html and php

CS4604
B. Aditya Prakash
Qianzhou Du
Introduction to html

- Basic page:

```html
<html>
<title> ...... </title>
<body>
 ...... 
<a> ...... </a>
 ...... 
<body>
</html>
```
• How to create a table in html?

<table>
<tr><td>Tom</td><td>Jerry</td></tr>
<tr><td>Book</td><td>Paper</td></tr>
......
</table>

• <table></table> creates a table.
• <tr></tr> creates a row in a table.
• <td></td> creates a grid in a row.

• Run the above code and get:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tom</td>
<td>Jerry</td>
</tr>
<tr>
<td>Book</td>
<td>Paper</td>
</tr>
</tbody>
</table>
• **Create a hyperlink:**

```html
<a href="index.php?title='index'" title = "index"> index </a>
```

• When you click this hyperlink, you will go to “index.php”, and send `title = ‘index’` to the new website.

• And you will send `title = ‘index’` to “index.php”
• Create a form:
  
  <form action="form_action.php" method = "get">
  <input type="text" name="Search">
  <input type="submit" name ="Search" value = "Search">
  </form>

  • “action” means that it will send this form’s data to “form_action.php”, when you submit this form.
  • “method” means how to send this form’s data.
  • There are some types you can choose.
  • For more information, please go to http://www.w3schools.com/html/
Introduction to PHP

• **Basic php**
  ```php
  <?php
  Echo "hello world!";
  ?>
  ```

• **Use "$" to define a variable.**  
  
  ```
  $s = "hello world";
  ```

• **Assign by reference**
  ```
  $a = & $b
  ```

• **Variable types:**

  - **String**  
  ```
  $s = "database";
  ```

  - **Integer**
  ```
  $i = 1;
  ```

  - **Double**
  ```
  $d = 6.66;
  ```

  - **Boolean**
  ```
  $b = false
  ```

  - **Array**
  ```
  $arr[0] = 1; $arr[1] = 2; ......
  ```

  - **Object**
• Understand scoping rules, variable scope: global vs. static.

• References: are not pointers

• Classes: PHP5 has a completely new mechanism for handling objects; $this is the invocant; one base class only
PHP

- **Embed php into html:**

  ```html
  <html>
  <body><?php echo "hello world!"; ?></body>
  </html>
  ```

  echo is a print function.

- **Also we can embed html into php:**

  ```html
  <html>
  <body><?php echo '<b>hello world!</b>'; ?></body>
  </html>
  ```
• **if** ... **else** ...
  
  if(expression) {statement1;} else { statement2; ... }

• **While**
  
  while(expression) {statement; ...}

• **do** ... **while** ...
  
  do {statement; ...} while(expression)

• **for**
  
  for(expression1; expression2; expression) {statement; ...}
• “POST” and “GET” methods:
First please recall the “form” in html:
<form action="form_action.php" method = "get">
<input type="text" name="Search">
......
In “form_action.php”, you can use GET method to get the value of “Search”.
$temp = \$_GET[‘Search’];

Also you can use the POST method in the same way:

$temp = \$_POST[‘name’];
• **Connect to postgresql:**

```php
pg_connect("host=? port=? dbname=? user=? Password=?");
```

• **Run query:**

```php
$query="select ... from ... where ...");
$queryresult = pg_query($query);
```
• Make sure you do error/exception handling
• E.g. what happens if the query fails?
• More postgresql functions in PHP:

pg_fetch_array

Fetch a row as an array.

pg_free_result($queryresult);

Free result memory.

pg_close($dbconn);

Close a postgresql connection.

You can check the following link to get more functions:
Instructions (if you want to use the cs4604 server)

• Create a directory called cs4604 in your home directory. Make it world readable (chmod a+r cs4604).

• You can access the directory from http://cs4604.cs.vt.edu/~<login>

• Each project should choose a member whose directory will contain the web interface for that project.