



Overview 8

Tables

Tables	186
Simple Table template	191
Instructor notes	191
Reminder on lists	191
Reminder on using é	193
Sample Résumé	193
Optional: Complex table template	194
Lab 5 design cheat-sheet	195
Lab 5	196
Review for Test 2	200
Completing Overview	204

Tables

If you are using a word processor, and want to organize information into rows and columns, you create a table, and place your items in cells; of course, it is not quite as easy in web page speak: we subdivide a table into rows, and subdivide rows into details... and we place our items in these detail. If you have several rows, the stacked 'details' take on the appearance of columns.

Example

row 1 detail 1	row 1 detail 2	row 1 detail 3
row 2 detail 1	row 2 detail 2	row 2 detail 3
row 3 detail 1	row 3 detail 2	row 3 detail 3

To create a Table:

Open Notepad in the Accessories area

Either open your template.htm, or create the default HTML document

```
<HTML>  
<HEAD><TITLE>Your Title</TITLE></HEAD>  
<BODY>  
</BODY>  
</HTML>
```

Save document on your account or floppy as an .htm, such as inclass.htm
Between the <body...> </body> tags, insert the following

```
<HTML>  
<HEAD><TITLE>Your Title</TITLE></HEAD>  
<BODY>  
<TABLE>  
<TR>  
<TD>Hi</TD>  
</TR>  
</TABLE>  
  
</BODY>  
</HTML>
```

This is the minimal table, 1 X 1, one row with one detail (a place to insert items into the table).

- `<TABLE></TABLE>` defines the table area
- `<TR></TR>` defines the table row
- `<TD></TD>` defines the table detail: the cell ... you **may not** have an empty detail.

To make a table bigger

- To increase the number of 'details' (cells) and generate the number of 'columns' you want, copy the `<TD></TD>`s repeatedly within the `<TR></TR>`
- To increase the number of 'rows' to the number you want, copy the entire `<TR></TR>`s repeatedly within the `<TABLE></TABLE>`
- Once the table structure is built, you may insert
 - Text
 - Images
 - Links

within the 'details'.

Using a table to organize material into rows and columns. Let's say you want to organize some words into a column, and you want the column about one third of the way over from the left margin, like so:

Hi Bye

If you were using a typewriter to do this, you would simply hit the tab key, or the space key, until the words were in the right place. But web browsers ignore spaces, and would draw the words to the left margin; therefore we have to use a table.

As shown above, the easiest way to create the table above is to start with an 1x1 table; that is, one row with one column (detail).

you should already have the following between the `<body>` and `</body>`, in `inclass.htm`:

```
<table>
<tr>
<td>Hi</td>
</tr>
</table>
```

HTML and the Art of the Web Page

Save changes, and switch to the browser, and refresh or reload. You should now see the word 'HI', clinging to the left margin.

By default, the borders are invisible; to verify that a table really is around the word, insert the attribute and value **border="1"** INSIDE of the table tag.

```
<table border="1">
<tr>
<td> HI </td>
</tr>
</table>
```

Save changes, and switch to the browser, and refresh or reload. You should now see the word 'HI', clinging to the left margin, in a now visible table. The value for the border ranges from 0-6 pixels, zero being none, and 6 being very thick.

But the word 'Hi' is not at all where we want it placed. By default, tables are only big enough to accommodate what is inside. To move the word over, we need to increase the size of the table.

Switch back to notepad, and insert the attribute and value **width="100%"** INSIDE of the table tag, allowing spaces to separate the tag and attributes.

```
<table border="1" width="100%">
<tr>
<td> HI </td>
</tr>
</table>
```

Save changes, and switch to the browser, and refresh or reload. You should now see the word 'HI', clinging to the left margin, in a now very wide table. If we had omitted the '%', the value would have been interpreted as 100 pixels. That might be very big on a small screen, and very small on a big monitor screen, so normally values are set as a percentage of the available screen.

Even though the table is bigger, the word is still to the left. What we need to do is insert another detail in front of the detail holding the word, in order to start inching our target word away from the margin. But what we don't want to do is put anything visible in the detail. We will use the non-breaking space character, ** **.

Rather than type, you may just copy the existing detail to the clipboard,

and paste an exact duplicate in front of the original. Then edit the contents of the first detail to ` `.

```
<table border="1" width="100%">
<tr>
<td> &nbsp; </td> <td> HI </td>
</tr>
</table>
```

Save changes, and switch to the browser, and refresh or reload. You should now see the word 'HI' is no longer clinging to the left margin, but only moved slightly. But we can use the same trick to make the detail wider that we used to make the table wider. INSIDE the first `<td>`, insert the attribute and value `width="30%"`.

```
<table border="1" width="100%">
<tr>
<td width="30%"> &nbsp; </td> <td> HI </td>
</tr>
</table>
```

Save changes, and switch to the browser, and refresh or reload. You should now see the word 'HI' is no longer near the left margin, but right where we wanted. But we also wanted the word 'BYE' to occur directly underneath it. What we need is another row, again with two details.

Copy from `<tr>` to `</tr>` to the clipboard, then paste the entire structure between the `</tr>` and the `</table>` .

```
<table border="1" width="100%">
<tr>
<td width="30%"> &nbsp; </td> <td> HI </td>
</tr>
<tr>
<td width="30%"> &nbsp; </td> <td> HI </td>
</tr>
</table>
```

Edit the word in the second detail on the second row to the desired contents; in this case, the word 'BYE'.

We also do not need the second row to repeat the already specified `width="30%"` for the column, so that may be removed.

And finally, we want the border to go away, leaving the words floating in space, away from the margin; so, reset the border to equal 0.

HTML and the Art of the Web Page

```
<table border="0" width="100%">
<tr>
<td width="30%"> &nbsp; </td> <td> HI </td>
</tr>
<tr>
<td width="30%"> &nbsp; </td> <td> BYE </td>
</tr>
</table>
```

You should wind up with the following

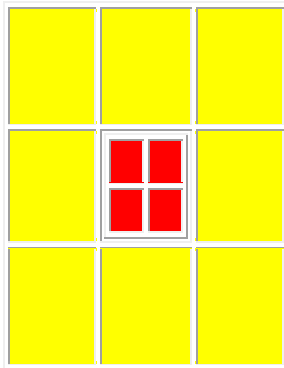
```
<table border="0" width="100%">
<tr>
<td width="30%"> &nbsp; </td> <td> HI </td>
</tr>
<tr>
<td > &nbsp; </td> <td> BYE </td>
</tr>
</table>
```

which yields

HI BYE

Fun with Tables

Details can hold text, links, or images... anything you can put into a web page you can put into a table, ***including another table!***



Simple Table template

You will need to copy the `<td>X</td>` until you have enough columns, then copy the `<tr>X</tr>` until you have enough rows

```
<html>
<head> <title> Title goes here </title>
<!-- your name goes here -->
</head>
<body background=" "
bgcolor=" "
text=" "
link=" "
vlink=" "> Stuff to display in the web page goes here

<table>
<tr><td> 1 x 1 Table </td></tr>
</table>

</body>
</html>
```

Instructor Notes

Reminder on lists

Remember, there are three kinds of lists

Ordered
Unordered, and
Definition

Ordered List Example: Sequence is important

1. list item
2. list item
3. list item

Ordered List Code

```
<ol>
<li> list item
<li> list item
</ol>
```

Unordered List Example: Sequence is not important

- list item
- list item
- list item

Unordered List Code

```
<ul>
<li> list item
<li> list item
</ul>
```

Definition List Example

Term
Definition

Definition List Code

```
<dl>  
<li> term  
<li> definition  
</dl>
```

Preformatted text <pre> </pre>

<pre></pre> was covered in my Overview 6-7, but they show how you could use it to organize information into rows and columns. However, the typewriter text is hard on the eyes, and you have limited format options.

Tables

When some books start discussing tables, they seem to think you can just type out a series of <tr> and <td> tags, and then go back to put your content in. I prefer to build a 1x1 table, with something in between the <td>x</td> tag, then copy the <td>...</td> tags until my columns are set, then copy the <tr>...<tr> tags until my rows are set. Then I can easily replace the contents of the details. (See page 186.)

Some books also introduces the <th></th> and so on, which I prefer to avoid, though I do cover them in lab 6, and in Overview 9.

Remember, the default border for a table is 0, but you can increase it; old html limited this to 6 pixels wide, but newer browsers can make huge borders, and color the borders using bordercolor=, or bordercolorlight=.

Some books also discuss making partial borders, or grids, using the rule= and frame= attributes. Be careful not to confuse this attribute with the framed pages, which we will discuss in a future Overview.

Again, most 'advanced' table elements discussed here are covered in Overview 9.

Width

A very important concept is to set table widths using percentages, so the page looks the same regardless of the size monitor your user has... I almost never use width= with a pixel value, unless the table is very small... the rest of the time I use width= with percentages, as in

```
<table width="90%">...</table>
```

Reminder on using é

To impress prospective employers, you need to spell Résumé correctly.

There are at least four ways to do this in Word Processors:

- * Insert\Symbol
- * Start\Run\Charmap... locate the acute e, copy, and then paste in Word
- * Press [Control] and ['] (single quote) at the same time. Release, press e
- * Press [Alt] and hold it down, type 0233 and let go.

For web pages, use `é` or `é`

Sample Résumé

R. Craig Collins Résumé 2600 S. 1 st Street Temple, TX 76504 254-298-8461 craig.collins@templejc.edu	
Education	<ul style="list-style-type: none">• PhD work Educational Computing, University of North Texas• MS Computer Education and Cognitive Systems University of North Texas• BBA Business Information Systems University of Texas El Paso
Experience	<ul style="list-style-type: none">• Temple College• University of Mary Hardin-Baylor• Cedar Valley College• Creative Education Institute• Center for Organization Research & Development
References	Available upon request

A good résumé would also have addresses, phone numbers, contact personnel, and dates. Further, there would be a lot of formatting of text.

My Vitæ (an educator's résumé with classes taken and classes taught) is on the class website.

Optional: Complex template with Table

```
<!--Sample Comprehensive Template-->
<html>
<head>
  <title>
    Your title goes here
  </title>
  <!-- your name goes here -->
</head>

<!--Only .gif or .jpg/jpeg images allowed-->
<body
background="filename.jpg"
bgcolor="#ffffff"
text="#000000"
link="#0000ff"
vlink="#ff00ff"
alink="#00ff00"
>

<!--Bookmark-->
  <a name="topp"></a>

<!-- H1-6 provides bold, size, and line break before/after-->
<h1>Headline text</h1>

<font color="#ff0000" size="+1">Large red words</font>
<br>

<br>

<br>
<a href="filename.htm">Link to local file</a>
<a href="http://URL">Link to default or index on web</a>
<br>
<!--Two by two table-->
  <table border="1" width="95%">
    <tr>
      <td>A1</td><td>A2</td>

      </tr>
      <tr>

        <td>B1</td><td>B2</td>
      </tr>
    </table>
    <br>
  <!--Link to jump to top of page-->
    <a href="#topp">To top</a>

  </body>
</html>
```

Lab 5 cheat-sheet

```
&#0233; &#0233;  
<h2> Craig's Résum  </h2>  
2600 S First, Temple, TX <br>  
254-298-8461 <br><br>
```

```
a href="mailto:  
craig.collins@templejc.edu <br><br>
```

Goals: To get an A

```
<table>  
<tr> <td> </td> <td> </td></tr>  
<tr> <td> </td> <td> </td></tr>  
<tr> <td> </td> <td> </td></tr>  
<tr> <td> </td> <td> </td></tr>  
</table>
```

Education	<ol style="list-style-type: none">1. BBA UTEP2. MS UNT3. PhD work UNT
Experience	TSTC CVC UMHB <u>TC</u> a href="http://www.templejc.edu"
References	Available upon request

Notice by drawing out what your résumé should look like, it is easy to go back and annotate which tags can make that design come to life.

Note how I labeled the headline, the links, how to make the é, and especially where the table, rows, and details should be; I also noted where breaks would be... although I could have used `<p>text </p>` for some material. The Experience section could probably be a list, as well, and a real résumé would include addresses, duties, contact personnel, etc.

To use a mailto

the html would be `Visible text`
Remember, mailto's don't work if you user only has a web email service.

Finally, please don't make your goal "to get an A" but instead to 'get a good paying job that utilizes hard earned skills,' or some other BS worthy verbiage. (BS stands for Bachelor of Science, by the way.)

Lab 5



A video on creating tables is available on the class web site.

General Lab Directions

Note: There is not enough time in lecture to cover all the material; read your book BEFORE you begin the lab

Note: Typically labs will require you to invest some time in the lab, outside of class lecture hours

Check with your Instructor for due date, typically Friday, 11:59PM (see due dates on web site)

•**NOTE:** Do NOT use CAPITAL letters OR spaces in file names.

•**NOTE:** Do NOT use curly quotation marks, such as ”; only use straight quotation marks, such as ".

- Note: If you need to stop work on a web page:
Save your changes in your text editor (Notepad)
When ready to resume,
open the file in notepad
and
double click web page to open browser

Part One: Documentation (30%)

At the end of this process, you will be turning in answers using the Quizzes area of Desire2Learn, based on the following. So, to get the best score, fill in all the answers in this document first.

Tags to document must include: <table> , <tr>, and <td>

Tag: <table> </table> Table

Syntax (required and [optional attributes]); including bgcolor=, border=, and width=)

What does a table do?:

What does border= do?

What does bgcolor= do?

What does width= do?

Example:

Notes: requires the use of < > and < > tag sets.

Tag: <tr> </tr> Table Row

Syntax (required and [optional attributes];)

What does a tr do?: :

Example:

Notes:

Tag: <td> </td> Table Detail

Syntax (required and [optional attributes]; including width=, background=, bgcolor=, and align=)

What does a td do?:

Example:

Notes:

Also, make sure to update:

Tag:

Syntax (required and [optional attributes];)

What does ol do?:

Example:

Notes: requires the use of < >

Tag:

Syntax (required and [optional attributes];)

What does ul do?:

Example:

Notes: requires the use of < >

Tag:

Syntax (required and [optional attributes];)

What does li do?:

Example:

Part 2, Activity (40%):

Create a folder named lab5
 (QUICKSTART ALTERNATIVE:
 copy your lab4 FOLDER, and rename the copy to lab5)
 (remove the [large version](#) of your image for page2.htm though,
 it is no longer needed)

Step 1

Add a link from index.html to resume.htm (See paths, p. 106)

Step 2

Create a new file of your own design called resume.htm inside of the pages folder
 (why not copy a template with a simple table (p. 191) into lab5\pages as a starting point, renaming it resume.htm?)

Grading Points

Résumé aspects	General web page aspects
(5 points) Your name, address phone, and email	(5 points) Appropriate Title, Control of default text/link colors, background color and background image
(5 points) Include the word résumé somewhere in the document, spelled résumé not resume (p. 195) (don't use special characters in filename)	See previous overviews for making backgrounds or class web site to download a background
(3 points) Section labels: Goals or Objectives, Experience, Education, and References	(5 points) At least a 2x3 table (see p. 186 or p. 191 for help with tables)
	(5 points) Use of a list (see Lab 1, p. 52, or p. 191)
	(2 points) Formatting (bolds, etc)
	(5 points) Links: link from index to résumé, link from résumé to index, (see Paths, p. 106) and one relevant link on résumé: Examples: convert email address to working mailto add link to Temple College add link to Employer etc
	(5 points) Appropriately coded

How to check for HTML Errors, page 42

Part Three: Hands On Questions: (30%)

Posers, could you answer these on a test?

- Tag typically surround text, so you can't leave `<td></td>` empty. What can you put in a detail if you don't wish anything to display?
- In `<Table width=" "...>` `width=` can use a pixel value or a percentage. Discuss when each could be used.
- If you set a detail width, `<td width=" "...>`, what happens to the detail if you put something wider in that detail?
- If you set a detail width, `<td width=" "...>`, what happens to the column, if you put something wider in any detail?
- You could control the height of a row, but normally this is left alone. what do you suppose sets the default height of a row?

Lab 5 Questions

1. Match the following

table	This tag creates a table
tr	This tag divides table rows into details, or cells
td	This table attribute sets how thick the edges of the table are
border	This tag divides tables into rows
width	This attribute can set how wide a table or detail is

2. Fill in the missing tags or attributes to code the following

Hi
Bye

```
<table ___="1" width="20%"  
<___><td>Hi</td></tr>  
<tr><td>___</td></tr>  
<___>
```

3. What does the `` tagset do? (From Quiz 1)

4. What does the `` tagset do? (From Quiz 1)

5. What does the `` tagset do? (From Quiz 1)

6. Tags typically surround text, so you can't leave `<td></td>` empty. What can you put in a detail if you don't wish anything to display?

- a) `<!--empty-->` c) the non-breaking space
b) `é` d) just put some text in that's the same color as the `bgcolor`

7. True or false? If you set a table to use pixels, such as `width="1280"`, but the user's browser window is only 800 pixels wide, a scroll bar will be required for the user to see the entire table. It would be better to use `width="100%"` instead, to size the table to fit the browser window.

8. If you set a detail width, `<td width="10"...>`, what happens to the detail if you put something wider, such as a picture that is 20 pixels wide, in that detail?

The image is cropped, only displaying the left 10 pixels

The detail expands to hold the image

The image will be shrunk to fit in the space available

The image will not display at all

9. If you set a detail width, `<td width="10"...>`, what happens to the column, if you put something wider in any detail, such as an image that is 20 pixels wide?

The entire column expands to the size of the widest item

Only the one detail with the image expands, the rest of the details stay 10 pixels wide

10. You could control the height of a row, but normally this is left alone. What do you suppose sets the default height of a row?


The row height will always be 1 pixel tall, unless the `height=` attribute is used

The height of the tallest item in that row

The width of the tallest item in any row

The row height will always be 100 pixels tall, unless the `height=` attribute is used

Review for Test 2

Before continuing, verify you are caught up with class participation discussions and MUDs. To check your progress: in the D2L classlist, choose the circular blue icon next to your name ; to check your Discussion progress, use the dropdown Tool and select Discussions...choose Apply.

You will need to scroll down to see which discussions you have and have not posted to.

Your participation grade will be penalized at the end of the semester for discussions you have not posted to.

Feel free to copy this to a word document and send it to me... I won't give you the right answers necessarily, but I'll let you know where you still need a little work. Note: This test is a little more challenging

How to Study, page 115; How to take a Collins test, page 116

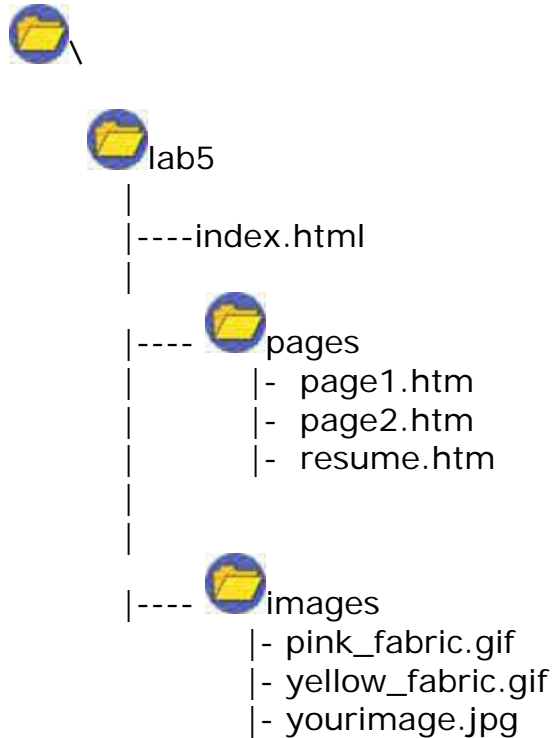
PS, The first part of the final will include the same information as Test 2.

I also suggest you Log into D2L, chooses Quizzes, then choose to take the Practice Test.

- Lists
 - Can you name the different types of lists?
 - What tags are used in each type of list?
- Text Formatting
 - What is a non-breaking space? How is it added to a web page, and what does it do?
 - What does `<tt>text</tt>` do?
 - What does `<pre>text</pre>` do?
- Graphics
 - Why use a background color, and background image?
Can you name the eight basic colors using hex (black, white, red, green, blue, purple, yellow, turquoise)
 - What is the attribute to set the background color?
 - What is the attribute to set the background image?
 - What file types are supported?
 - Which file format is best suited for photographs?
 - Which file format is best suited for graphs?
 - What are the three variations on gif? What do they do?
 - How many colors may be used in gif?
 - Which file format supports transparency?
 - Which image attribute sets the width?
 - Which image attribute sets the height?
 - Which image attribute sets the text alternative?

HTML and the Art of the Web Page

Paths



- Example 1:
Web page saved in lab5
image1.gif saved in lab5
``
- Example 2:
Web page saved in lab5
image1.gif saved in lab5\images
``
- Example 3:
Web page saved in lab5\pages
image1.gif saved in lab5
``
- Example 4:
Web page saved in lab5\pages
image1.gif saved in lab5\images
``
- Example 5:
Web page saved in lab5
bg.jpg saved in
<http://tc.templejc.edu/dept/cis/ccollins/ITMED1x16>
``

Imape Maps

Name the three types of hotspots

ftp

What does ftp stand for?

Tables

What three tags are used to create tables?

What tag creates the table?

What tag creates the row?

What tag divides the row into cells?

What can you put in a cell?

What attribute makes the border visible?

What attribute makes the table a different size?

What attribute makes the text go to the left, center, or right of the detail?

Code the following tick tac toe game:

X	X	O
O	O	X
X	X	O

SUBMITTING THE LAB

In Windows, zip the entire lab5 directory, and rename to yourname-lab5.zip. Directions on page 70.

Log into Desire2Learn, choose this class, choose Dropbox, select Lab 5. Browse to yourname-lab5.zip and upload it. (See page 70 or class website for detailed instructions)

You will then transfer your answers to the D2L Quiz for lab 5. You may use your notes for this part of lab. Choose the Quizzes menu, and locate Lab 5.

Completing Overview 8

- Submit by 11:59 pm, Friday, of the current week (see due dates on course web site)
 - Lab 5

MUD 8 (My Understanding, Details)

Respond in the class D2L Discussion forum to the following:

What topics, if any, during this time frame do you feel very comfortable with? Why?

What topics, if any, during this time frame do you not feel comfortable with?

- Participation Discussion 8 Respond in the class D2L Discussion forum to the following:
What can you put in a table?
-

For the next time frame:

- Read Overview 9
- Each test has a review; you may wish to write out pertinent information from the readings and activities
- After completing this overview, you may wish to preview Lab 6