag
 - On , it applies to list items

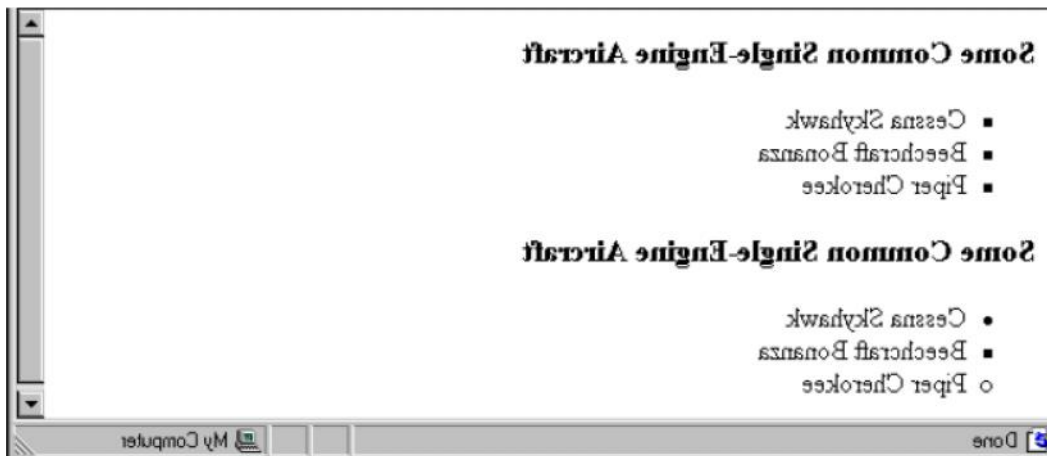
<h3> Some Common Single-Engine Aircraft </h3>

```
<ul style = "list-style-type: square">
  <li> Cessna Skyhawk </li>
  <li> Beechcraft Bonanza </li>
  <li> Piper Cherokee </li>
</ul>
```

- On , 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:

```
<li style = "list-style-image:
url(bird.jpg)">
```

- 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
fuchsia	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

```
<style type = "text/css">
th.red {color: red}
th.orange {color: orange}
```

```
</style>
```

```
...
```

```
<table border = "5">
```

```
<tr>
```

```
<th class = "red"> Apple </th>
```

```
<th class = "orange"> Orange </th>
```

```
<th class = "orange"> Screwdriver </th>
```

```
</tr>
```

```
</table>
```

- 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

```
<img src = "c210.jpg"
```

```
style = "float: right" />
```

- Some text with the default alignment - left

