



Introduction to HTML

CSE 264

Web Systems Programming

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Introduction to HTML

Hyper Text Markup Language

Markup language for creating web pages

Two types of elements

- Tags
- Text

Free format (mostly)

Provides *semantics* and *structure*, NOT *presentation*.

HTML – The Law

Lowercase tag names - `<p>`

Termination required - `<p>...</p>`

Attribute values in quotes

```
<td colspan="2">
```

Attribute values explicit

```
<input type="checkbox"
checked='checked' />
```

Nesting restrictions enforced

Must use entities for `<`, `>`, `&`, `'`, `"`

Nesting

Ok

```
<h1><strong>Header</strong></h1>
```

Not Ok

```
<h1><strong>Header</h1></strong>
```

Entities

<	<	&<name>;
>	>	&#<num>;
&	&	< == <
'	'	
"	"	
	 	

DOCTYPE

Unless otherwise noted, we will always use the doctype for html5:

```
<!DOCTYPE html>
```

Minimal Document

```
<!DOCTYPE html>
<html>
  <head>
    <title>Page title</title>
  </head>
  <body>
    The content of the doc
  </body>
</html>
```

Header Elements

`<title>`

`<base>`

`<link>`

`<meta>`

`<script>`

`<style>`

Common Attributes

`id`

- Uniquely identifies an element

`class`

- Places an element in a group/classification

`style`

- Associates styles with an element

`name`

- Form field name

Element Types

Inline

Block

Text Tags

`<p>` - Paragraph

`<h1>`, `<h2>`, `<h3>`, `<h4>`, `<h5>`,
`<h6>` - Headings

Content Tags

<abbr>

<acronym>

<cite>

<code>

<dfn>

<kbd>

<samp>

<var>

<blockquote>

<q>

<address>

Comment

<!--

This is an HTML comment.

-->

Tables

```
<table>
```

```
<thead>
```

```
  <tr> <th>heading cell</th> ...  
  </tr>
```

```
</thead>
```

```
<tbody>
```

```
  <tr> <td rowspan=n colspan=n>non  
  heading cell</td></tr>
```

```
</tbody>
```

```
</table>
```

Lists

Three types of lists:

- Ordered
- Unordered
- Definition

Ordered List

```
<ol>
```

```
  <li>Item 1</li>
```

```
  <li>Item 2</li>
```

```
</ol>
```


Unordered List

```
<ul>
```

```
  <li>Item 1</li>
```

```
  <li>Item 2</li>
```

```
</ul>
```

Definition List

```
<dl>
```

```
  <dt>Term 1</dt>
```

```
  <dd>Definition 1</dd>
```

```
  <dt>Term 2</dt>
```

```
  <dd>Definition 2</dd>
```

```
</dl>
```

Images

```
<img src=... alt=... name=...  
align=... height=... width=...  
hspace=... vspace=... border=...>
```

Image can be a jpeg, gif, png

Attributes

- src=url that contains image
- alt= Substitute text in place of image
- name=Name of image

Images (continued)

align=left, right, top, middle,
bottom/texttop, absmiddle, absbottom,
baseline, center

height,width - reserve space on page

— use for: performance, scaling (perhaps a bad idea), block fills

border= # of pixels in border

Hyperlinks

```
<a href='newpage.html'>Click  
Here!</a>
```

Line Break

Structuring

the `div` tag

the `span` tag

div

Block element

Division

Use to create named containers for sections of your document

```
<div class=... id=... style= ...>
```


span

Inline

Use to name small pieces of your document (typically text).

```
<span class=... id=... style= ...>
```

```
</span>
```

Forms

```
<form name=... action=...  
      method=(get|post) >  
</form>
```

```
<input type=... name=... size=n  
maxlength=n   value=... checked>
```

Forms - Elements

text

checkbox

radio

submit

reset

image (src=)

button

hidden

Forms - Elements

```
<textarea name=... rows=n  
cols=n>  
</textarea>
```

```
<select name=colors size=n  
multiple>  
  <option value="blue">blue</option>  
</select>
```

Additional Elements

Label

Button

Fieldset

Label Element

```
<label for="username">  
  <span  
    class="accesskey">n</span>ame:  
</label>  
  
<input type=text  
id="username" size=25>
```

Button Element

Use HTML for a button label

```
<button style=".....">
```

```
  click me
```

```
  <span style="...">now!</span>
```

```
</button>
```

Fieldset Element

Group Related Controls

```
<fieldset>
```

```
  <legend>ship to</legend>
```

```
  ..... . . .
```

```
</fieldset>
```


Inline Frames

Similar to regular frames, but are embedded in a regular HTML page

```
<iframe src="frame.html"  
align=(top, middle, bottom,  
left, right)...> </iframe>
```