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

AI IN WEB TECHNOLOGY
III YEAR - VI SEM

UNIT 2 – CSS AND CLIENT-SIDE SCRIPTING

TOPIC 1 – Introduction – Features and Style Rules

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**CSS AND CLIENT-SIDE SCRIPTING / AI IN WEB TECHNOLOGY/
S.Rajarajeswari/AIML/SNSCT**

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

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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 }
```

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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.

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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

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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

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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

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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>
```
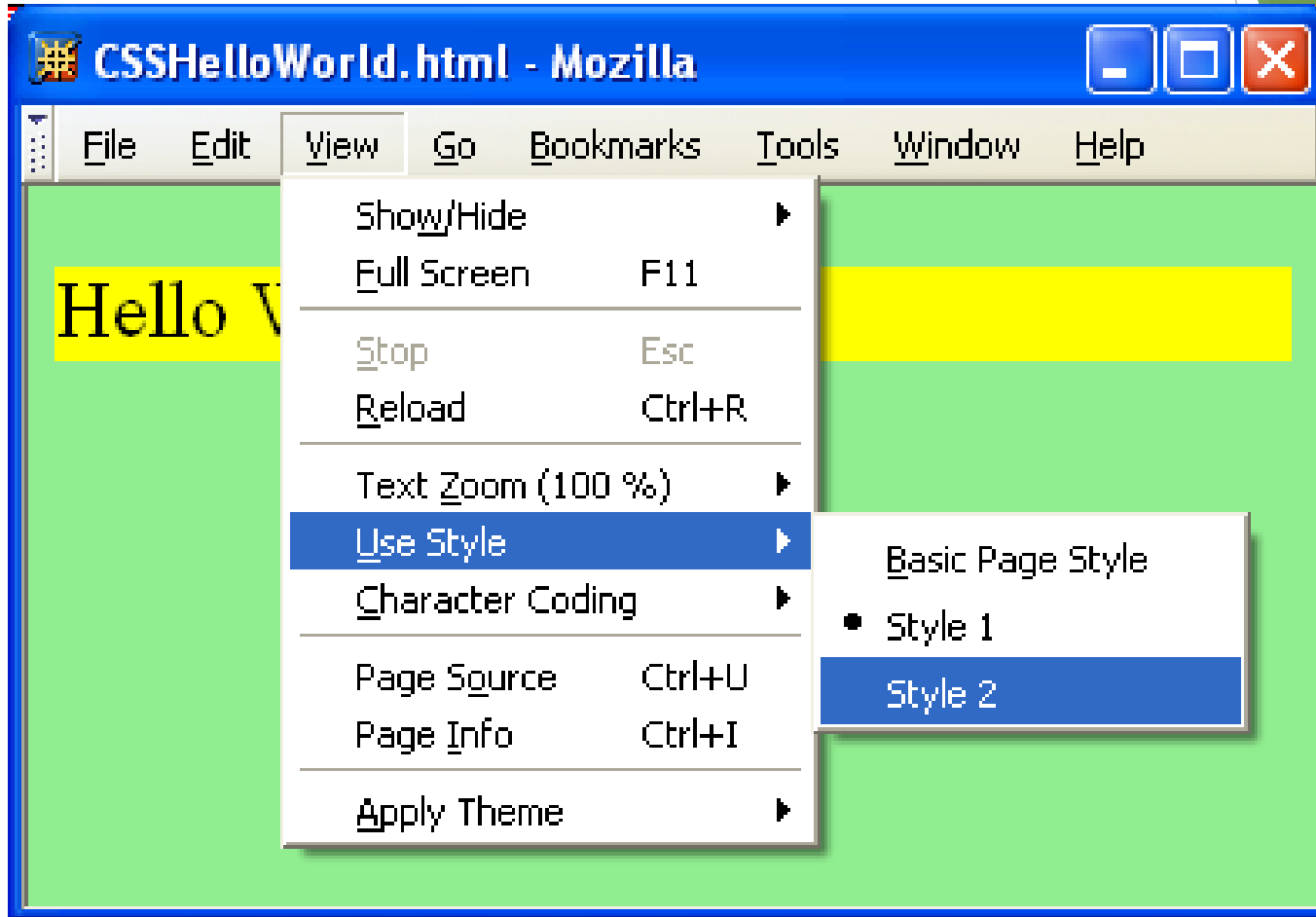
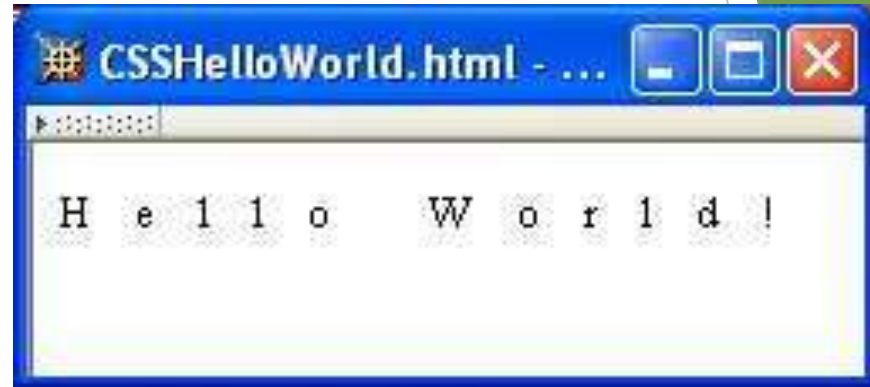Alternative, user selectable style sheets can be specified

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CSS Introduction

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CSS Introduction

▶ A styled HTML document

CSSHelloWorld.html - ...

H e l l o   W o r l d !

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.