CASCADING STYLE SHEETS

CSS

CASCADING STYLE SHEETS

- Two aspects of any document – Content and Style
  - Content – information to be presented
  - Style – how the information is presented

Content + Style = Document

CASCADING STYLE SHEETS

- Style sheet is a set of rules that controls the formatting of HTML docs
- **A CSS is a style sheet language that specifies how to incorporate style information in a style sheet.**
- Designed to work with html and xml documents
- W3C recommended

ADVANTAGES OF CSS

- Flexibility
- Faster
- Smaller in Size
- Saves Time
- Easy maintenance

STYLE SHEET RULE

- It consists of two parts
  - Selector – defines which elements are controlled by the rule
  - Declaration – tells what the desired effect is. Each declaration consists of the name of the property and a value assigned to it.

Syntax: Selector { property: value}

Ex: h1 { color : blue }

GROUPING SELECTORS

- A style can be applied to multiple selectors

Syntax: Sel1,sel2,..seln{ property: value}
Ex: h1,h2,h3,h4,h5,h6 { color : blue }

APPLYING MULTIPLE PROPERTIES

- To apply more than one property
- Declarations separated by semi-colon;

Syntax: Selector{ prop1:val1;prop2:val2....}
 Ex: h1 {
                color : blue ;
                align : center
                }

THREE WAYS TO INCLUDE CSS

- Inline
- Embedded or Internal
- External or Linked

INLINE METHOD

- Using style attribute
- Syntax:
- <tag style="property1:value1;property2:value2;">
- <p style="background-color:red ; color-blue;">This paragraph background is blue in color</p>
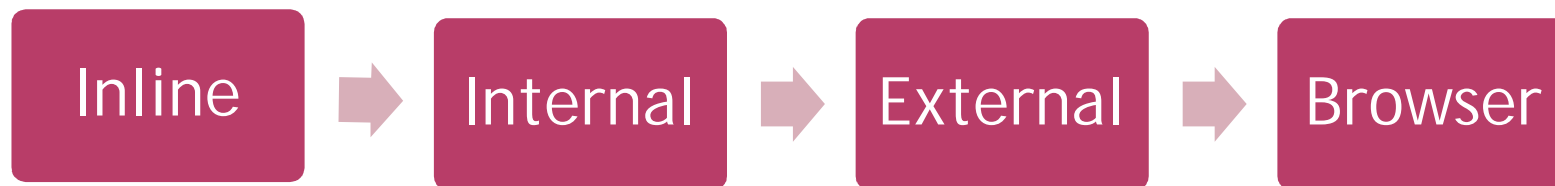
INTERNAL OR EMBEDDED

- Single document using a unique style
- Syntax
  - o <style>
  - o selector1 { property1:value1;}
  - o selector2 {property1:value1;}
  - o </style>
- Example
- <head>
- <style>
- h1   { font-family:arial;color:blue;}
- body { backgroud-image:url("flowers.jpg");color:red; }
- </style>
- </head>

EXTERNAL OR LINKED

- Used when style is applied to many pages
- <head>
- <link rel="stylesheet" type="text/css" href="style1.css" title=" Style1" media="tv, projection">
- </head>

STYLE PRECEDENCE (CASCADING)

- Inline styles override both linked style sheets and style information stored in the document head with <STYLE> tag.

- Styles defined in the document head override linked style sheets.

- Linked style sheets override browser defaults.

| Inline | ➡ | Internal | ➡ | External | ➡ | Browser |

DIVISIONS

- Block level HTML element to define sections of a HTML document
- Can contain other HTML elements such as divisions,images,spans,text,etc.,
- <div>   </div>

```
<div id="section1">
VIT UNIVERSTY
<img src="site.jpg">
<div>
```

```
#section1{
    color : blue;
    width :  50%;
    float : right;
}
```

SPAN ELEMENT

- Same as divisions except that it is an inline HTML element
- No line break is created
- content

<span id="section1">
This is part of the
    paragraph
<span>
	#section1{
	    font-style:italic;
	    font-size:14pt;
	}

ID SELECTOR

- The id Selector is used to specify a style for a single, unique element.

- It is a name preceded with a "#"

- It uses the id attribute of the HTML element.

```
#p1 {background-color:blue}
<p id="p1">   Web Technology    </p>
```

CLASS SELECTOR

- The class selector is used to specify a style for a group of elements.

- It is a name preceded with a "."

- It is generally used on several elements.

- It uses HTML class attribute.

```
<p class="fontcolor" > </p>
<h5 class="fontcolor" >  </p>
.fontcolor { color:blue;}
```

BACKGROUND PROPERTIES

Property	Description	Values
Background-color	Sets the background color	Color, transparent, inherit
Background-image	Sets the background-image	Inside,**outside**,inherit
Background-repeat	Sets the tiling of a background image	Repeat,repeat-x,repeat-y,no-repeat,inherit
Background-position	Sets the position of a background image	{Percentage, length,left,right,center}1 or 2 values, inherit
Background-attachment	Specifies if the background image scrolls or fixed	Scroll, fixed, inherit
*Background	Sets the color,image,repeat,attachment and position	Background-color background-image background-repeat background-position background-attachment

TEXT PROPERTIES

Property	Description	Values
Color	To set the color of the text	Color name (red) Hexadecimal value(#ff0000) RGB color code (rgb(0,255,255)
Text-align	sets the horizontal text alignment	Left, right, Center, Justify,inherit
Text-decoration	Decorating the text	None(default),Underline, Overline, Line-through, Blink , inherit
Text-indent	Indent the first line of the text	Length (10px), Percentage(10%), em
Text-transform	To change the text to upper or lower case	None, Capitalize, Lowercase,uppercase,inherit
White-space	Controlling the whitespaces	Normal,Nowrap,pre,pre-line,pre-wrap,inherit
Letter-spacing	Space between letters	Normal, Length, Inherit
Word-spacing	To adjust space between words	Normal, Length(5pt),inherit
Length can be specified in em or px or pt or percentage(Generally, 1em = 12pt = 16px = 100%)		

FONT PROPERTIES

Property	Description	Values
Font- family	Sets the font family for the text content	Family name(ex: Arial, Garamond) , inherit
Font-size	sets the font size for text content	Absolute-size , Relative-size(smaller, larger), length, percentage, Inherit
Font-weight	sets the font weight for text content	100,200,300,400,500,600,700,800,900,bold,bolder,lighter,normal,inherit
Font-style	sets the font style for text content	Italic,normal,oblique,inherit
Font-variant	sets the font variant for text content	Normal, small-caps,inherit
Font	specifies font properties	font-style font-variant font-weight font-size font-family | inherit
Absolute-size : xx-small, x-small, small, medium, large, x-large,xx-large		

LIST PROPERTIES

Property	Description	Values
List-style-type	Specifies the type of list-item marker in a list	**Disc**,circle,square,**decimal**,decimal-leading-zero,lower-alpha,lower-roman,upper-alpha,upper-roman,none,armenian,inherit
List-style-position	Specifies if the list-item markers should appeaer inside or outside the content flow.	Inside,**outside**,inherit
List-style-image	Replaces the list-item marker with image	url,**none**,inherit
List-style	Sets the style,position and image	Style position image

TABLE PROPERTIES

Property	Description	Values
Table-layout	Sets the layout of the table	Auto, fixed, inherit
Border-collapse	Specifies if the border should collapse or detached	Collapse, separate, inherit
Border-spacing	Sets the spacing between adjacent cells' borders	Length , inherit
Empty-cells	Specifies whether or not to display borders and background on empty cells	Hide ,show, inherit
Caption-side	Specifies the placement of a table caption	Top,bottom,inherit

BOX PROPERTIES

Dimensions		
Property	**Description**	**Values**
height	Sets the content height of a block	Length(px,pt) Percentage Auto Inherit
Width	Sets the content width of a block	Length(px,pt) Percentage Auto Inherit

BOX PROPERTIES

Margins		
Property	**Description**	**Values**
Margin-top	Sets the top margin of an element	Length(px ,pt,em), Percentage,Auto, Inherit
Margin-right	Sets the right margin of an element	Length(px ,pt,em), Percentage,Auto, Inherit
Margin-bottom	Sets the bottom margin of an element	Length(px ,pt,em), Percentage,Auto, Inherit
Margin-left	Sets the left margin of an element	Length(px ,pt,em), Percentage,Auto, Inherit
Margin(short hand)	Sets margin on all 4 sides	Length, percentage, auto{1 to 4 values}

BOX PROPERTIES

Padding		
Property	**Description**	**Values**
Padding-top	Sets the padding for the top side of an element	Length(px,pt,em), Percentage,Inherit
Padding-right	Sets the padding for the right side of an element	Length(px,pt,em) Percentage,Inherit
Padding-bottom	Sets the padding for the bottom side of an element	Length(px,pt,em) Percentage,Inherit
Padding-left	Sets the padding for the left side of an element	Length(px,pt,em) Percentage,Inherit
Padding(short hand)	Sets padding on all 4 sides	Length | Percentage{1 to 4 values}

BOX PROPERTIES

Border		
Property	**Description**	**Values**
Border –top-color	Sets the color for the top border of an element	Color,Transparent, Inherit
Border-top-style	Sets the style for the top border of an element	None,hidden,dotted,dashe d,solid,double,groove,ridg e,inset,outset,inherit
Border-top-width	Sets the width for the top border of an element	Thin,medium,thick,length ,inherit
Border-top	Sets the width ,color and style for the top border of an element	Border-width border-style border-color

Border-left, Border-right,Border-bottom -------same as above

BOX PROPERTIES

Border		
Property	**Description**	**Values**
Border –color	Sets the color for all four borders of an element	Color,Transparent, Inherit
Border-style	Sets the style for all four borders of an element	None,hidden,dotted,dashed,solid,double,groove,ridge,inset,outset,inherit
Border-width	Sets the width for all four borders of an element	Thin,medium,thick,length,inherit
Border	Sets the width ,color and style for all four borders of an element	Border-width border-style border-color

LAYOUT

- To control the visibility,position,and behaviour of the generated boxes.
- Layout properties
  - Display
  - Position
  - Visibility
  - Float
  - Clear

LAYOUT PROPERTIES

Property	Description	Values
Display	Controls the type of box that is generated	Block, Inline, Inline-block None
Position	Controls the positioning of the box that is generated	Static(default),Absolute, Fixed, Relative, Inherit
Visibility	Controls the visibility of the element	Visible(default), Hidden Collapse, Inherit
Float	specifies whether a box should float to the left or right, or not float at all	Left , Right ,None ,Inherit
Clear	prevents a box from being adjacent to floated boxes	Left, Right, Both, None, Inherit