

Computer/Human Interaction

Lecture 5

Overview:

- Multi-form, multi-page interaction
- Lists and tables
- Styling and style sheets

References:

- CSW3, CSRA, CSGD

Assignments out:

- Project overview, XHTML/CGI prototype

Purple Pizza Parlor, v4

- Output file is hard-coded to be in same directory as the CGI script with file name `output/orders.txt`
- Directory with output file must be writable by others, but don't want any other files to be writable, so create a separate subdirectory
- Set permissions on output directory to 733

Multi-forms, Multi-pages

- Web page can have more than one form. Each form can have a different action.
- Often want to carry data across multiple pages. Use the input element with hidden type.

```
<input type="hidden" name="size" value="Small" />
```
- Purple Pizza Parlor, v5

Lists

There are two kinds of lists: bulleted (unordered), and numbered (ordered). `` tags enclose list items.

```
<ul> <!-- An unordered list -->
  <li>The first item</li>
  <li>The second item</li>
</ul>
```

```
<ol> <!-- An ordered list -->
  <li>The first item</li>
  <li>The second item</li>
</ol>
```

Definition Lists

Definition lists associate terms with descriptions. However, they are useful as a generic way of associating items.

```
<dl>
  <dt> The term </dt>
  <dd> The description </dd>
  <dt> Another term </dt>
  <dd> Another description </dd>
</dl>
```

Tables

Tables are enclosed in `<table>` tags. `<tr>` tags enclose each row. `<td>` tags contain data while `<th>` tags contain headers.

```
<table cellpadding="0">
  <tr><th>Year</th><th>Sales</th></tr>
  <tr><td>2000</td><td>$18M</td></tr>
  <tr><td>2001</td><td>$25M</td></tr>
  <tr><td>2002</td><td>$36M</td></tr>
</table>
```

Styling

- Many HTML tags have presentation attributes. E.g., align, bgcolor, width.
- Old way is to set these attributes in each tag. Compare Purple Pizza Parlor, v6a vs. v6b.
- Hard to be consistent, especially over multiple pages. Hard to modify.
- Styling defines presentation attributes for a particular item or a class of items

Style Tag

- Style definitions goes in the head of an XHTML document enclosed in a <style> tag.

```
<head>
<style type="text/css">
  <!-- style code goes here -->
</style>
</head>
```
- CSS (Cascading Style Sheet) is one particular form of style definition.

Global CSS Styling

- Syntax is: selector { property: value;}

```
body { background: #FDF5E6; font-size:
      small; max-width: 800px; }
h1, h2, h3 { color: orange; background:
      purple; border: 1px solid #000; }
```
- Can specify tag hierarchy

```
h1 a:link, h1 a:visited {
  color: orange; }
h4 a:link, h4 a:visited {
  color: purple; }
```

CSS classes

- Style class is for style to be used in many places. Definition starts with '.' (dot)

```
.office-hr { background: yellow; }
```
- Associate style class in XHTML tag with class attribute

```
<td class="office-hr">
```

CSS ids

- Style id is for style to be used for one item in a page. Definition starts with '#'

```
#office-sched { width: 90%; position:
      relative; left: 5% }
```
- Associate style id in XHTML tag with id attribute

```
<table id="office-sched">
```

Cascading

- Can combine elements, classes, and ids hierarchically, i.e., they "cascade"

```
#office-sched td a { display: block;
/* makes entire element clickable */ }

#office-sched .office-hr { ... }

td.office-hr { ... }
```

XHTML Grouping

- Sometimes the item you want styled isn't enclosed in a tag. Or want to style only some of the items of same tag. Can group without any presentation effect.
- `` tag groups text

```
some regular text <span
  class="warning">special text</span>
back to regular text
```
- `<div>` tag groups structural items like paragraphs, lists, and tables. Particularly, useful for arranging items.

Style sheets

- `<style>` tag and style definitions are not recognized by all browsers
- Hide style definitions from old browsers in comments, but separation of style definitions from content makes sense.
- Style sheet is collection of style definitions.

```
<style type="text/css">
  @import url("style.css");
</style>
```
- See the CSS Zen Garden (ref: CSZN)

Purple Pizza Parlor, v5-v7

- Copy files `-hwang/cs350/lecture5/*.*` to your `cgi-bin` directory
- Edit the HTML and CGI script files to use the CGI scripts in your web space.
- Edit the response in the CGI programs so you can tell it's your program running.
- Make sure they are all running correctly.

In-class Exercise

- Complete any previous in-class exercises
- Experiment with table formatting and CSS styling.