

# Tables

## 1. Table construction:

- Tables are constructed or “read” from left to right and top to bottom. Think of how you are reading this text.
- A set of cells going across the width of the table from left to right is referred to as a Table Row `<tr>`
- The information in each Table Row `<tr>` is broken down into Table Data `<td>`. Each `<td>` represents a cell in the table.

The diagram shows a 3x3 table with a double border. The top row contains three cells, each labeled 'Row 1' in red text. The middle row contains three cells, each labeled 'Row 2' in black text. The bottom row contains three cells, each labeled 'Row 3' in green text. Below this table, another 3x3 table is shown with a double border. The first column contains three cells, each labeled 'Col 1' in red text. The second column contains three cells, each labeled 'Col 2' in green text. The third column contains three cells, each labeled 'Col 3' in black text.

## 2. Tables are made up of the following elements:

### 3. `<table>` `</table>`

- Each table starts and ends with the **TABLE** tag set.

### 4. `<tr>` `</tr>`

- Each horizontal row is made up of a **TABLE ROW** tag set.

### 5. `<td>` `</td>`

- Within each table row tag set, the **TABLE DATA** tag sets contain the table’s actual data. `<TD>` tags make up the cells of the table.

## 6. Here is what the code looks like for the two tables above.

```
50 <table border="1">
51
52   <tr>
53     <td >Row 1</td>
54     <td >Row 1</td>
55     <td >Row 1</td>
56   </tr>
57
58   <tr>
59     <td >Row 2</td>
60     <td >Row 2</td>
61     <td >Row 2</td>
62   </tr>
63
64   <tr >
65     <td >Row 3</td>
66     <td >Row 3</td>
67     <td >Row 3</td>
68   </tr>
69
70 </table>
71
```

```
8 <table border="1">
9
10  <tr>
11    <td>Col 1</td>
12    <td>Col 2</td>
13    <td>Col 3</td>
14  </tr>
15
16  <tr>
17    <td>Col 1</td>
18    <td>Col 2</td>
19    <td>Col 3</td>
20  </tr>
21
22  <tr>
23    <td>Col 1</td>
24    <td>Col 2</td>
25    <td>Col 3</td>
26  </tr>
27
28 </table>
29
```

## 7. You can style a table using CSS. The possibilities are endless!

```
table {
  border: solid 2px gray;
  border-collapse: collapse; // makes the border solid rather than beveled
}
```

```
td{
  margin: 10px;
  border: solid 2px gray;
}
```

```
.gray {
  color: green;
}
```

← { Apply this class to a part of a table:  
`<td class="green">text</td>`  
and the text will be green.

## 8. The Counter-intuitive Colspan attribute

- **COLSPAN** merges row cells together.
- For example, if you have a table with three columns and three rows.
- You want to combine the cells in the first **ROW**
- You do that by adding the **COLSPAN** attribute to the appropriate **<TD>** tag set
- and removing the **<TD></TD>** elements you no longer need

Do	Re	Mi
One	Two	Three
Rock	Paper	Scissors

Do Re Mi		
One	Two	Three
Rock	Paper	Scissors

```
<table border="1">
  <tr class="red">
    <td colspan="3" align="center">Do Re Me</td>
  </tr>
  <tr>
    <td >One</td>
    <td >Two</td>
    <td >Three</td>
  </tr>
  <tr class="green">
    <td >Rock</td>
    <td >Paper</td>
    <td >Scissors</td>
  </tr>
</table>
```

## 9. Conversely, if you want to merge cells together in a column, you do it with the **ROWSPAN** attribute.

- In this instance, you want to combine the cells in the first column
- You do that by adding the **ROWSPAN** attribute to the appropriate **<TD>** tag set
- and removing the **<TD></TD>** elements you no longer need

```
<table border="1">
  <tr class="red">
    <td rowspan="3">Do</td>
    <td >Re</td>
    <td >Mi</td>
  </tr>
  <tr>
    <td >Two</td>
    <td >Three</td>
  </tr>
  <tr class="green">
    <td >Paper</td>
    <td >Scissors</td>
  </tr>
</table>
```

Do	Re	Mi
	Two	Three
	Paper	Scissors