

# Lecture Notes 4a: Web Page Metadata

CSE 190 M (Web Programming), Spring 2007  
University of Washington

Reading: Sebesta Ch. 2 sections 2.4.7, 2.4.9



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## Web page metadata: <meta>

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information about your page (for a browser, search engine, etc.)

```
<meta name="description"
  content="Authors' web site for Building Java Programs." />
<meta name="keywords" content="java, textbook" />
<meta http-equiv="Content-Type"
  content="text/html; charset=iso-8859-1" />
```

- placed in the head of your HTML page
- meta tags often have both the name and content attributes
  - some meta tags use the http-equiv attribute instead of name

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## meta element to describe the page

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```
<head>
<meta name="author"
  content="web page's author" />
<meta name="revised"
  content="web page version and/or last modification date" />
<meta name="generator"
  content="the software used to create the page" />
</head>
```

- many WYSIWYG HTML editors (FrontPage, PageMaker, etc.) place their names in the meta generator tag (why?)

## meta element to aid search engines

```
<head>
<meta name="description"
  content="how you want search engines to display your page" />
<meta name="keywords"
  content="words to associate with your page (comma-separated)" />
</head>
```

- these are suggestions to search engines about how to index your page
- the search engine may choose to ignore them (why?)

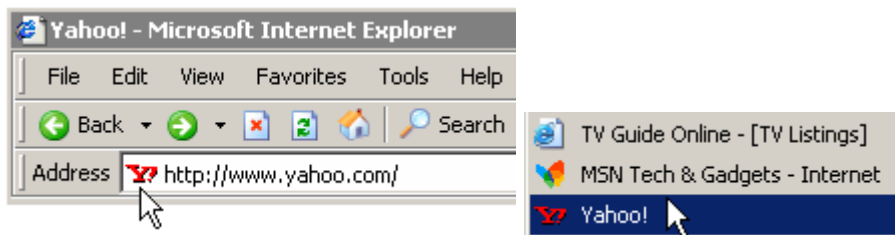
## meta element to aid browser / web server

```
<meta http-equiv="refresh"
  content="how often to refresh the page (seconds)" />
</head>
<meta http-equiv="Content-Type"
  content="what type of document this is
  (may include internationalization information such as character encoding)" />
```

- using the meta Content-Type tag gets rid of the W3C "tentatively valid" warning  
`<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />`
- the meta refresh tag can also redirect from one page to another:  
`<meta http-equiv="refresh" content="5;url=http://www.bjp.com" />`
  - why would we want to do this? ([example](#))

## Favorites icon ("favicon")

```
<link rel="shortcut icon" type="MIME type" href="filename" />
<link rel="shortcut icon" type="image/gif" href="cse.gif" />
```



- the link tag, placed in the HTML page's head section, can specify an icon for a web page
  - this icon will be placed in the browser title bar and bookmark/favorite
- IE6: this doesn't work; must place a file in .ico format named favicon.ico in the root directory of the web server ([instructions](#))

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## Internet media ("MIME") types

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classifications of data that travel over the internet

- sometimes when including resources in a page (style sheet, icon, multimedia object), we specify their type of data

MIME type	file extension
text/html	.html
text/plain	.txt
image/gif	.gif
image/jpeg	.jpg
video/quicktime	.mov
application/octet-stream	.exe

- Lists of MIME types: [by type](#), [by extension](#)

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## HTML Character Entities

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a way of representing any Unicode character within a web page

character(s)	entity
< >	&lt; &gt;
é è ñ	&eacute; &egrave; &ntilde;
™ ©	&trade; &copy;
π δ Δ	&pi; &delta; &Delta;
И	&#1048;
" &	&quot; &amp;

- [Complete list of HTML entities](#)
- How would you display the text & amp ; on a web page?

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## HTML-encoding text

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```
<p><a href=
"http://www.google.com/search?q=marty+stepp&ie=utf-8&aq=t">
Search Google for Marty</a></p>
```

- To display the above text in a web page, its special characters must be encoded as shown below:

```
&lt;p&gt;&lt;a href=
&quot;http://www.google.com/search?q=marty+stepp&amp;ie=utf-8&amp;aq=t&quot;&gt;
Search Google for Marty&lt;/a&gt;&lt;/p&gt;
```