Introduction to CS520/CS596_026

Lecture One

Gordon Tian

408-668-5680
gtian@svuca.edu
gordontian@126.com

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Requirements

- Cygwin

- Nginx/php/mysql

- Course website: www.sit.academy

INSTALL

- Nginx/php/mysql

  - http://wtriple.com/wtnmp/?wtSrc=exe

- Aptana

  - http://www.aptana.com/products/studio3/download.html

- Cygwin

  - http://cygwin.com/install.html

Tools

- http://bluefish.mrball.net/stable/binaries/win32/

- http://www.aptana.com/products/studio3/download.html

- http://www.eclipse.org/downloads/packages/eclipse-php-developers/heliossr2

What is HTML?

HTML is a markup language for describing web documents (web pages).

- HTML stands for Hyper Text Markup Language

- A markup language is a set of markup tags

- HTML documents are described by HTML tags

- Each HTML tag describes different document content

Example

```
<!DOCTYPE html>

<html>

        <head>

                <title>Page Title</title>

        </head>

        <body>

                <h1>My First Heading</h1>

                <p>My first paragraph.</p>

        </body>

</html>
```

- Save as .html or .htm file

HTML Versions

Tim Berners-Lee invented www — 1989

Tim Berners-Lee invented HTML — 1991

Dave Raggett drafted HTML+ — 1993

HTML Working Group defined HTML 2.0 — 1995

W3C Recommended HTML 3.2 — 1997

W3C Recommended HTML 4.01 — 1999

W3C Recommended XHTML 1.0 — 2000

HTML5 WHATWG First Public Draft — 2008

HTML5 WHATWG Living Standard — 2012

HTML5 W3C Final Recommendation — 2014

!DOCTYPE

- HTML 5

<!DOCTYPE html>

- HTML 4.01

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">

- HTML 1.0

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

Comments

- <!-- Write your comments here →

- <!--[if IE 8]>

  .... some HTML here ....

- <![endif]-->

HTML Tags

- <tag> content </tag>

- Tags can be nested

- HTML headings are defined with the <h1> to <h6> tags

- <p>, <a>, <img>

- Empty element: <br> or

- <hr>

- <pre> defines preformatted text.

Attributes

- lang="en-US" for html

- title for p

- href for a

- width and height for img or use style
  style="width:304px;height:228px;"

  - **Use the style attribute. It prevents styles sheets from changing the original size of images**

HTMl Styles - inline

- style="property:value; property:value;"

- <h1 style="color:blue">This is a heading</h1>

- <p style="color:red">This is a paragraph.</p>

- background-color, color, font-family, font-size, test-align

HTMl Styles – Internal CSS

```
<head>
        <style>
                Body {background-color:lightgrey}
                h1   {color:blue}
                p    {color:green}
        </style>
</head>
```

HTML Styles – External CSS

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

- To define a special style for one special element, add an id attribute to the element

```
p#p01 {
  color:blue;
}
```

```
<p id="p01">I am different</p>
```

- To define a style for a special type (class) of elements, add a class attribute to the element

```
p.error {
  color:red;
}
```

```
<p class="error">Whoops</p>
```

Styles - <a>

```
<style>
        a:link    {color:green; background-color:transparent;
            text-decoration:none}

        a:visited {color:pink; background-color:transparent;
            text-decoration:none}

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

        a:active  {color:yellow; background-color:transparent;
            text-decoration:underline}
</style>
```

Styles - floating

```
<p>

        <img src="smiley.gif" alt="Smiley face"
            style="float:right;width:42px;height:42px;">

        The image will float to the right of the text.

</p>


<p>

        <img src="smiley.gif" alt="Smiley face"
            style="float:left;width:42px;height:42px;">

        The image will float to the left of the text.

</p>
```

Table

```
<style>
        table, th, td {
            border: 1px solid black;

            border-spacing: 5px;

        }
        th, td {

            padding: 15px;

            text-align: left;

        }
</style>
```

Table – more styles

```
table#t01 tr:nth-child(even) {

    background-color: #eee;

}

table#t01 tr:nth-child(odd) {

    background-color: #fff;

}

table#t01 th {

    color: white;

    background-color: black;

}
```
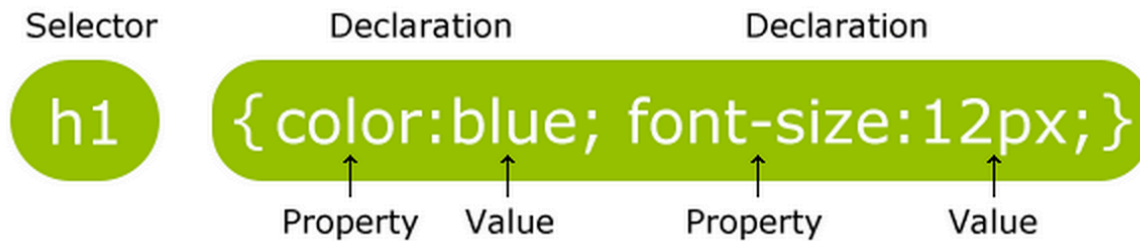
CSS

What is CSS?

- CSS stands for Cascading Style Sheets

- CSS defines how HTML elements are to be displayed

- Styles were added to HTML 4.0 to solve a problem

- CSS saves a lot of work

- External Style Sheets are stored in CSS files

CSS

CSS Syntax

A CSS rule set consists of a selector and a declaration block:

The selector points to the HTML element you want to style.

The declaration block contains one or more declarations separated by semicolons.

Each declaration includes a property name and a value, separated by a colon.

CSS Example

A CSS declaration always ends with a semicolon, and declaration groups are surrounded by curly braces:

```
p {color:red;text-align:center;}
```

Selector

- element
- id
- class

CSS Comment

Use c/c++/Java like comnet

/*

….

*/