WEB SYSTEMS & TECHNOLOGIES

2. Cascading Style Sheets (CSS)

```
171  #content .article img.left.border {
172      padding: 0 9px 9px 0;
173      border-right: 1px dotted #999;
174      border-bottom: 1px dotted #999; }
175  #content .article blockquote {
176      margin-left: 10px;
177      padding-left: 10px;
178      border-left: 3px solid #252525; }
179  #content .article ul {
180      padding-left: 1em;
181      list-style-type: circle; }
```

Welcome to My Homepage

Use the menu to select different Stylesheets

Stylesheet 1

Stylesheet 2

Stylesheet 3

Stylesheet 4

No Stylesheet

Same Page Different Stylesheets

This is a demonstration of how different stylesheets can change the layout of your HTML page. You can change the layout of this page by selecting different stylesheets in the menu, or by selecting one of the following links: Stylesheet1, Stylesheet2, Stylesheet3, Stylesheet4.

No Styles

This page uses DIV elements to group different sections of the HTML page. Click here to see how the page looks like with no stylesheet:

No Stylesheet.

Side-Bar

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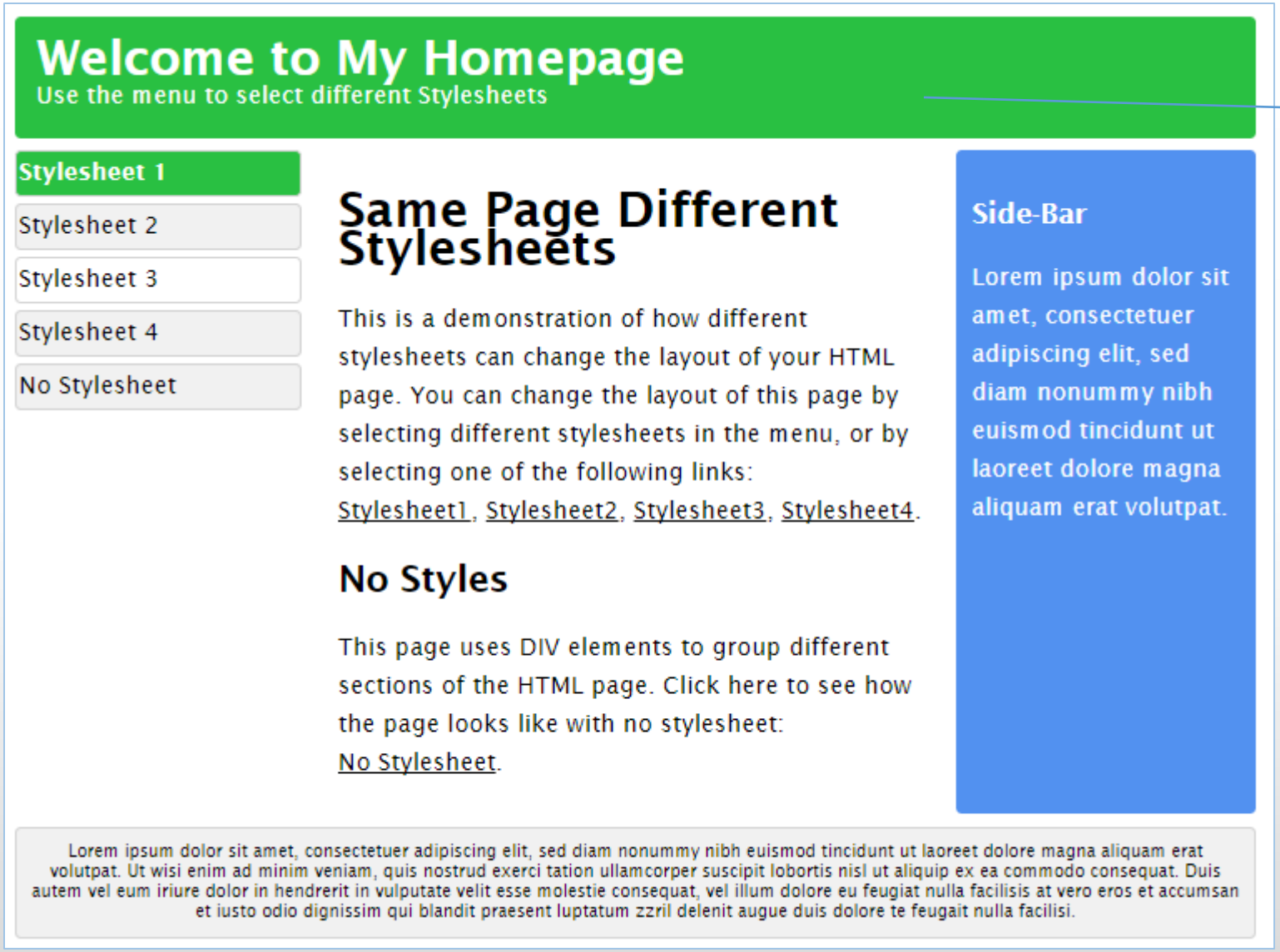
Welcome to My Homepage
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Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat. Duis autem vel eum iriure dolor in hendrerit in vulputate velit esse molestie consequat, vel illum dolore eu feugiat nulla facilisis at vero eros et accumsan et iusto odio dignissim qui blandit praesent luptatum zzril delenit augue duis dolore te feugait nulla facilisi.

Content (HTML document)

Presentation (CSS Document)

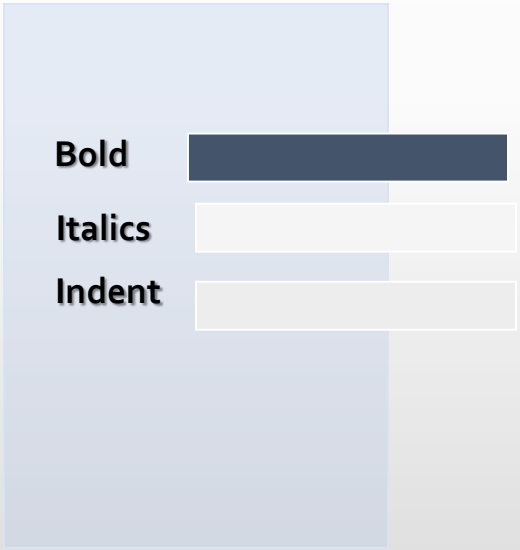
- Separate content from presentation!

Title

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Suspendisse at pede ut purus malesuada dictum. Donec vitae neque non magna aliquam dictum.

- **Vestibulum et odio et ipsum**
- **accumsan accumsan. Morbi at**
- **arcu vel elit ultricies porta. Proin**

tortor purus, luctus non, aliquam nec, interdum vel, mi. Sed nec quam nec odio lacinia molestie. Praesent augue tortor, convallis eget, euismod nonummy, lacinia ut, risus.



Contents

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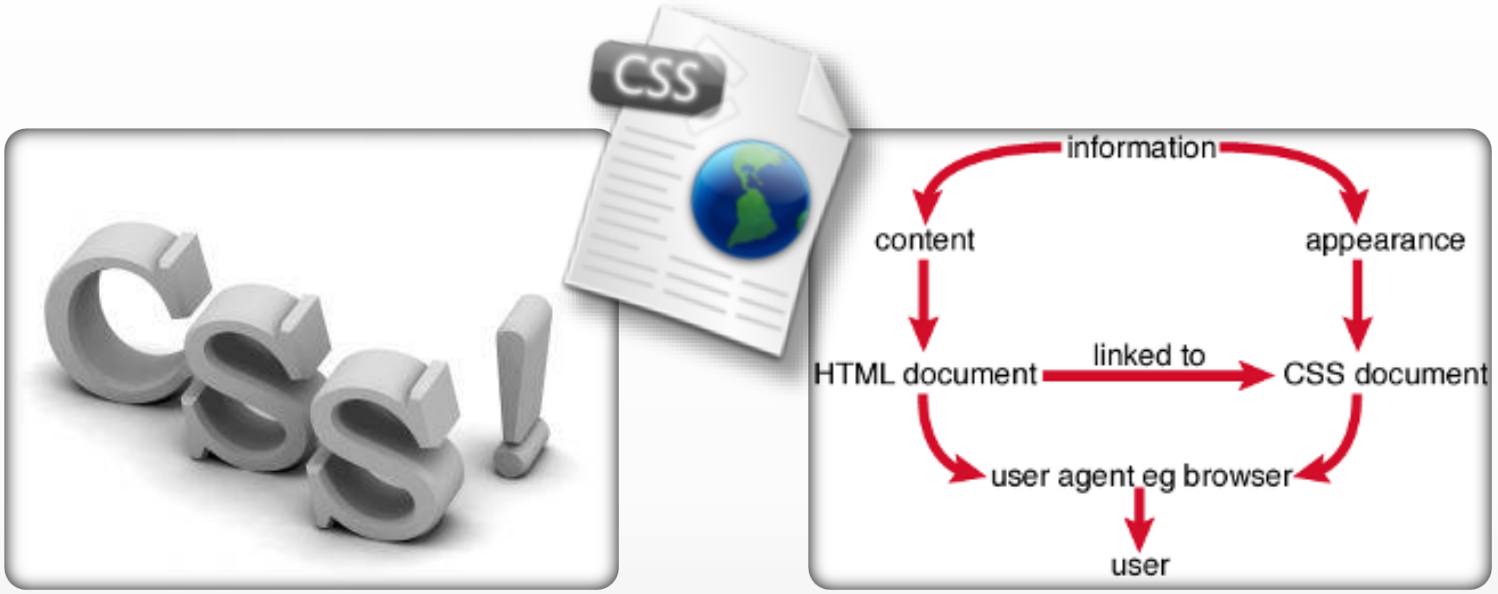
- Styling with Cascading Stylesheets (CSS)
- Selectors and style definitions
- Linking HTML and CSS
- Fonts, Backgrounds, Borders
- The Box Model
- Alignment, Z-Index, Margin, Padding
- Positioning and Floating Elements
- Visibility, Display, Overflow



CSS Intro

Styling with Cascading Stylesheets

CSS Introduction

- Cascading Style Sheets (CSS)
  - ✓Used to describe the presentation of documents
  - ✓Define sizes, spacing, fonts, colors, layout, etc.
  - ✓Improve content accessibility
  - ✓Improve flexibility
- Designed to separate presentation from content
- Due to CSS, all HTML presentation tags and attributes are deprecated, e.g. `font`, `center`, etc.

CSS Introduction (2)

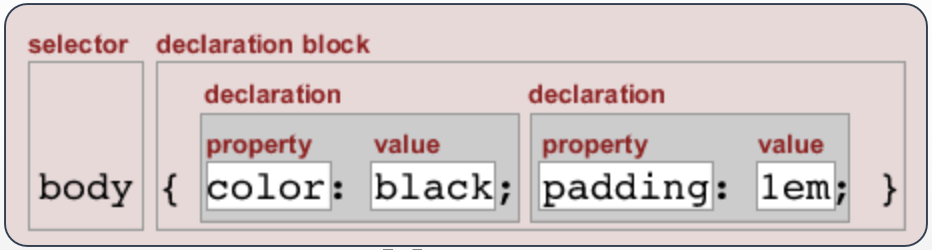
- CSS can be applied to any XML document
  - ✓Not just to HTML / XHTML
- CSS can specify different styles for different media
  - ✓On-screen
  - ✓In print
  - ✓Handheld, projector

Why "Cascading"? (3)

- Some CSS styles are inherited and some not
  - ✓Text-related and list-related properties are inherited - `color`, `font-size`, `font-family`, `line-height`, `text-align`, `list-style`, etc
  - ✓Box-related and positioning styles are not inherited - `width`, `height`, `border`, `margin`, `padding`, `position`, `float`, etc
  - ✓`<a>` elements do not inherit color and text-decoration

Style Sheets Syntax

- Stylesheets consist of rules, selectors, declarations, properties and values



- Selectors are separated by commas
- Declarations are separated by semicolons
- Properties and values are separated by colons

```
h1,h2,h3 { color: green; font-weight: bold; }
```

Linking HTML and CSS

- HTML (content) and CSS (presentation) can be linked in three ways:
  - ✓**Inline**: the CSS rules in the `style` attribute
    - No selectors are needed
  - ✓**Internal**: in the <head> in a `<style>` tag [.html]
  - ✓**External**: CSS rules in separate file (best)
    - Usually a file with `.css` extension
    - Linked via `<link rel="stylesheet" href=…>` tag or `@import` directive in embedded CSS block

Inline style

- An inline style may be used to apply a unique style for a single element.
- The style attribute can contain any CSS property.

```
...
<body>

<h1 style="color:blue;text-align:center;">This
is a heading</h1>
<p style="color:red;">This is a paragraph.</p>

</body>
...
```

Internal Styles

- Internal style in the HTML in the `<style>` tag:

```
<style type="text/css">
```

  - ✓The `<style>` tag is placed in the `<head>` section of the document
  - ✓`type` attribute specifies the MIME type
    - MIME describes the format of the content
    - Other MIME types include `text/html`, `image/gif`, `text/javascript` …
- Used for document-specific styles

External CSS Styles

- External linking
  - ✓Separate pages can all use a shared style sheet
  - ✓Only modify a single file to change the styles across your entire Web sitec `ink` tag (with a `rel` attribute)
  - ✓Specifies a relationship between current document and another document `link` elements should be in the `<head>`

```
<link rel="stylesheet" type="text/css"
href="styles.css">
```

External CSS Styles (2)

✓@import

- Another way to link external CSS files
- Ancient browsers do not recognize @import
- Use @import in an external CSS file to workaround the IE 32 CSS file limit

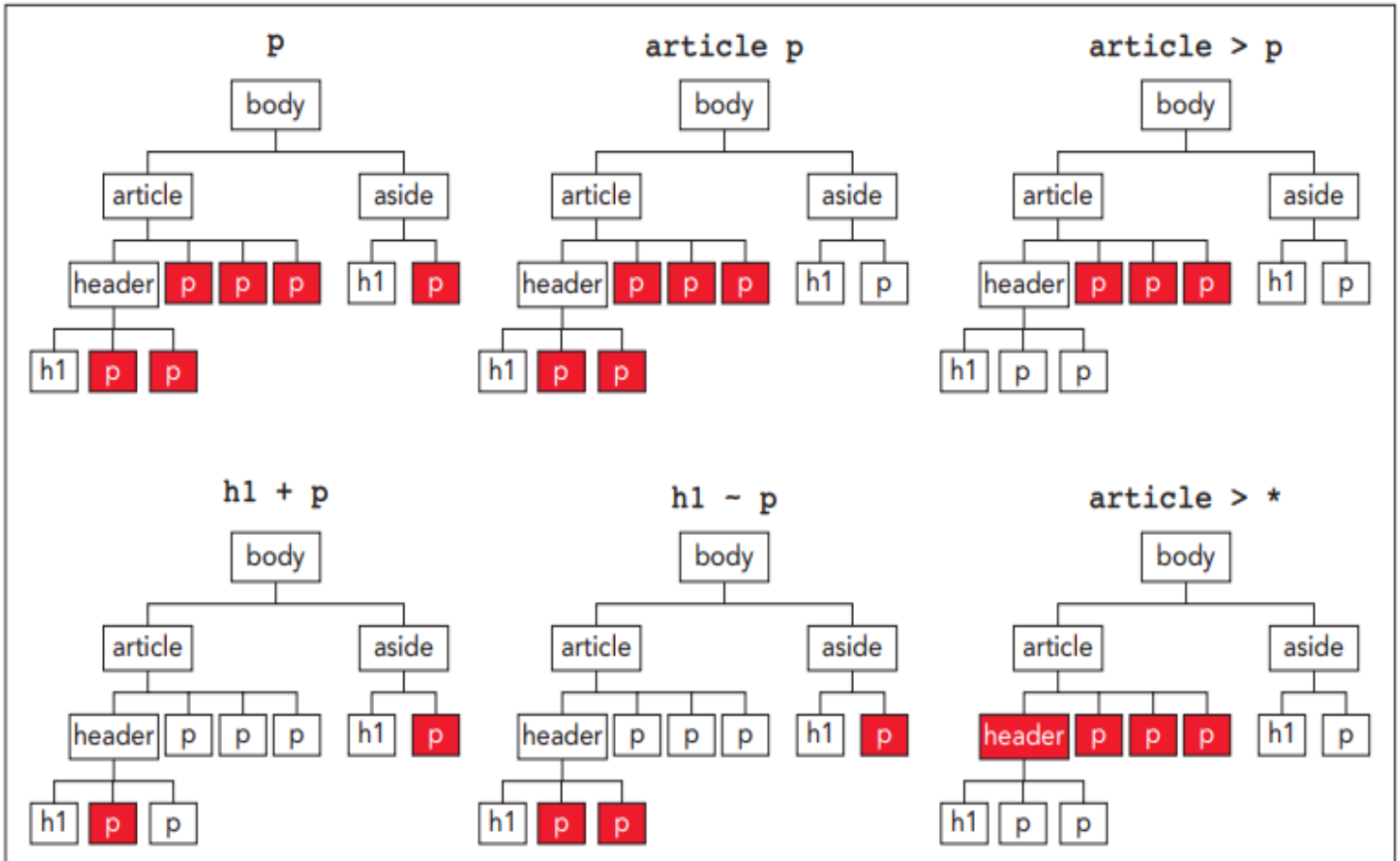
```
<style type="text/css">
  @import url("styles.css");
  /* same as */
  @import "styles.css";
</style>
```

External Styles: Example

styles.css

```
/* CSS Document */

a        { text-decoration: none }

a:hover { text-decoration: underline;
          color: red;
          background-color: #CCFFCC }

li em    { color: red;
          font-weight: bold }

ul       { margin-left: 2cm }

ul li    { text-decoration: underline;
          margin-left: .5cm }
```

Relationship selectors



Selectors

- Selectors determine which element the rule applies to:
  - ✓All elements of specific type (tag)
  - ✓Those that mach a specific attribute (id, class)
  - ✓Elements may be matched depending on how they are nested in the document tree (HTML)
- Examples:

```
.header a { color: green }
```

```
#menu>li { padding-top: 8px }
```

- Three primary kinds of selectors:
  - ✓By tag (type selector):

```
h1 { font-family: verdana,sans-serif; }
```

  - ✓By element id: (javaScript)

```
#element_id { color: #ff0000; }
```

  - ✓By element class name (only for HTML): ****

```
.myClass {border: 1px solid red}
```

- Selectors can be combined with commas:

```
h1, .link, #top-link {font-weight: bold}
```

This will match `<h1>` tags, elements with class `link`, and element with id `top-link`

- Pseudo-classes define state
  - ✓`:hover`, `:visited`, `:active` , `:lang(value);`
  - ✓Pseudo-elements define element "parts" or are used to generate content
  - ✓`:first-line` , `:before`, `:after`

```
a:hover { color: red; }
p:first-line { text-transform: uppercase; }
.title:before { content: "»"; }
.title:after { content: "«"; }
```

- Match relative to element placement:

```
p a {text-decoration: underline}
```

This will match all `<a>` tags that are inside of `<p>`

- * – universal selector (avoid or use with care!):

```
p * {color: black}
```

This will match all descendants of `<p>` element

- + selector – used to match "next sibling":

```
img + .link {float:right}
```

This will match all siblings with class name `link` that appear immediately after `<img>` tag

- `>` selector – matches direct child nodes:

```
p > .error {font-size: 8px}
```

This will match all elements with class `error`, direct children of `<p>` tag

- `[ ]` – matches tag attributes by regular expression:

```
img[alt~=logo] {border: none}`
```

This will match all `<img>` tags with `alt` attribute containing the word `logo`

- `.class1.class2` (no space) - matches elements with both (all) classes applied at the same time

Values in the CSS Rules

- Colors are set in RGB format (decimal or hex):
  - ✓Example: `#a0a6aa = rgb(160, 166, 170)`
  - ✓Predefined color aliases exist: `black`, `blue`, etc.
- Numeric values are specified in:
  - ✓Pixels, ems, e.g. `12px` , `1.4em`
  - ✓Points, inches, centimeters, millimeters
    - E.g. `10pt` , `1in`, `1cm`, `1mm`
  - ✓Percentages, e.g. `50%`
    - Percentage of what?...
  - ✓Zero can be used with no unit: `border: 0;`

Default Browser Styles

- Browsers have default CSS styles
  - ✓Used when there is no CSS information or any other style information in the document
- Caution: default styles differ in browsers
  - ✓E.g. margins, paddings and font sizes differ most often and usually developers reset them

```
* {
      margin: 0 auto;
      padding: 0;
      box-sizing: border-box;
   }
```

CSS Cascade (Precedence)

- There are browsers, user and author stylesheets with "normal" and "important" declarations
  - ✓Browser styles (least priority)
  - ✓Normal user styles
  - ✓Normal author styles (external, in head, inline)
  - ✓Important author styles
  - ✓Important user styles (max priority)

```
a { color: red !important ; }
```

CSS Text

- `color` – specifies: the color of the text
- `text-align: property` set the horizontal alignment of a text {left, right, center, or justified}
- `vertical-align:` {top, bottom, middle}
- `line-height:` {size px %}
- `Letter-spacing`: the space betwwen characters

Ex: DHCN → D H C N

CSS Font

- `font-size` – size of font: `xx-small`, `x-small`, `small`, `medium`, `large`, `x-large`, `xx-large`, `smaller`, `larger` or numeric value
- `font-family` – comma separated font names
  - ✓Example: `verdana`, `sans-serif`, etc.
  - ✓The browser loads the first one that is available
  - ✓There should always be at least one generic font

CSS Font

- `font-weight` can be `normal`, `bold`, `bolder`, `lighter` or a number in range [`100` … `900`]
- `font-style` – styles the font
  - ✓Values: `normal`, `italic`, `oblique`
- `text-decoration` – decorates the text
  - ✓Values: `none`, `underline`, `line-through`, `overline`, `blink`
- `line-height: defines the height of line`

CSS Background

- background-image:url('image file')
  - ✓URL of image to be used as background, e.g.:

```
background-image:url("back.gif");
```

- background-color: {color value}
  - ✓Using color and image and the same time
- background-repeat:{repeat-x, repeat-y, repeat, no-repeat}
- background-attachment: {fixed / scroll}
- background-size: {size of image to set up back ground - %, px}

CSS Background

- `background-position: {top, center, bottom, left, center, right, %, px}`

specifies vertical and horizontal position of the background image

✓Examples:

```
background-position: top left;
```

```
background-position: -5px 50%;
```

CSS Background Shorthand

- `background`: shorthand rule for setting background properties at the same time:

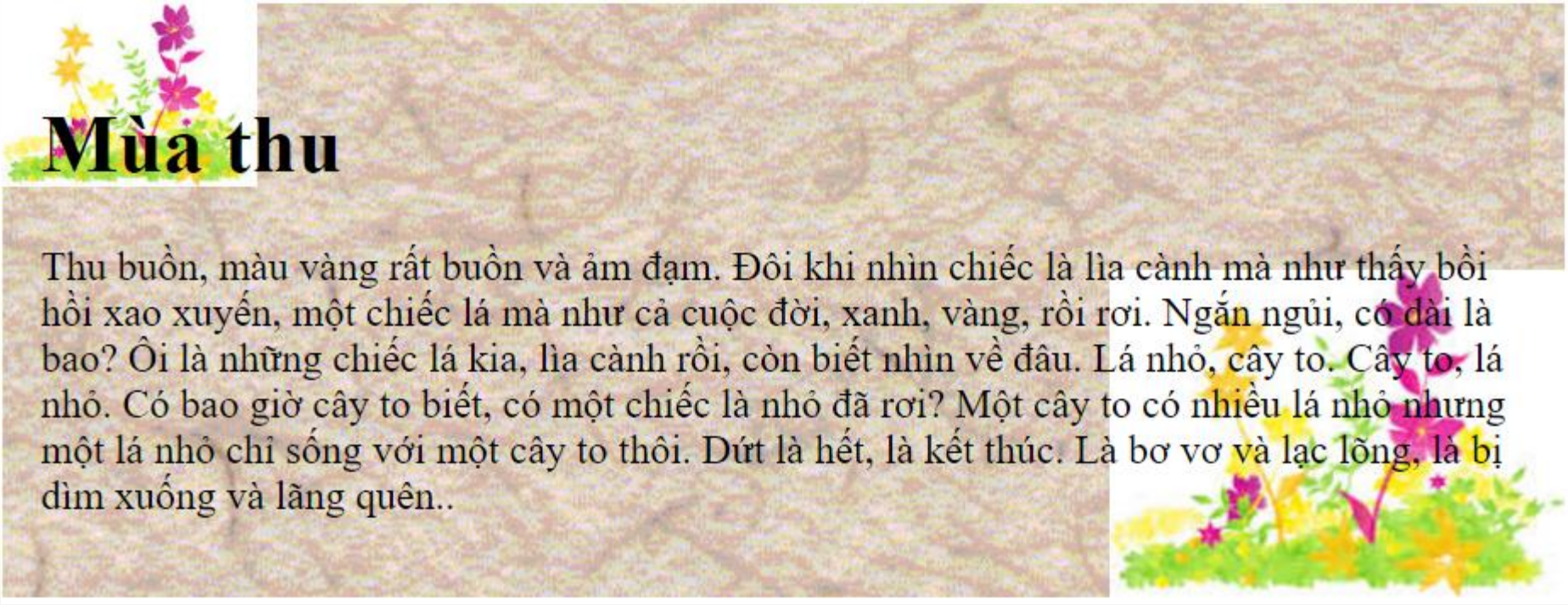
```
background: #FFF0C0 url("back.gif") no-repeat
fixed top;
```

is equal to writing:

```
background-color: #FFF0C0;
background-image: url("back.gif");
background-repeat: no-repeat;
background-attachment: fixed;
background-position: top;
```

Background-image or <img>?

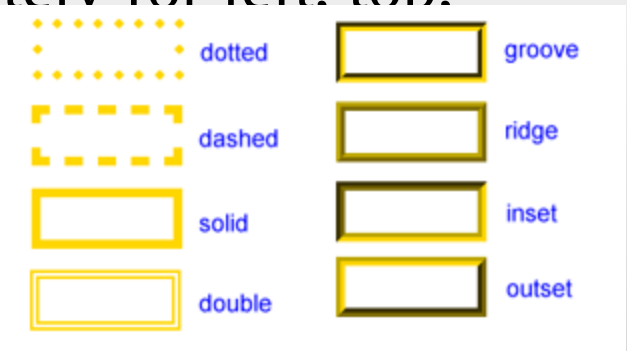
- Background images allow you to save many image tags from the HTML
  - ✓Leads to less code
  - ✓More content-oriented approach
- All images that are not part of the page content (and are used only for "beautification") should be moved to the CSS




```
#example1 {
    background: url(img_flwr.gif) left top no-repeat,
url(img_flwr.gif) right bottom no-repeat, url(paper.gif) left top
repeat;
    background-size: 50px, 130px, auto;
}
```

CSS Border

- `border-width`: `thin`, `medium`, `thick` or numerical value (e.g. `10px`)
- `border-color`: color alias or RGB value
- `border-style`: `none`, `hidden`, `dotted`, `dashed`, `solid`, `double`, `groove`, `ridge`, `inset`, `outset`
- Each property can be defined separately for left, top, bottom and right
  - ✓`border-top-style`, `border-le`
- Border-radius: rounded the corner



CSS Border Shorthand

- `border`: shorthand rule for setting border properties at once:

```
border: 1px solid red
```

is equal to writing:

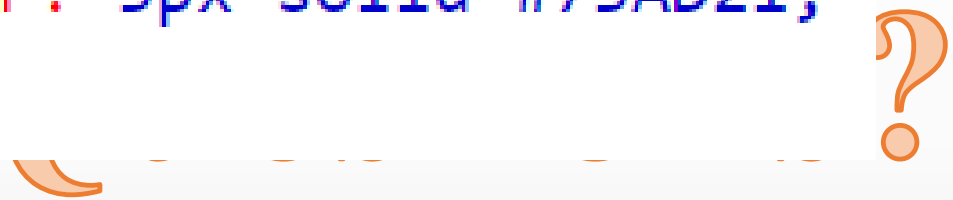
```
border-width:1px;
border-style:solid;
border-color:red;
```

- Specify different borders for the sides via shorthand rules: `border-top`, `border-left`, `border-right`, `border-bottom`
- When to avoid `border:0`

CSS Width and Height

- `width` – defines numerical value for the width of element, e.g. `200px`
- `height` – defines numerical value for the height of element, e.g. `100px`
  - ✓By default the height of an element is defined by its content
  - ✓Inline elements do not apply height, unless you change their `display` style.
- *Max-width: (not change when resize the screen size)*

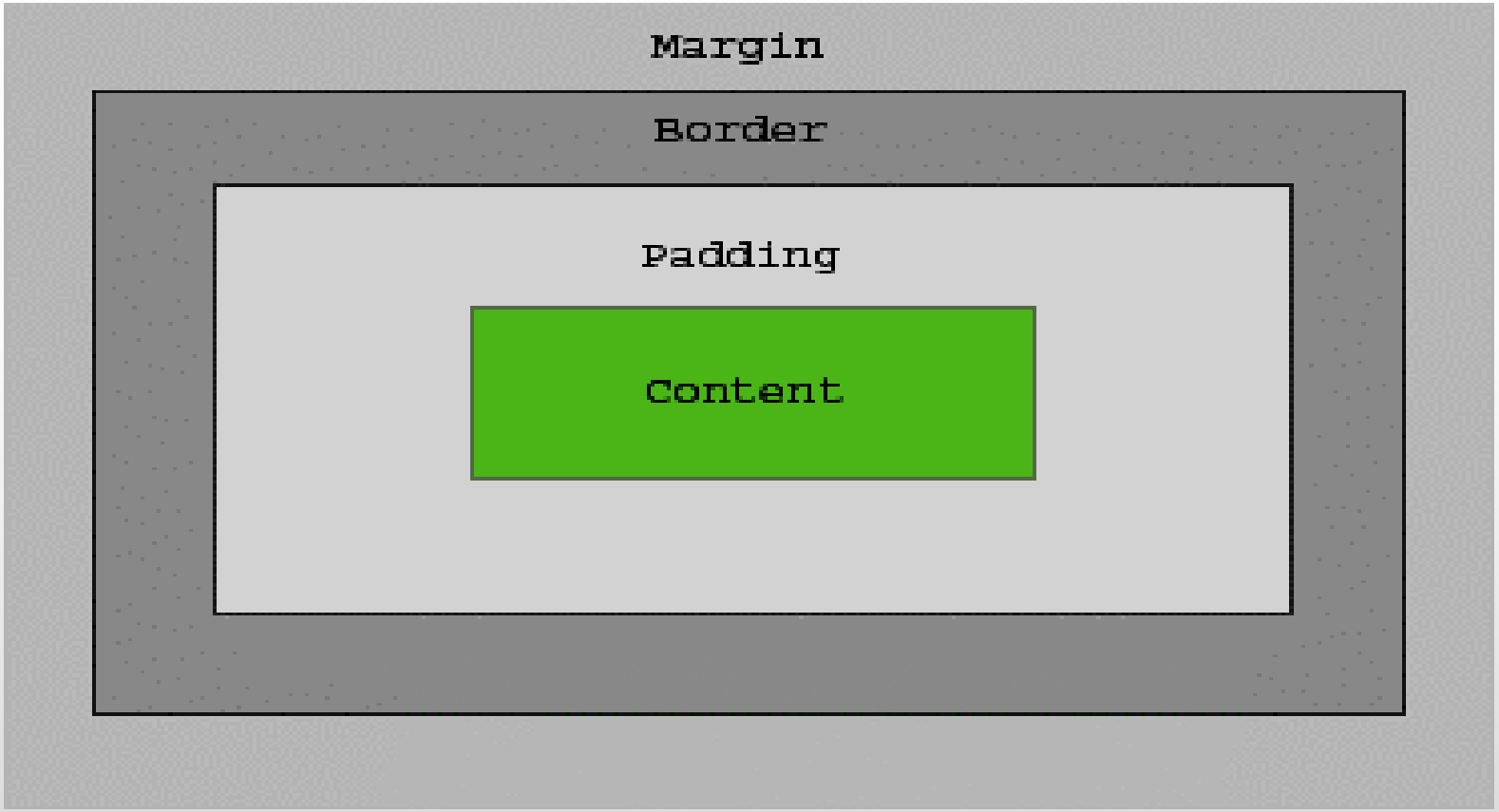
```
div {
    width: 500px;
    height: 100px;
    border: 3px solid #73AD21;
}
```



Set height and width of an Element:

This div element has a height of 100px and a width of 500px.

CSS Margin and Padding



CSS Margin and Padding

- `margin` and `padding` define the spacing around the element
  - ✓Numerical value, e.g. `10px` or `-5px`
  - ✓Can be defined for each of the four sides separately - `margin-top`, `padding-left`, …
  - ✓`margin` is the spacing outside of the border
  - ✓`padding` is the spacing between the border and the content
  - ✓What are collapsing margins?

Margin and Padding: Short Rules

- `margin: 5px;`
  - ✓Sets all four sides to have margin of `5` px;
- `margin: 10px 20px;`
  - ✓top and bottom to `10px`, left and right to `20px`;
- `margin: 5px 3px 8px;`
  - ✓top 5px, left/right 3px, bottom 8px
- `margin: 1px 3px 5px 7px;`
  - ✓top, right, bottom, left (clock wise from top)
- *Same for `padding`*

The Box Model

- position:[absolute,relative];
- top: [value];
- left: [value];
- bottom: [value];
- right: [value];

CSS Position

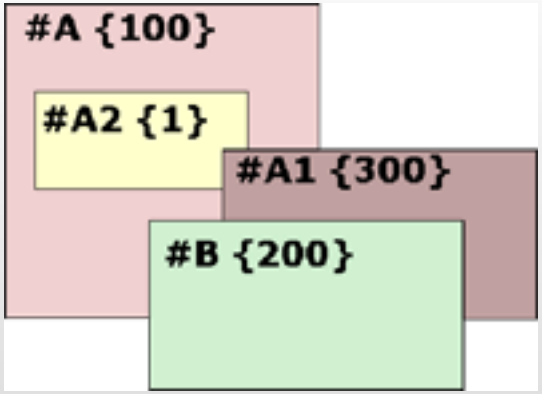
- `position`: defines the positioning of the element in the page content flow
- The value is one of:
  - ✓`static` (default)
  - ✓`relative` – relative position according to where the element would appear with static position
  - ✓`absolute` – position according to the innermost positioned parent element
  - ✓`fixed` – same as absolute, but ignores page scrolling

CSS Position

- Margin VS relative positioning
- Fixed and absolutely positioned elements do not influence the page normal flow and usually stay on top of other elements
  - ✓Their position and size is ignored when calculating the size of parent element or position of surrounding elements
  - ✓Overlaid according to their z-index
  - ✓Inline fixed or absolutely positioned elements can apply height like block-level elements

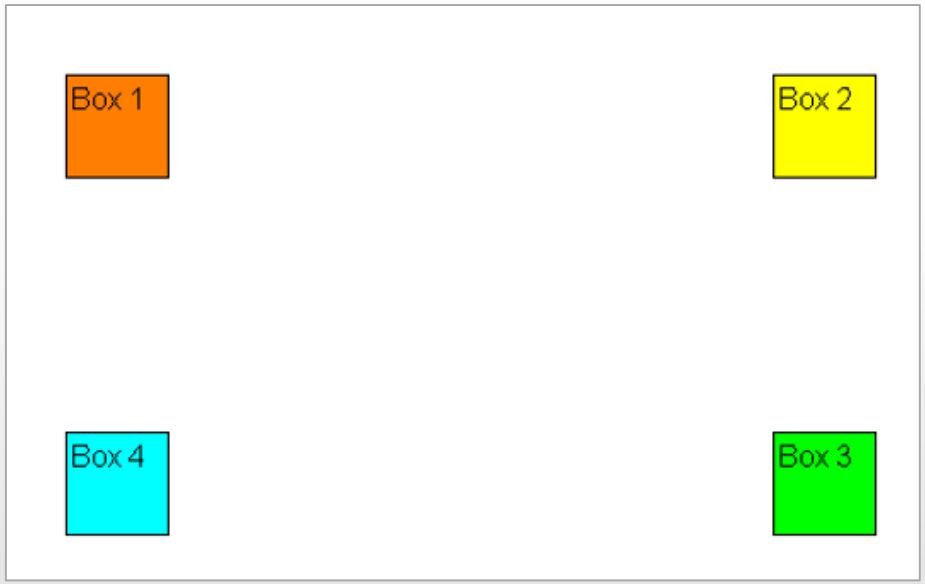
CSS Position

- `top`, `left`, `bottom`, `right`: specifies offset of absolute/fixed/relative positioned element as numerical values
- `z-index` : specifies the stack level of positioned elements
  - ✓Understanding stacking context



CSS position

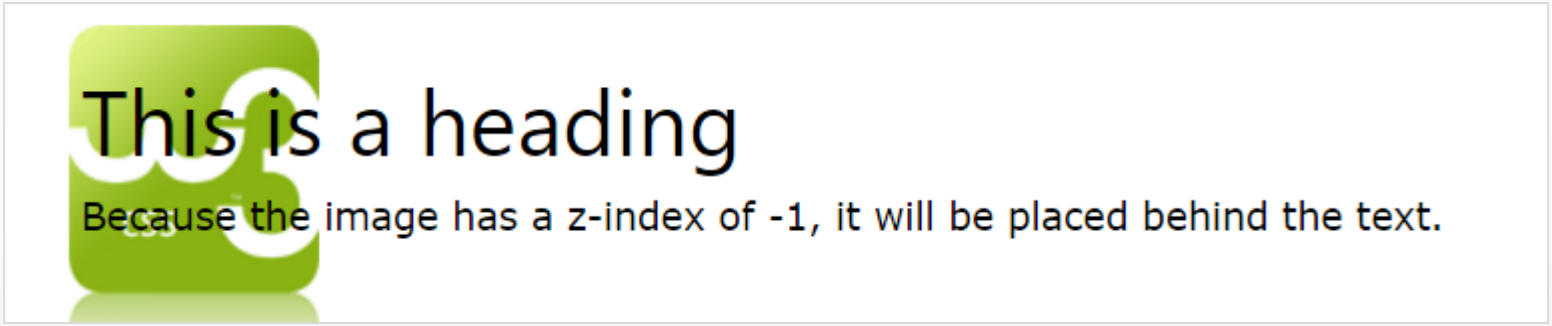
```
#box1 {
    position:absolute;
    top: 50px;
    left: 50px; }
#box2 {
    position:absolute;
    top: 50px;
    right: 50px; }
#box3 {
    position:absolute;
    bottom: 50px;
    right: 50px; }
#box4 {
    position:absolute;
    bottom: 50px;
    left: 50px; }
```



CSS Position

- The “z-index” property specifies the stack order of an element.
- An element with greater stack order is always in front of an element with a lower stack order.
- **Note:** z-index only works on positioned elements (position: absolute/ fixed).

Questions?

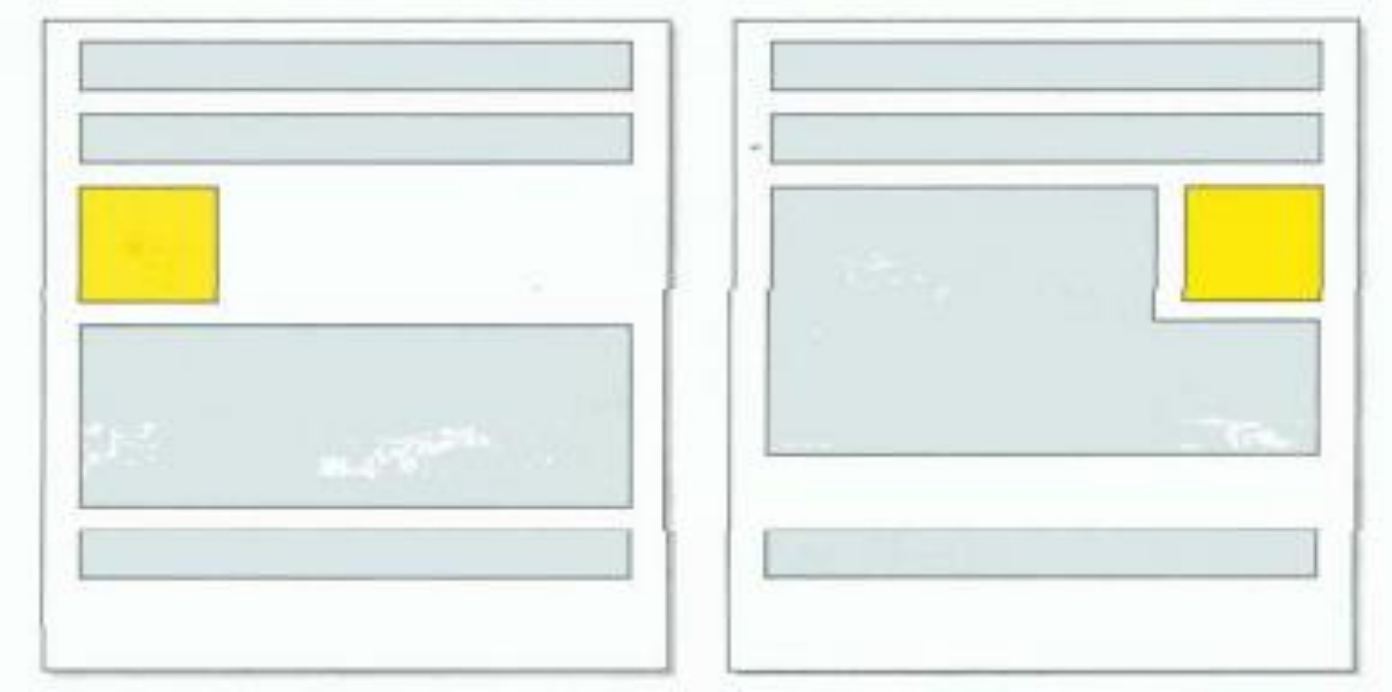



```
img {
    position: absolute;
    left: 0px;
    top: 0px;
    z-index: -1;
}
```

CSS Float

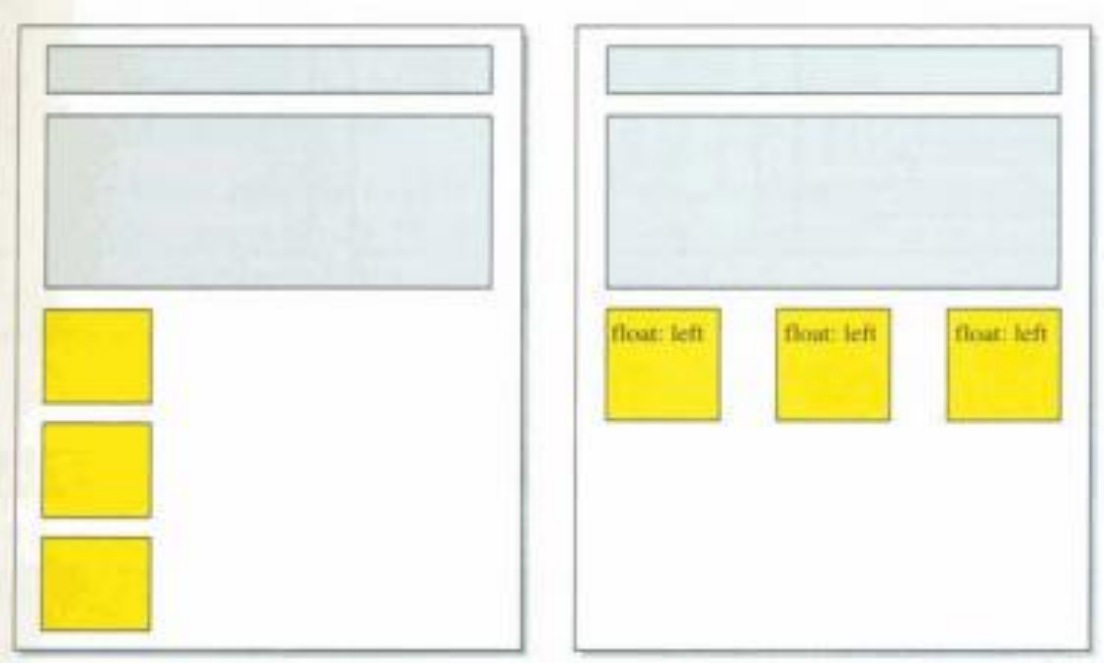
- `float`: the element "floats" to one side
  - ✓`left`: places the element on the left and following content on the right
  - ✓`right`: places the element on the right and following content on the left
  - ✓floated elements should come before the content that will wrap around them in the code
  - ✓margins of floated elements do not collapse
  - ✓floated inline elements can apply height

CSS Float

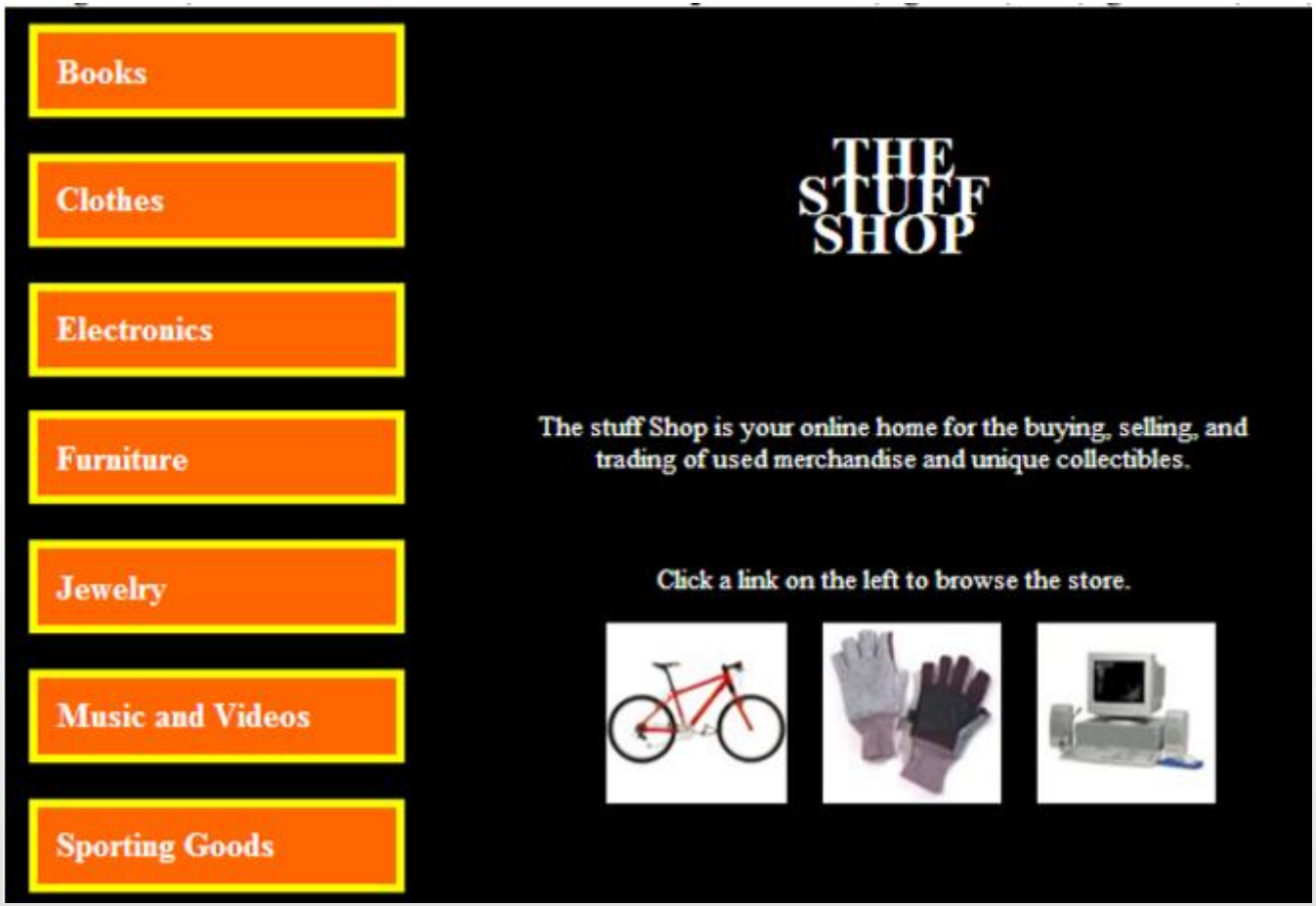


- Floating: normal
- Floating: right

CSS Float



- Floating: normal (3 elements)
- Floating: left (3 elements)


Books
Clothes
Electronics
Furniture
Jewelry
Music and Videos
Sporting Goods
THE STUFF SHOP
The stuff Shop is your online home for the buying, selling, and trading of used merchandise and unique collectibles.
Click a link on the left to browse the store.

CSS Clear

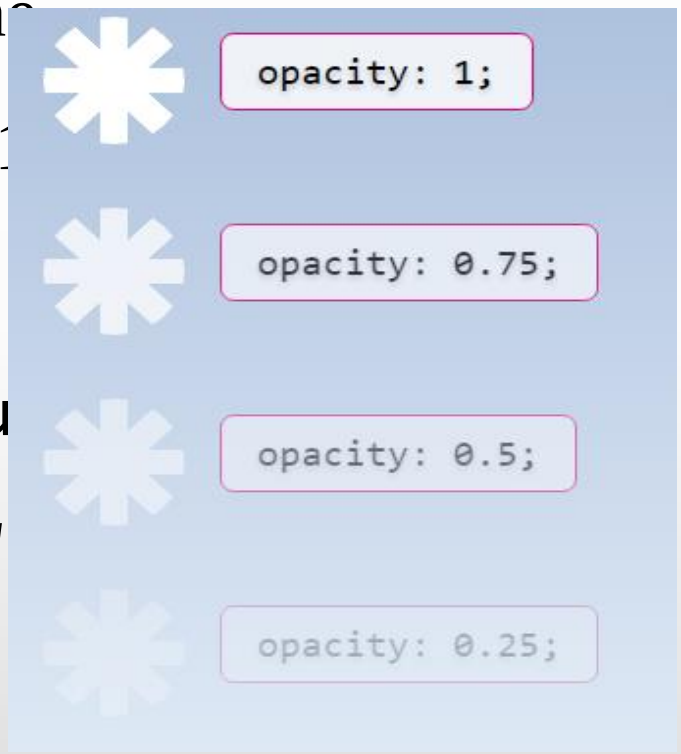
- `clear`
  - ✓Sets the sides of the element where other floating elements are NOT allowed
  - ✓Used to "drop" elements below floated ones or expand a container, which contains only floated children
  - ✓Possible values: `left`, `right`, `both`
- Clearing floats
  - ✓additional element (`<div>`) with a clear style

Clear

- Clearing floats (continued)
  - ✓`:after { content: ""; display: block; clear: both; height: 0; }`
  - ✓Triggering hasLayout in IE expands a container of floated elements
    - display: inline-block;
    - zoom: 1;

CSS Opacity

- `opacity`: specifies the opacity of the element
  - ✓Floating point number from 0 to 1
  - ✓For old Mozilla browsers use `-moz-opacity`
  - ✓For IE use `filter:alpha(opacity=value)` where value is from 0 to 100; also, "binary and script behaviors" must be enabled and `hasLayout` must be triggered, e.g. with `zoom:1`

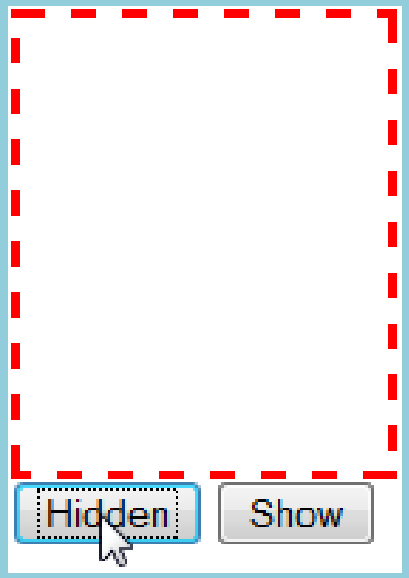


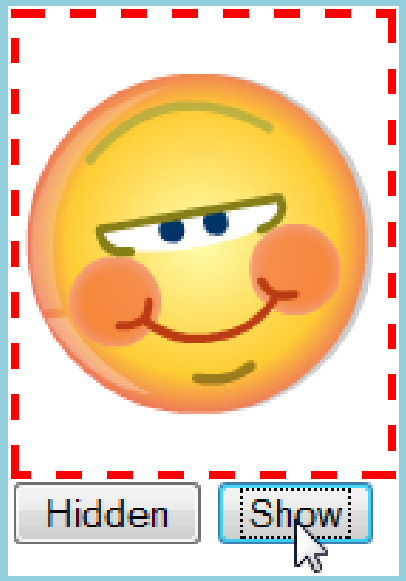
CSS Visibility

- `visibility`
  - ✓Determines whether the element is visible
  - ✓`hidden`: element is not rendered, but still occupies place on the page (similar to `opacity:0`)
  - ✓`visible`: element is rendered normally

Visibility

```
.frame
{
  border: dashed medium red;
  width:130px;
}

html file
<body>
<div class="frame">
<p><img id="myImg" src="smilec.png"></p>
</div>
<input type="button"
       value="Hidden"
       onclick="myImg.style.visibility='hidden'">

<input type="button"
       value="Show"
       onclick="myImg.style.visibility='visible'">
</body>
```





CSS Display

- `display`: controls the display of the element and the way it is rendered and if breaks should be placed before and after the element
  - ✓`None:`
  - ✓`inline`: no breaks are placed before and after (`<span>` is an inline element): ngang
  - ✓Inline – block: inline in the frame : ngang có khung
  - ✓`block`: breaks are placed before AND after the element (`<div>` is a block element): dọc

CSS Display

- `display`: controls the display of the element and the way it is rendered and if breaks should be placed before and after the element
  - ✓`none`: element is hidden and its dimensions are not used to calculate the surrounding elements rendering (differs from `visibility: hidden`!)
  - ✓There are some more possible values, but not all browsers support them
    - Specific displays like `table-cell` and `table-row`

CSS Display

```
<a href="/html/default.asp" target="_blank">HTML</a>
<a href="/css/default.asp" target="_blank">CSS</a>
<a href="/js/default.asp" target="_blank">JavaScript</a>
```

```
a {
  display: none;
}
```

```
a {
  display: inline;
}
```

HTML CSS JavaScript

```
a {
  display: block;
}
```

HTML
CSS
JavaScript

Overflow

- `overflow`: defines the behavior of element when content needs more space than you have specified by the size properties or for other reasons. Values:
  - ✓`visible` (default) – content spills out of the element
  - ✓`auto` - show scrollbars if needed
  - ✓`scroll` – always show scrollbars
  - ✓`hidden` – any content that cannot fit is clipped

Pseudo Classes

- A pseudo-class is used to define a special state of an element.
  - Style an element when a user mouses over it
  - Style visited and unvisited links differently
  - Style an element when it gets focus

Questions?

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

- :visited
- :hover
- :link
- :active
- :first-letter
- :first-line

Pseudo Classes

```
p:first-line
{
  font-family: tahoma;
  font-weight: bold;
  background-color: #FFFFCC;
}
```

```
p:first-letter
{
  font-family: fantasy;
  font-size: xx-large;
  font-weight: bold;
}
```

E-Commerce

E-commerce (Electronic commerce) is defined as the sale and purchase of products over the Internet. E-mail, accounting, shipment information, and enterprise information reporting are the some common applications of e-commerce.

Physical Chemistry

Physical chemistry is a branch of chemi physical properties of chemicals.

CSS Table

- Table border:

```
table, td, th {
  border: 1px solid black;
}

table {
  width: 100%;
  border-collapse: collapse;
}
```

Firstname	Lastname
Peter	Griffin
Lois	Griffin

```
table, td, th {
  border: 1px solid black;
}

table {
  width: 100%;

}
```

Firstname	Lastname
Peter	Griffin
Lois	Griffin

CSS Table

- Table alignment:

`text-align` property sets the horizontal alignment

`vertical-align` property sets the vertical alignment

CSS Table

- Table style

`border-bottom` property to <th> and <td> for horizontal dividers:

```
th, td {
  border-bottom: 1px solid #ddd;
}
```

First Name	Last Name	Savings
Peter	Griffin	$100
Lois	Griffin	$150
Joe	Swanson	$300

CSS Table

Use the `:hover` selector on <tr> to highlight table rows on mouse over:

```
tr:hover {background-color: #f5f5f5;}
```

zebra-striped tables, use the `nth-child()` selector and add a `background-color` to all even (or odd)

```
tr:nth-child(even) {background-color: #f2f2f2;}
```

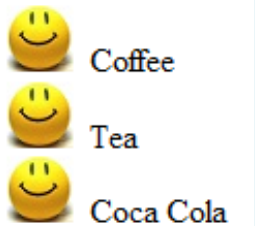
First Name	Last Name	Savings
Peter	Griffin	$100
Lois	Griffin	$150
Joe	Swanson	$300

List Properties

List-style-type: {none, circle, square, disc}
List-style-image: url (images/bullet.gif)}
List-style-position: [inside/outside]

Questi

```
UL
{
  list-stle-type: square;
  list-style-position: inside;
  list-style-image: url ('smile.jpg');
}
```



List Properties

- Home
- News
- Contact
- About


```
<ul>
  <li>Home </li>
  <li>News</li>
  <li>Contact</li>
  <li>About</li>
</ul>
```

```
ul {
    padding-left:0;
}
ul li
{
    list-style-type:none;
    width:150px;
    border:1px solid #fff;
    display:block;
    background-color:#000;
    text-align:center;
    color:#FFF;
    padding:20px;
}
```

List Properties


```
ul {
    padding-left:0;
    background-color:#000;
}
ul li
{
    list-style-type:none;
    width:150px;
    border-right:1px solid #fff;
    display:inline-block;
    background-color:#000;
    text-align:center;
    color:#FFF;
    padding:20px;
}
```

CSS form

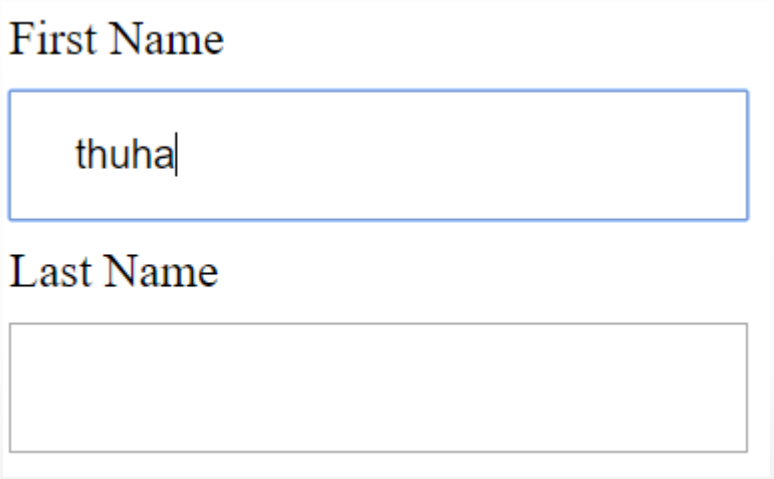
Selector:

- Input: Apply for all items
- Input [type=text]: apply for textbox
- Input [type=text]:focus
- Input[type=number] : apply for number
- Select{ }: apply for listbox

Example

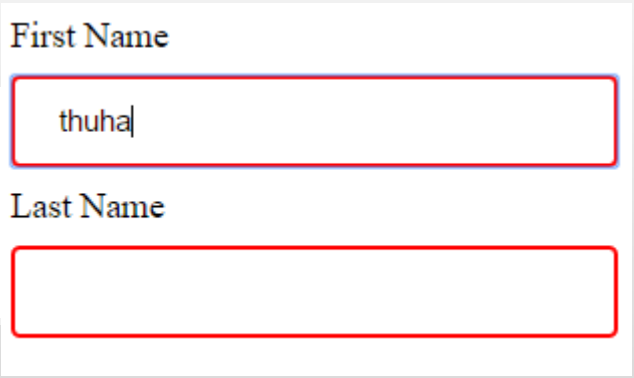
- Padding:

```
input[type=text] {
    width: 100%;
    padding: 12px 20px;
    margin: 8px 0;
    box-sizing: border-box;
}
```



- Border:

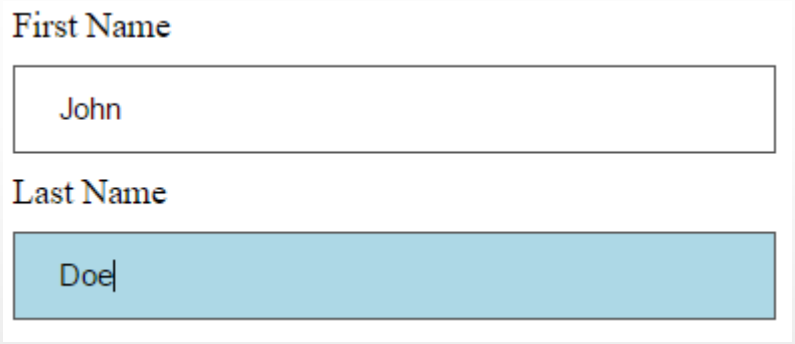
```
input[type=text] {
    border: 2px solid red;
    border-radius: 4px;
}
```



Example

- Background :
- Color:

```
<style>
input[type=text] {
    width: 100%;
    padding: 12px 20px;
    margin: 8px 0;
    box-sizing: border-box;
    border: 1px solid #555;
    outline: none;
}

input[type=text]:focus {
    background-color: lightblue;
}
</style>
```



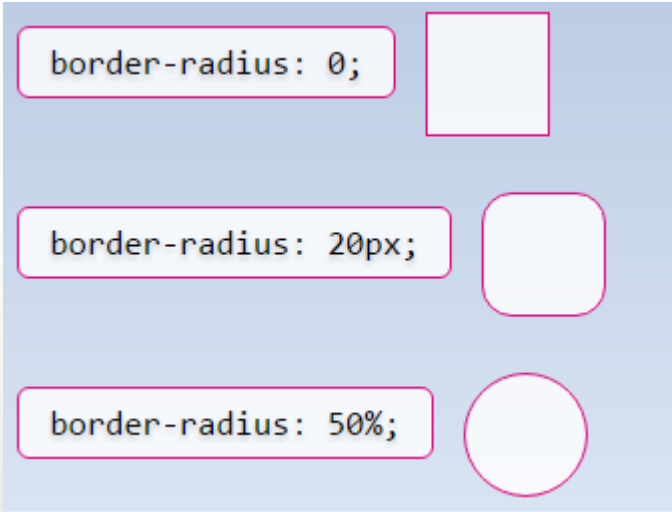
CSS3 - Border

- Background:
  - ✓**background-size**
  - ✓**background-origin**
  - ✓**Background-image**

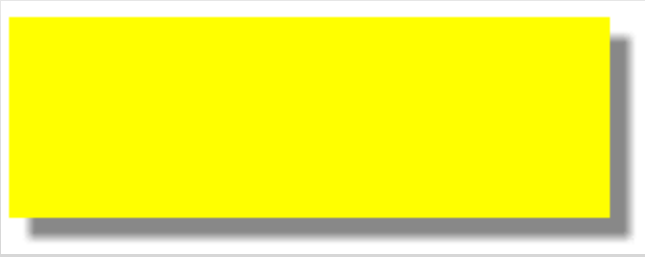
```
#example1 {
    border: 10px solid black;
    padding:35px;
    background:url(img_flwr.gif);
    background-repeat: no-repeat;
    background-origin: content-box;
}
```

```
#example1 {
    background: url(img_flwr.gif) left top no-repeat, url(img_flwr.gif) right bottom no-repeat,
url(paper.gif) left top repeat;
    background-size: 50px, 130px, auto;
}
```

- Border
  - **border-radius:**
  - **box-shadow:**
  - **border-image:**




```
div
{
box-shadow: 10px 10px 5px
#888888;
}
```



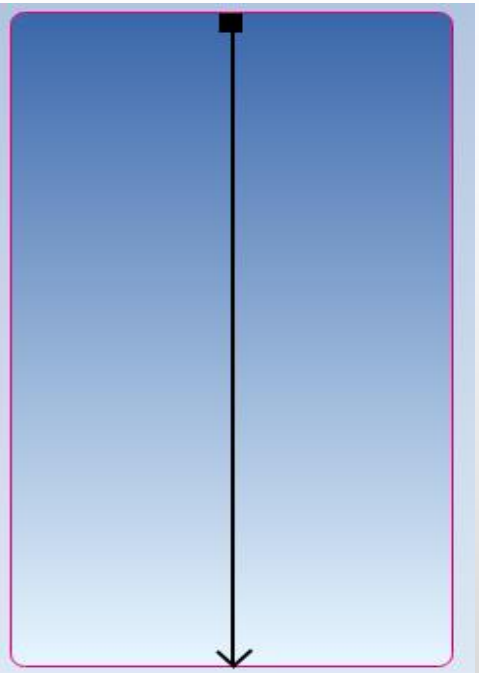
CSS3- Gradient

- ✓Linear Gradients (goes down/up/left/right/diagonally)
- ✓Radial Gradients (defined by their center)

```
background-image:
    linear-gradient(
    #3A67AB,
    #E8F6FF);
```

```
background-image:
    linear-gradient(top,
    #3A67AB 0%,
    #E8F6FF 100%);
```

```
background-image:
    linear-gradient(270deg,
    #3A67AB 0%,
    #E8F6FF 100%);
```

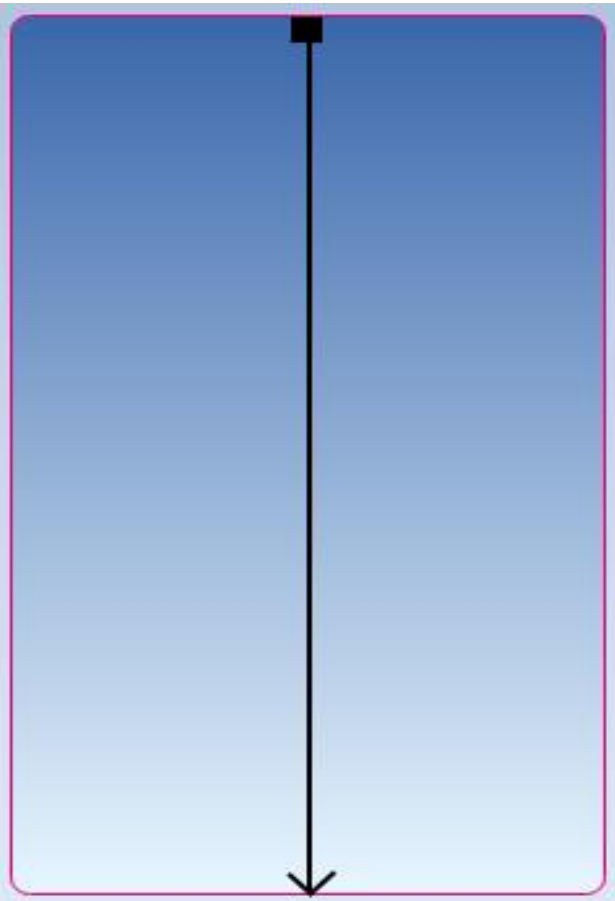


CSS Gradient

```
background-image:
    linear-gradient(
    #3A67AB,
    #E8F6FF);
```

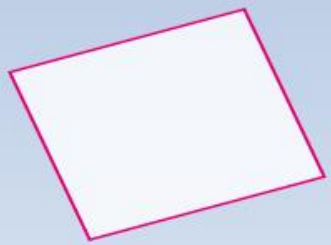
```
background-image:
    linear-gradient(top,
    #3A67AB 0%,
    #E8F6FF 100%);
```

```
background-image:
    linear-gradient(270deg,
    #3A67AB 0%,
    #E8F6FF 100%);
```



CSS Transform

- **translate** `transform: translate(-80px, 200px);`
- **rotate** `transform: rotate(15deg);`
- **scale** `transform: scale(1.5, 2);`
- **skew** `transform: skewX(-8deg);`



CSS3- Transition

- Transition:
  - ✓**transition:**
  - ✓**transition-delay**
  - ✓**transition-duration**
  - ✓**transition-property**
  - ✓**transition-timing-function**

```
Tag {
        transition-propertiy:[width, height, all, {properties…}]
        transition-duration: [time s,ms];
        transition-timing-function:[ease, ease-in, ease-out]
        transiton-delay: [time s/ms]
}
```

Text shadow / Box shadow

```
h1 {
  text-shadow: 2px 2px;
}
```

Text shadow effect!

```
h1 {
  text-shadow: 2px 2px red;
}
```

Text shadow effect!

```
h1 {
  text-shadow: 2px 2px 5px red;
}
```

Text shadow effect!

```
h1 {
  text-shadow: 0 0 3px #FF0000, 0 0 5px #0000FF;
}
```

Text shadow effect!

- **Multiple Columns:**
  - `column-count`
  - `column-gap`
  - `column-rule`

Multicolumn

Hằng năm cứ vào cuối thu, lá ngoài đường rụng nhiều và trên không có những đám mây bàng bạc, lòng tôi lại nao nức những kỷ niệm hoang mang của buổi tựu trường. Tôi không thể nào quên được những cảm giác trong sáng ấy nảy nở trong lòng tôi như mấy cành hoa tươi mỉm cười giữa bầu trời quang đãng. Những ý tưởng ấy tôi chưa lần nào ghi lên giấy, vì hồi ấy tôi không biết ghi và ngày nay tôi không nhớ hết. Nhưng mỗi lần thấy mấy em nhỏ rụt rè núp dưới nón mẹ lần đầu tiên đến trường, lòng tôi lại tưng bừng rộn rã. Buổi sáng mai hôm ấy, một buổi mai đầy sương thu và gió lạnh. Mẹ tôi âu yếm nắm tay tôi dẫn đi trên con đường làng dài và hẹp. Con đường này tôi đã quen đi lại lắm lần, nhưng lần này tự nhiên tôi thấy lạ. Cảnh vật chung quanh tôi đều thay đổi, vì chính lòng tôi đang có sự thay đổi lớn: Hôm nay tôi đi học.

CSS Layout


Worldwide Apparel
<header>
<nav>
Home
Policies and Procedures
Document Repository
News & Events
Welcome to Worldwide Apparel's intranet
THE INTERNAL RESOURCE AND INFORMATION CENTER FOR ALL EMPLOYEES OF WORLDWIDE APPAREL
This site is the internal resource and information center for all employees of Worldwide Apparel. Here you can find relevant information including the contact information for your fellow employees, forms and frequently asked questions about employee benefits and much more.
The information on this site is provided to help you be a happier, more productive employee. If you have any questions about anything on the site or other employee related questions, you can also call Jen Smith at extension 535!
UNDERSTANDING THE QUIET PERIOD
By Cheri White, posted December 21, 2012
WHAT ALL EMPLOYEES NEED TO KNOW DURING AN IPO
When a company files for an Initial Public Offering (IPO), there is period of time after the registration statement is officially delivered to the Securities Exchange Commission until this statement is declared official, called the "quiet period." During this time, there are laws limiting the type of information a company can release to the public.
The quiet period was largely created to prevent employees and other company insiders from artificially inflating the price of the company's stock. The Federal government takes these rules very seriously and employees could jeopardize the success of the IPO or incur fines if the rules are not followed.
Quiet needed during an IPO.
<aside>
VOLUNTEER OPPORTUNITIES
SORT HOME GOODS IN BELLEVUE.
Thursday, July 21, 4pm-7pm
Sort and inspect home goods and supplies for kids. Ages 9+ welcome! Learn more.
PREPARE MEALS FOR THE HOMEBOUND
Thursday, July 28, 6pm-8pm
Prepare meals for senior citizens and individuals recovering from surgery.Learn more.
<section>
<article>
Copyright Worldwide Apparel 2011
All content on this site is confidential and should not be shared with anyone outside of Worldwide Apparel.
<footer>

Layout – HTML5

- <header>: Logo or image of the website
- <section>: Main content
- <article>: content details
- <aside>: ads-headline
- <footer>: information{address, emails, …}
- <nav>: links - navigations

CSS Layout – Flex box

- Parent Element (Container): display: flex;

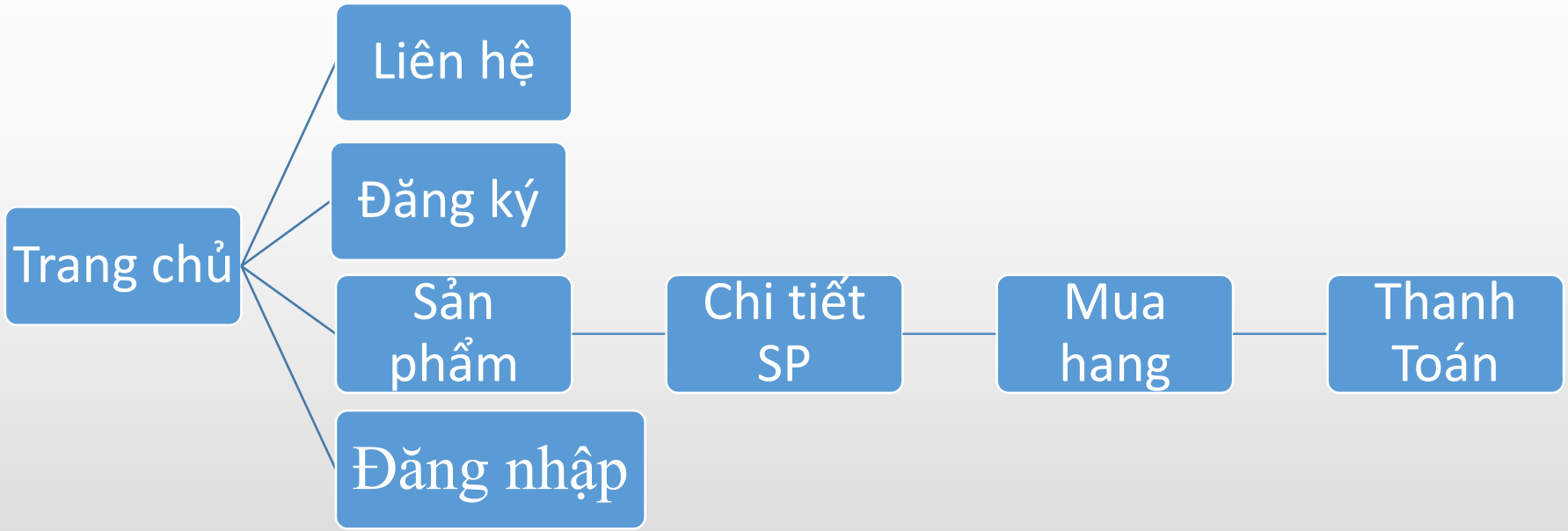
The flex container properties are:

- flex-direction
- flex-wrap
- flex-flow
- justify-content
- align-content


header
nav
section
article
article
aside
footer

- CSS align
- CSS gallery
- CSS Animation

- Sitemap: Cấu trúc của Website



CSS Basics