

# Chp7

Dynamic Html(DHTML)

Web Technology-Developers perspective by N.P.Gopalan/J.  
Akhilandeswari

# DHTML

- Technique of dynamically changing the rendering content of an html code.
- Combination of JS/CSS and DOM

## **Advantages:**

- Designers can create html docs that interact with user
- Images can be animated
- Separate design can be applied
- Hide text and images
- Create a form filled with data

# CSS

Rules that organize layout of html document(margin,links,color,etc)

## **Advantages:**

- Saves time: specify details once
- Pages load faster :less code so faster download
- Easy maintenance: make change in one place
- Superior styles than html

**Disadvantage:**browser compatibility

# CSS-Revision

- Coding CSS has two parts : property and value
- Properties of Tags: Style is a property
- Property values: values specified as colors ,numbers ,percentage ,URLs,lengths(em-overall height of current font,px,in,pt-point size)
- vw    Relative to 1% of the width of the viewport\*
- em    Relative to the font-size of the element (2em means 2 times the size of the current font)
- rem   Relative to font-size of the root element
- %     Relative to the parent element

# CSS

Other style properties:

Font-family,font-style,font-size,font-weight-  
(normal,bold,lighter),color,background-color, background-image,  
background-repeat, background-attachment-scroll/fixed),position-  
left,text-decoration-underline or overline,text-transform-uppercase or  
lowercase

# CSS

```
<html><head><style>
p.normal {
  font-weight: normal;
}
p.light {
  font-weight: lighter;
}
p.thick {
  font-weight: bold;
}
p.thicker {
  font-weight: 900;
}
</style></head><body>
<h1>The font-weight Property</h1>
<p class="normal">This is a paragraph.</p>
<p class="light">This is a paragraph.</p>
<p class="thick">This is a paragraph.</p>
<p class="thicker">This is a paragraph.</p>
</body>
</html>
```

# CSS

- Inheritance: parent element properties applied to child elements
- `<h1> headline <em> is </em> important</h1>`
- Default properties set Body { }

# Contextual Selectors

H1 {color:blue}

EM {color:red}

Using this all EM outside or within H1 will be in red

To give EM within H1 a different color :

H1 EM {color:red}-search pattern is matched before applying CSS

Several Contextual Selectors can be grouped together



# Pseudo classes

What are Pseudo-classes?

- A pseudo-class is used to define a special state of an element.

For example, it can be used to:

- Style an element when a user mouses over it
- Style visited and unvisited links differently
- Style an element when it gets focus

Syntax:

```
selector:pseudo-class {  
    property: value;  
}
```

# Pseudo classes

- Unlike regular classes its attached to the tag name with colon and not a period
- Pseudo classes address different elements:they are available with anchor tag
- `A:link {color:red} //unvisted`
- `A:visited {color:blue} //visted`
- `A:active {color:green} //active`

# Pseudo classes

```
/* unvisited link */  
a:link {  
    color: #FF0000;  
}
```

```
/* visited link */  
a:visited {  
    color: #00FF00;  
}
```

```
/* mouse over link */  
a:hover {  
    color: #FF00FF;  
}
```

```
/* selected link */  
a:active {  
    color: #0000FF;  
}
```

# Pseudo Elements

- What are Pseudo-Elements?
- A CSS pseudo-element is used to style specified parts of an element.
- For example, it can be used to:
- Style the first letter, or line, of an element
- Insert content before, or after, the content of an element

Syntax: selector::pseudo-element {  
    property: value;  
}

# Pseudo Elements

- The `::first-line` pseudo-element is used to add a special style to the first line of a text.
- ```
p::first-line {  
  color: #ff0000;  
  font-variant: small-caps;  
}
```
- The `::first-letter` pseudo-element is used to add a special style to the first letter of a text.
- ```
p::first-letter {  
  color: #ff0000;  
  font-size: xx-large;  
}
```

# Pseudo elements

```
p::before {  
  content: "Read this -";  
}  
  
p::after {  
  content: " - Remember this";  
}
```

# Pseudo-elements and CSS Classes

- Pseudo-elements can be combined with CSS classes:

```
p.intro::first-letter {  
    color: #ff0000;  
    font-size: 200%;  
}
```

- display the first letter of paragraphs with class="intro", in red and in a larger size.

# Pseudo classes and elements

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<style>
```

```
p::first-line {
```

```
  color: #ff0000;
```

```
  font-variant: small-caps;
```

```
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<p>You can use the ::first-line pseudo-element to add a special effect to the first line of a text. Some more text.  
And even more, and more, and more, and more, and more, and more, and more, and more, and more, and more, and  
more, and more, and more.</p>
```

```
</body>
```

```
</html>
```



# Pseudo classes and elements

font-size: xx-small; x-small; small; medium; large; x-large; xx-large; xxx-large;

/\* <relative-size> values \*/

font-size: smaller; font-size: larger;

/\* <length> values \*/

font-size: 12px; font-size: 0.8em;

/\* <percentage> values \*/

font-size: 80%;

font-variant-caps: normal; small-caps; all-small-caps;

letter-spacing: 3px;

# Positioning

- Absolute:
- Relative::

# CSS

- Backgrounds-Discussed earlier
- Element Dimensions- Discussed earlier