FSEM 1111 Computer Security – from a Free Software Perspective

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HTML

- Hyper Text Markup Language

- Standardized Document Format

- Similar to LaTeX

HTML and LaTeX

LaTeX	HTML
\documentclass	Cascading Style Sheet
latex	firefox, khtml
compile error	W3C HTML validator error
\command	`<tag>␣</tag>`
\"a (ä)	`ä` (ä)
\begin{document}	`<body>`
\end{document}	`</body>`

HTML Template

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD
  HTML 4.01 Transitional//EN">
<html>
 <head>
  <title>My Document</title>
 </head>
 <body>
  <h1>My Document</h1>
  Text here.
 </body>
</html>
```

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HTML Attributes

```
<body text="#000000" bgcolor="white">
<h1>My Document</h1>
Text here.
</body>
```

Links

`<a href="url">link text</a>`

`url` can be:

relative, local: `more.html`

absolute, local: `/images/logo.png`

absolute, global: `http://example.com/page.html`

Prefer relative and local over absolute and global.

Images

```
<img src="filename.ext"
     width="200"
     height="200"
     alt="Description">
<a href="http://example.com/">
  <img src="filename.ext"
       width="200"
       height="200"
       alt="Description"
       border="30"></a>
```

Sections

```
<h1>Like \chapter</h1>
<h2>Like \section</h2>
<h3>Like \subsection</h3>
<h4>Like \subsubsection</h4>
<h5>Like \subsubsubsection</h5>
<h6>Like \paragraph</h6>
```

Do not use these to increase font-size!

Text Formatting

LaTeX	HTML
\em	`<em></em>`
\bf	`<b></b>`
\it	`<i></i>`
\tt	`<tt></tt>`
^ (math mode)	`<sup></sup>`
_ (math mode)	`<sub></sub>`
\big	`<big></big>`
\small	`<small></small>`
\verb	`<pre></pre>`

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Text Formatting

LaTeX	HTML
\newline	` `
empty line	`<p></p>`
\newpage	no equivalent

Lists

LaTeX	HTML
\begin{itemize}	`<ul>`
\begin{enumerate}	`<ol>`
\item{a}	`<li>a</li>`
\begin{description}	`<dl>`
\item[a][b]	`<dt>a</dt><dd>b</dd>`

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Tables

LaTeX	HTML
\begin{tabular}{crrc}	<table␣border="4">
\\	<tr></tr>
&	<td></td> and <th></th>
\raisebox	<td␣rowspan="2"></td>
\multicolumn	<td␣colspan="2"></td>

Tables in HTML

Name	Present	Age
Alice	yes	14
Bob	no	7
Carol	yes	21
Dave		103

```
<table border="1">
<tr><th>Name</th><th>Present</th><th>Age</th></tr>
<tr><td>Alice</td><td>yes</td><td>14</td></tr>
<tr><td>Bob</td><td>no</td><td>7</td></tr>
<tr><td>Carol</td><td rowspan=2>yes</td><td>21</td></tr>
<tr><td>Dave</td><td>103</td></tr>
</table>
```

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Forms

```
<form action="/cgi-bin/process.pl" method="post">
 <input name="firstname" type="text" size="42">
 <select name="present">
   <option selected="selected">yes</option>
   <option>no</option>
 </select>
 <input type="submit" value="Click me to submit">
</form>
```

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Form processing: PHP

```php
<?php
$connection = mysql_connect("localhost", "user", "pass");
mysql_select_db("database", $connection);
$first = mysql_real_escape_string($_POST['firstname']);
$query = "INSERT INTO users VALUES(\"$first\")";
mysql_query($query, $connection);
header("Location: http://example.com/thankyou.html");
?>
```

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Hidden Form Elements and JavaScript

```
<form name="Feedback" action="/cgi-bin/process.pl"
      method="post">
 <input type="hidden" name="UserBrowser" value="">
  <script type="text/javascript">
    document.Feedback.UserBrowser.value
      = navigator.appName;
  </script>
  <input type="submit" value="Submit"><br>
</form>
```

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16

HTTP Methods

get Must not modify server state (google will crawl)

post May modify server state (google will not crawl)

Frames

```
</head>
<frameset cols="120,*">
<frame src="navigation.html" name="navigation">
<frame src="main.html" name="main">
</frameset>
<body>
Alternative body for browsers that do not support frames.
</body>
```

Updating Frames

A link can specify which frame should be updated:

```
<!-- somewhere in navigation.html -->
<body>
<a target="main" href="next.html">Linktext</a>
<body>
```

Questions

?

Task

Create a **professional** webpage for yourself. Remember, future employers will search for you on the web, and you want to have an appropriate presence on-line.

CS majors can have `http://www.cs.du.edu/~username/` by creating a folder `public_html` with the main page being called `index.html`.