Table-Based Web Pages

Web Authoring and Design

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Outline

- What do we mean by Table-Based Web Sites?
- Review Table Tags/Structure
- Tips/Debugging/Applications
- Summary
- Review/Discussion
Submissions/Quizzes/GitHub

- Course material (Public)

- Submissions/Quizzes (Graded/Private)
  - www.zjnu.xyz
  - (Login – Student No)
  - Password Emailed
Activity

Show examples of students Github websites
(5-10 Minutes)
Review

Basic Tags
- h1~h6, p, body, title, img, a, strong, b, em, i, ...

List Tags
- ul li, ol li, dl dt dd, ...

Form Tags
- form, fieldset, legend, label, input, select, option, textarea, button, ...

Table Tags
- table, thead, tbody, tfoot, tr, td, colgroup, col

...
What are Tables for?

Share examples and thoughts on what HTML could be used for?

(5 Minutes)
HTML Tables and Tags

The table element is used to represent multiple dimensions data. How to organize and present tabular data in a web page or application is interesting and challenging.

The table element is made from these 5 parts:

- Table caption - `<caption>`
- Row group - `<thead>`, `<tbody>`, `<tfoot>`
- Column group - `<colgroup>`, `<col>`
- Table rows - `<tr>`
- Table cells - `<td>`, `<th>`
Review Table Tags

table

<table>
<thead>
<tr>
<th>Row 2</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>cell1</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cell2</td>
<td></td>
<td>D</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>A</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B</td>
</tr>
</tbody>
</table>

</table>
<table>
<thead>
<tr>
<th>Header</th>
<th>Header</th>
<th>Header</th>
<th>Header</th>
<th>Header</th>
<th>Header</th>
</tr>
</thead>
<tbody>
<tr>
<td>sample data</td>
<td>sample data</td>
<td>sample data</td>
<td>sample data</td>
<td>sample data</td>
<td>sample data</td>
</tr>
<tr>
<td>sample data</td>
<td>sample data</td>
<td>sample data</td>
<td>sample data</td>
<td>sample data</td>
<td>sample data</td>
</tr>
<tr>
<td>sample data</td>
<td>sample data</td>
<td>sample data</td>
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<tr>
<td>sample data</td>
<td>sample data</td>
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<td>sample data</td>
<td>sample data</td>
</tr>
<tr>
<td>sample data</td>
<td>sample data</td>
<td>sample data</td>
<td>sample data</td>
<td>sample data</td>
<td>sample data</td>
</tr>
<tr>
<td>footer</td>
<td>footer</td>
<td>footer</td>
<td>footer</td>
<td>footer</td>
<td>footer</td>
</tr>
</tbody>
</table>

Table caption
Question

What is the tag to identify a row inside of a table?

a) <tr>
b) <row>
c) <th>
d) <td>
Answer

a) tr
Colspan/Rowspan

```xml
<table>

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;td colspan=&quot;3&quot;&gt; &lt;/td&gt;</td>
<td>&lt;td&gt; &lt;/td&gt;</td>
<td>&lt;/td&gt;</td>
</tr>
<tr>
<td>&lt;td&gt; &lt;/td&gt;</td>
<td>&lt;td&gt; &lt;/td&gt;</td>
<td>&lt;td&gt; &lt;/td&gt;</td>
</tr>
<tr>
<td>&lt;td&gt; &lt;/td&gt;</td>
<td>&lt;td&gt; &lt;/td&gt;</td>
<td>&lt;td&gt; &lt;/td&gt;</td>
</tr>
<tr>
<td>&lt;td&gt; &lt;/td&gt;</td>
<td>&lt;td&gt; &lt;/td&gt;</td>
<td>&lt;td&gt; &lt;/td&gt;</td>
</tr>
</tbody>
</table>

</table>
```
<table>
<thead>
<tr>
<th></th>
<th>DynDNS Pro</th>
<th>Dyn Standard DNS</th>
<th>DynECT Managed DNS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Domain Style</strong></td>
<td>yourname.dyndns.org</td>
<td>yourdomain.com</td>
<td>yourdomain.com</td>
</tr>
<tr>
<td><strong>Resource Records</strong></td>
<td>Up to 30 yourname.dyndns.org</td>
<td>50 records</td>
<td>100 records</td>
</tr>
<tr>
<td></td>
<td>style hostnames</td>
<td>200 records</td>
<td>500 records</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>500+ records</td>
</tr>
<tr>
<td><strong>Domains/Zones</strong></td>
<td>N/A</td>
<td>1 Zone (yourdomain.com)</td>
<td>10 Zones</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>25 Zones</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>50 Zones</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>50+ Zones</td>
</tr>
<tr>
<td><strong>DNS Queries per Month</strong></td>
<td>N/A</td>
<td>600,000</td>
<td>1,200,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1,800,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1,800,000+</td>
</tr>
<tr>
<td><strong>Record Types</strong></td>
<td>One A record One MX record</td>
<td>A, AAAA, CNAME, MX, TXT, SRV, NS, LOC, PTR</td>
<td>A, AAAA, CERT, CNAME, DHCID, DNAME, DNSKEY, DS, IPSECEKEY, KEY, XK, LOC, MX, NAPTR, NS, NSAP, PTR, PX, RP, SOA, SPF, SRV, SSHFP, TXT</td>
</tr>
<tr>
<td><strong>Network Style</strong></td>
<td>Unicast Network in 5 global data centers</td>
<td>IP Anycast Network in 15 global data centers and the fastest, most secure, stable and reliable DNS network available on the market today.</td>
<td></td>
</tr>
<tr>
<td><strong>Advanced Features</strong></td>
<td>No</td>
<td>DNSSEC</td>
<td>Active Failover Traffic Management Advanced Traffic Management</td>
</tr>
</tbody>
</table>
Which of the following are table tags?

a) table, thead, tr, td
b) colspan, table, tr
c) table, tt, tr, td
Answer

a) table, thead, tr, td

Other options include table row elements and attributes
HTML Table Tips
TIP 1 - Keep your tables as simple as possible

- Nesting tables 'inside' tables is ok - but keep it to the minimum
- You can usually achieve the same layout effect by using more rows and columns in your main table
TIP 2 - Keep your tables as short as possible

Better to have a sequence of smaller tables than one big one
TIP 3 - Pen and Paper First

Plan your initial layout
TIP 4 - Label the empty 'TD' data cells (Debugging)

Once you have completed the blank table then label/number the data cells so you can see which is which when you start filling them up.

I know it sounds a bit 'simple' - but when you start filling the cells up with content, the page in your html editor expands enormously and its much easier to locate a cell in your editor if its labelled than if its not.
<table>
<thead>
<tr>
<th><strong>Row 1</strong></th>
<th><strong>HEADER</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Row 2</strong></td>
<td>LEFT INDEX</td>
</tr>
<tr>
<td>TEXT 1</td>
<td>PIC 1</td>
</tr>
<tr>
<td>PIC 2</td>
<td></td>
</tr>
<tr>
<td><strong>Row 3</strong></td>
<td>TEXT 2</td>
</tr>
<tr>
<td>PIC 3</td>
<td></td>
</tr>
<tr>
<td>TEXT 3</td>
<td></td>
</tr>
<tr>
<td><strong>Row 4</strong></td>
<td>TEXT 3</td>
</tr>
<tr>
<td>TEXT 3</td>
<td></td>
</tr>
</tbody>
</table>
TIP 5 – Table Width="%"

- Declare the size of the table either as fixed units
  - e.g., `<table width="700">` where 700 is measured in pixels

- or you can define it as a percentage (%) of the screen its viewed in
  - e.g., `<table width="100%">`
TIP 6 – Borders and colours to see what you are doing

The normal border effect you get using "border=1" is quite ugly really and most of the time you will have set the parameter to border="0". However - while you are building your table - and especially when you are faulting a table - turn up the volume to border="2" so you can see what you are doing
TIP 7 - Table attribute "SUMMARY".

The table attribute "summary" should be used to describe what is inside the table for the convenience of non visual site visitors.

Example:

```html
<table width="100%" summary="Top page table incorporating top header bar, left side index bar and data cells of text and pictures">
```

Table Background Colour

You can set the background color of your table and cells simply by using "bgcolor" attribute
## Table Background Colour

```html
<table bgcolor="yellow" cellpadding="20" cellspacing="25" style="border:10 solid green">

<tr>
<td bgcolor="light blue" style="border:4 solid red">xxxxxxxxxxxxxxxxx</td>
<td bgcolor="purple" style="border:5 dotted purple">xxxxxxxxxxxxxxxxx</td>
</tr>

<tr>
<td style="border:5 solid blue">xxxxxxxxxxxxxxxxx</td>
<td bgcolor="pink">xxxxxxxxxxxxxxxxxxxx</td>
</tr>

</table>
```
Cellpadding and Cellspacing

Control spacing between content and borders
Cellpadding and Cellspacing

**Cellpadding** is an attribute of `<table>` tag. By using cellpadding attribute you can set the amount of space between the contents of the cell and the cell wall.

Example: `<table cellpadding="4">`

**Cellspacing** is also an attribute of `<table>` tag. By using cellspacing attribute you can set the amount of space between the table cells.

Example `<table cellspacing="4">`
Cellpadding and Cellspacing

1. Cellspacing attribute: Define space between cells and the table

2. Cellpadding attribute: Define space between the content and the cell

HTML code for this table:

```html
<table cellpadding="20" cellspacing="25" style="border:10 solid green">
  <tr><td style="border:4 solid red">xxxxxxxxxxxxx</td><td style="border:5 dotted purple">xxxxxxxxxxxxxx</td></tr>
  <tr><td style="border:5 solid blue">xxxxxxxxxxxxx</td><td xxxxxxxxxxxxxxx</td></tr>
</table>
```
Table Background Image

- Background attribute to add any images as background of your table or to each cell separately

```html
<table>
  <tr>
    <td style="background: url(tree.jpg);">..</td>
    <td>..</td>
  </tr>
</table>
```
You are learning Web Designing
You are learning Web Designing

Cell with image as a background

Using different background for table.

Cell with another image as background

You are learning Web Designing
This attribute of the table HTML element configures the amount of space between the content of each table cell and the edge of the table cell

a) cell
b) valign
c) cellpadding
d) colspan
Answer

\boxed{c) cellpadding}
Question

HTML element that configures the row(s) in the table footer area is “tbody”

a) True
b) False
b) False

It should be “tfoot”
You can also apply border to your image by using the "style" attribute

```html
<img style="border:5 solid yellow" src="world.jpg" height="200" width="400" alt="image"/>
```
Note on Anchors

- Open links in a new window using the ‘target’ attribute
  `<a href="cat.html" target="_blank" >Link to Cats</a>`

- Clickable Images
  - Take advantage of graphics
  `<a href="cats.html" target="_blank" ><img src="path of the image"></a>`
Special Characters

- Display HTML coding on your web page for visitors to see (e.g., <, >, &, ..)
- Popular escape codes:

<table>
<thead>
<tr>
<th>CODE</th>
<th>DESCRIPTION</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td> </td>
<td>Space</td>
<td></td>
</tr>
<tr>
<td>&lt;</td>
<td>Less than</td>
<td>&lt;</td>
</tr>
<tr>
<td>&gt;</td>
<td>Greater than</td>
<td>&gt;</td>
</tr>
<tr>
<td>&quot;</td>
<td>Quotation</td>
<td>&quot;</td>
</tr>
<tr>
<td>&amp;</td>
<td>Ampersand</td>
<td>&amp;</td>
</tr>
<tr>
<td>©</td>
<td>Copyright</td>
<td>©</td>
</tr>
<tr>
<td>®</td>
<td>Registered</td>
<td>®</td>
</tr>
<tr>
<td>¶</td>
<td>Paragraph Sign</td>
<td>¶</td>
</tr>
<tr>
<td>¢</td>
<td>Cent</td>
<td>¢</td>
</tr>
<tr>
<td>²</td>
<td>Superscript (example 2)</td>
<td>²</td>
</tr>
<tr>
<td>¼</td>
<td>Fraction (example ¼)</td>
<td>⅛</td>
</tr>
<tr>
<td>£</td>
<td>Pound</td>
<td>£</td>
</tr>
<tr>
<td>°</td>
<td>Degrees</td>
<td>°</td>
</tr>
<tr>
<td>¥</td>
<td>Yen</td>
<td>¥</td>
</tr>
</tbody>
</table>
Sub and Sup

Example:

Regular Text.

<sub> Lowered SUB text. </sub>

Regular text.

<sup> Raised SUP text. </sup>

Regular Text. Lowered SUB text. Regular Text. Raised SUP text.
This Week

- Review Slides
- Read Associated Chapters
- Practical Tasks
  - Experiment and Have Fun
- Online Quizzes
  - Additional quizzes each week
- Update Github Website
  - Regularly make commits/updates
  - Structure your/folders/sections
    - Manage/demonstrate different features/techniques
Summary

- Overview of Traditional Table-Based HTML Techniques
- See how HTML Tables allow you to format/represent data/layouts in an organised manner
- Next week we’ll move onto CSS for controlling/formatting
  ▶ Split Content from Formatting
  ▶ Greater control and customizability
Questions/Discussion
Individual Project

- Develop and Implement at Tutorial Website on HTML/CSS
- Published on Github
  - Show regular progressive updates
  - Github commit history/log
  - (Submitted with the final website at the end)
- Multiple Pages
  - Theme
- Professional Solution
Deliverables

Easy to use/Structured
- Navigation section,
- Logo section
- Header/Footer
- ...

Website:
- Contact page,
- About page
- Home page
- Content pages (Tutorials/Information)
- Resizable
- Support different browsers
- +

Style:
- Consistent layout/theme
- Modern and interesting (use colours and formatting)
- `fav` icon (browser tab)
- Comments in html
- Images (.jpg/.gifs), ...

`Professional implementation'
- Use of tags/styles/formatting should be done in a professional/well organised way
Revision Questions
How would you automatically transfer your visitors to a new web page?
Answer

You can do it with the help of meta tag mentioned below:

```html
<META HTTP-EQUIV="Refresh" CONTENT="2";
    URL="http://www.cats.com">
```

Place this tag between `<HEAD>`</HEAD>`

It will load your site.com in 2 seconds.
What is a `<dl>` tag in HTML?

a) definition list tag
b) delete tag
c) double tab tag
d) table column tag
a) definition list tag

<dl> is a definition list tag used in HTML. It is used with <dt> and <dd>. <dt> lists the item while <dd> describes it.
Question

Colspan=n can be added to only what tag?

a) Table
b) Td
c) Tr
Answer

Answer b)