



SNS COLLEGE OF TECHNOLOGY

Coimbatore-35
An Autonomous Institution

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A+' Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai



DEPARTMENT OF INFORMATION TECHNOLOGY

WEB TECHNOLOGY

III YEAR - V SEM

UNIT 2 – CSS AND CLIENT-SIDE SCRIPTING

TOPIC 1 – Style Sheets CSS-Introduction to Cascading Style Sheets



Motivation



- ▶ HTML markup can be used to represent
 - ▶ **Semantics**: h1 **means** that an element is a top-level heading
 - ▶ **Presentation**: h1 elements **look** at a certain way
- ▶ It's advisable to separate semantics from presentation because:
 - ▶ It's easier to present documents on **multiple platforms** (browser, cell phone, spoken, ...)
 - ▶ It's easier to generate documents with **consistent look**
 - ▶ Semantic and presentation changes can be made independently of one another (**division of labor**)
 - ▶ **User control** of presentation is facilitated



Style Sheet Languages

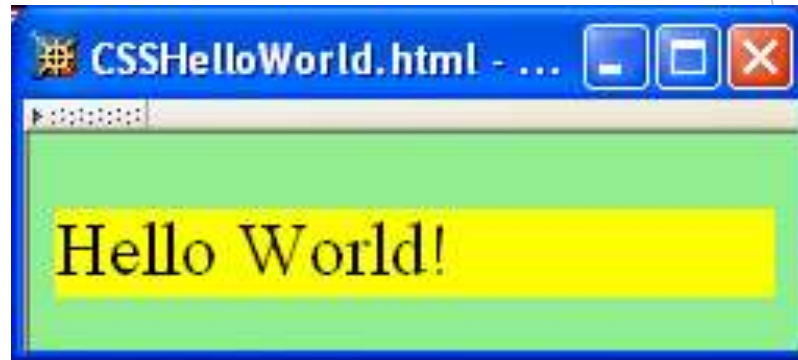


- ▶ Cascading Style Sheets (**CSS**)
 - ▶ Applies to (X)HTML as well as XML documents in general
- ▶ Extensible Stylesheet Language (**XSL**)
 - ▶ Often used to transform one XML document to another form, but can also add style
 - ▶ XSL Transformations covered in later chapter



CSS Introduction

- ▶ A styled HTML document



produced by the style sheet style1.css:

```
body { background-color:lime }  
p    { font-size:x-large; background-color:yellow }
```



CSS Introduction



```
<!DOCTYPE html
  PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
  "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
  <head>
    <title>
      CSSHelloWorld.html
    </title>
    <link rel="stylesheet" type="text/css" href="style1.css"
      title="Style 1" />
    <link rel="alternate stylesheet" type="text/css" href="style2.css"
      title="Style 2" />
  </head>
  <body>
    <p>
      Hello World!
    </p>
  </body>
</html>
```

link element associates style sheet with doc.



CSS Introduction



```
<!DOCTYPE html
  PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
  "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
  <head>
    <title>
      CSSHelloWorld.html
    </title>
    <link rel="stylesheet" type="text/css" href="style1.css"
      title="Style 1" />
    <link rel="alternate stylesheet" type="text/css" href="style2.css"
      title="Style 2" />
  </head>
  <body>
    <p>
      Hello World!
    </p>
  </body>
</html>
```

type attribute specifies style language used



CSS Introduction



```
<!DOCTYPE html
  PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
  "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
  <head>
    <title>
      CSSHelloWorld.html
    </title>
    <link rel="stylesheet" type="text/css" href="style1.css"
          title="Style 1" />
    <link rel="alternate stylesheet" type="text/css" href="style2.css"
          title="Style 2" />
  </head>
  <body>
    <p>
      Hello World!
    </p>
  </body>
</html>
```

href attribute provides style sheet URL

href="style1.css"



CSS Introduction



```
<!DOCTYPE html
  PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
  "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
  <head>
    <title>
      CSSHelloWorld.html
    </title>
    <link rel="stylesheet" type="text/css" href="style1.css"
      title="Style 1" />
    <link rel="alternate stylesheet" type="text/css" href="style2.css"
      title="Style 2" />
  </head>
  <body>
    <p>
      Hello World!
    </p>
  </body>
</html>
```

title attribute provides style sheet name



CSS Introduction

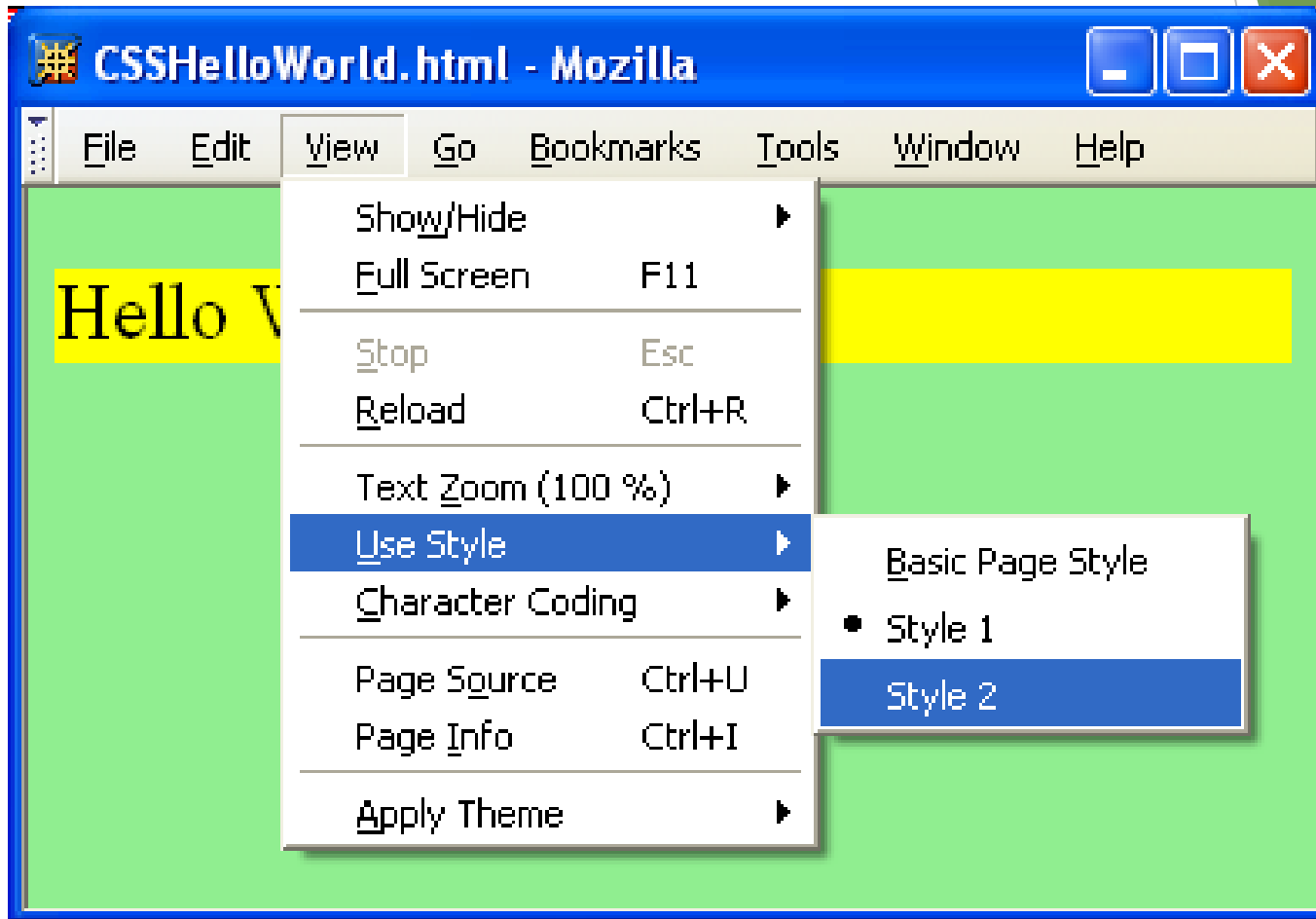


```
<!DOCTYPE html
  PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
  "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
  <head>
    <title>
      CSSHelloWorld.html
    </title>
    <link rel="stylesheet" type="text/css" href="style1.css"
          title="Style 1" />
    <link rel="alternate stylesheet" type="text/css" href="style2.css"
          title="Style 2" />
  </head>
  <body>
    <p>
      Hello World!
    </p>
  </body>
</html>
```

Alternative, user selectable style sheets can be specified



CSS Introduction

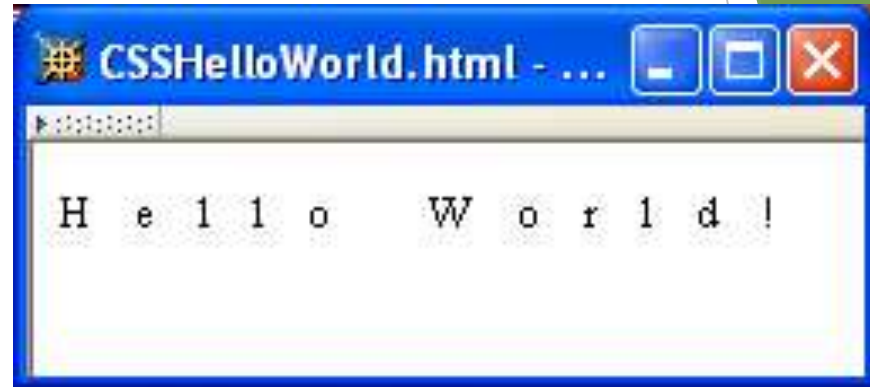




CSS Introduction



- ▶ A styled HTML document



produced by the style sheet style2.css:

```
p { font-size:smaller; letter-spacing:1em }
```



CSS Introduction



Note that alternate, user selectable style is not widely supported: firefox 3 and IE 8 do, but IE 6, IE 7 and Chrome don't.



CSS Introduction

- ▶ Single document can be displayed on multiple media platforms by tailoring style sheets:

This document will be **printed** differently than it is

```
dis <link rel="stylesheet" type="text/css" href="style1.css"
    media="screen, tv, projection" />
    <link rel="stylesheet" type="text/css" href="style2.css"
    media="handheld, print" />
```