

# CSIS 1280 Lab

## Tables

### Introduction:

Basically, tables are boxes, divided into rows and columns, that help you organize and display content on your web page. If the information you want to display is too complicated for a list, or you can't get a group of pictures to align properly, a well-designed table may be the solution.

Here's a table with two rows and three columns		
Column 1	Column 2	Column 3

Here is one of the most basic tables you can create:

1 2 3

4 5 6

7 8 9

It doesn't look much like a table, since it doesn't have borders, headings, or shading, but it is a good place to start since it doesn't require any extra attributes or tags. Here's the HTML code that created it:

```
<TABLE>
<TR> <TD>1</TD> <TD>2</TD> <TD>3</TD> </TR>
<TR> <TD>4</TD> <TD>5</TD> <TD>6</TD> </TR>
<TR> <TD>7</TD> <TD>8</TD> <TD>9</TD> </TR>
</TABLE>
```

Each number is surrounded by `<TD></TD>` ("table data"). This creates a cell. Every three of these cells are surrounded by `<TR></TR>` ("table row"). This creates a row. The whole thing is surrounded by `<TABLE></TABLE>`. The browser will count the number of rows and the number of columns in the longest row and make a table of the appropriate size. In the final table, every row will have as many columns as the longest row regardless of how many you typed in. Unspecified cells will be blank.

## The <TABLE> tag

Every table must be surrounded by the <TABLE> and </TABLE> tags. Whenever the browser encounters a table, it reads in everything between these two tags before deciding how to arrange and display it. If you forget either one of them, your table will not show up at all!

The <TABLE> tag has quite a few attributes. None are required; here are a few of the more useful ones:

Attribute	Description
BORDER	Tables, by default, have no visible borders. If you would like your table to have a border, assign a value (in pixels) to this attribute. BORDER=1 (or just BORDER) will give your table a very thin border. BORDER=5 is much thicker.
CELLSPACING	Controls how much space (in pixels) there is between cells. Default cellspacing is 1, but you can use this attribute to raise or lower it (e.g., CELLSPACING=0).
CELLPADDING	Cellpadding is the space between a cell's borders and its content. In tables with borders, you may want to set CELLPADDING=5 to avoid having text touch the edges of the cells.
WIDTH	WIDTH can be assigned either a number of pixels or a percentage of the width of the window. For example, WIDTH=80 will result in a table that is 80 pixels wide, and WIDTH=80% will result in a table that is 80% as wide as the browser window.
BGCOLOR	Controls the default background color of every cell in your table. As with the BGCOLOR attribute in the <BODY> tag, BGCOLOR can be assigned a built-in color or an RGB value (e.g., BGCOLOR="#ffdab9"). If no BGCOLOR is specified, the table will have the same background color as the page.

## The <TR> tag

Every row you create within your table must be surrounded by <TR> and </TR> tags. Here are some of the attributes you can include:

Attribute	Description
ALIGN	Controls the horizontal alignment in the text of each cell in that row. Its default is LEFT, but you can set it to CENTER or RIGHT.
VALIGN	Controls the vertical alignment in the text of each cell in that row. Its default is MIDDLE, but you can set it to TOP or BOTTOM.
BGCOLOR	Controls the default background color of every cell in the row. As with the BGCOLOR attribute in the <TABLE> tag, BGCOLOR can be assigned a built-in color or RGB value (e.g., BGCOLOR="#FF00FF", which is red plus blue, or magenta). If no BGCOLOR is specified, the row will have the same background color as the table.

## The <TD> tag

All text within your table should be surrounded by <TD> and </TD> (or <TH> and </TH>). These tags create the actual data cells, and thus have a lot of optional attributes to help you customize the cells:

Attribute	Description
ALIGN	Controls the horizontal alignment in the text in the cell. Its default is LEFT, but you can set it to CENTER or RIGHT.
VALIGN	Controls the vertical alignment in the text in the cell. Its default is MIDDLE, but you can set it to TOP or BOTTOM.
BGCOLOR	Controls the background color of this cell. If no BGCOLOR is specified, the cell will have the same background color as the row.
ROWSPAN	Controls how many rows the cell occupies, allowing you to merge the cells of more than one row into one tall cell. The default is 1, but you can raise this attribute to be anything up to the number of remaining rows. For example, ROWSPAN=3 will cause the cell to be 3 rows high. When you have set a cell to occupy more than one row, you will usually be filling fewer cells in the next few rows. If, for example, you set ROWSPAN=4 on one cell in a table that is 5 columns wide, the next 3 rows would have 4 columns to fill instead of 5.
COLSPAN	Controls how many columns the cell occupies, allowing you to merge the cells of more than one column into one long cell. The default is 1, but you can raise this attribute to be anything (if you raise it above the number of remaining columns, it will create new ones on the right). For example, COLSPAN=3 will cause the cell to be 3 columns long.

## Other table tags

There are two other tag pairs which can be used within tables:

- `<TH></TH>` These tags can be used in place of `<TD></TD>` to create a table header cell. Header cells are just like regular cells except that all text is centered and bold. All the attributes of `<TD>` can also be used for `<TH>`.
- `<CAPTION></CAPTION>` If you wish your table to have a caption, you can place these tags inside the `<TABLE></TABLE>` tags. Any text you type between `<CAPTION></CAPTION>` will be placed above the table as a caption.

## Advanced Example

Here is a sample table created to display a schedule:

Schedule					
Time	Monday	Tuesday	Wednesday	Thursday	Friday
9:00	MAT 104		MAT 104		MAT 104
10:00		PHI 201		PHI 201	
11:00	SPA 207		SPA 207		SPA 207
Noon	LUNCH				

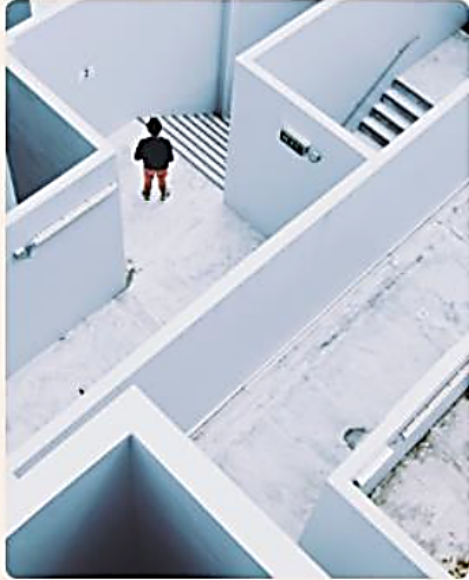
Notice that it uses many of the attributes we described above, especially ROWSPAN and COLSPAN. The HTML code that created this table is listed below. If you examine this code closely, you'll notice that the fourth row (11:00) seems to be missing a few cells. This is because the third row has two cells with ROWSPAN=2, which means they each automatically take up a cell in the fourth row as well.

The code for the above table is illustrated in the next following. All html and styling codes are inline for illustration. However, in the chapter tutorial you will see how to implement css files for more control over

HTML code for Schedule	
<pre> &lt;TABLE BORDER=1 CELLPADDING=5&gt;    &lt;CAPTION&gt;&lt;H3&gt;Schedule&lt;/H3&gt;&lt;/CAPTION&gt;    &lt;TR BGCOLOR=SILVER&gt;     &lt;TH BGCOLOR=BEIGE&gt;Time&lt;/TH&gt;     &lt;TH&gt;Monday&lt;/TH&gt;     &lt;TH&gt;Tuesday&lt;/TH&gt;     &lt;TH&gt;Wednesday&lt;/TH&gt;     &lt;TH&gt;Thursday&lt;/TH&gt;     &lt;TH&gt;Friday&lt;/TH&gt;   &lt;/TR&gt;    &lt;TR ALIGN=CENTER VALIGN=MIDDLE&gt;     &lt;TD BGCOLOR=BEIGE&gt;9:00&lt;/TD&gt;     &lt;TD&gt;MAT 104&lt;/TD&gt;     &lt;TD&gt;&lt;/TD&gt;     &lt;TD&gt;MAT 104&lt;/TD&gt;     &lt;TD&gt;&lt;/TD&gt;     &lt;TD&gt;MAT 104&lt;/TD&gt;   &lt;/TR&gt; </pre>	<pre>     &lt;TR ALIGN=CENTER VALIGN=MIDDLE&gt;       &lt;TD BGCOLOR=BEIGE&gt;10:00&lt;/TD&gt;       &lt;TD&gt;&lt;/TD&gt;       &lt;TD ROWSPAN=2&gt;PHI 201&lt;/TD&gt;       &lt;TD&gt;&lt;/TD&gt;       &lt;TD ROWSPAN=2&gt;PHI 201&lt;/TD&gt;       &lt;TD&gt;&lt;/TD&gt;     &lt;/TR&gt;      &lt;TR ALIGN=CENTER VALIGN=MIDDLE&gt;       &lt;TD BGCOLOR=BEIGE&gt;11:00&lt;/TD&gt;       &lt;TD&gt;SPA 207&lt;/TD&gt;       &lt;TD&gt;SPA 207&lt;/TD&gt;       &lt;TD&gt;SPA 207&lt;/TD&gt;     &lt;/TR&gt;      &lt;TR ALIGN=CENTER VALIGN=MIDDLE&gt;       &lt;TD BGCOLOR=BEIGE&gt;Noon&lt;/TD&gt;       &lt;TD COLSPAN=5 BGCOLOR=TURQUOISE&gt;         L U N C H&lt;/TD&gt;     &lt;/TR&gt;   &lt;/TABLE&gt; </pre>

Your Task

Create the following table. Please style your table and the image so it shows close to the image below.

	It's a maze		
	You can span down.	You can span accross	
		It's like a puzzle	
		This way	That way
			Where am I?
			Over here