Web development

lesson 5

Sep 29, 2024

What is a table?

A table is a structured set of data made up of rows and columns (tabular data). A table allows you to quickly and easily look up values that indicate some kind of connection between different types of data, for example a person and their age, or a day of the week, or the timetable for a local swimming pool.

Person	Age
Chris	38
Dennis	45
Sarah	29
Karen	47

How does a table work?

Information is easily interpreted by making visual associations between row and column headers.

Data about the planets of our solar system (Source: Nasa's Planetary Fact Sheet - Metric).

	Name	Mass (10^{24}kg)	Diameter (km)	Density (kg/m^3)	Gravity (m/s^2)	Length of day (hours)	Distance from Sun (10^6km)	Mean temperature (°C)	Number of moons	Notes
Terrestrial planets	Mercury	0.330	4,879	5427	3.7	4222.6	57.9	167	0	Closest to the Sun
	Venus	4.87	12,104	5243	8.9	2802.0	108.2	464	0	
	Earth	5.97	12,756	5514	9.8	24.0	149.6	15	1	Our world

Let's make a table

```html
<!DOCTYPE html>
<html lang="en-US">
  <head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width">
    <title>Table template</title>
  </head>
  <body>
    <h1>Table template</h1>

  </body>
</html>
```

Add the table tag

The content of every table is enclosed by these two tags: `<table></table>`. Add these inside the body of your HTML.

A table cell

The smallest container inside a table is a table cell, which is created by a `<td>` element ('td' stands for 'table data'). Add the following inside your table tags:

```
<td>Hi, I'm your first cell.</td>
```

A table row

We use the `<tr>` element ('tr' stands for 'table row') to group the cells belong to the same row:

```
<tr>
  <td>Hi, I'm your first cell.</td>
  <td>I'm your second cell.</td>
  <td>I'm your third cell.</td>
  <td>I'm your fourth cell.</td>
</tr>
```

Your table

```html
<table>
    <tr>
        <td>Hi, I'm your first cell.</td>
        <td>I'm your second cell.</td>
        <td>I'm your third cell.</td>
        <td>I'm your fourth cell.</td>
    </tr>
    <tr>
        <td>Second row, first cell.</td>
        <td>Cell 2.</td>
        <td>Cell 3.</td>
        <td>Cell 4.</td>
    </tr>
</table>
```

Hi, I'm your first cell.	I'm your second cell.	I'm your third cell.	I'm your fourth cell.
Second row, first cell.	Cell 2.	Cell 3.	Cell 4.

Adding headers with `th` elements

```
<table>
  <tr>
    <td> </td>
    <td>Knocky</td>
    <td>Flor</td>
    <td>Ella</td>
    <td>Juan</td>
  </tr>
  more rows...
```

	Knocky	Flor	Ella	Juan
Breed	Jack Russell	Poodle	Streetdog	Cocker Spaniel
Age	16	9	10	5
Owner	Mother-in-law	Me	Me	Sister-in-law
Eating Habits	Eats everyone's leftovers	Nibbles at food	Hearty eater	Will eat till he explodes

learn more

check https://developer.mozilla.org/en-US/docs/Learn/HTML/Tables

- rowspan

- colspan

- caption

- thead, tbody, tfoot

- table nesting

- ...

Midterm project assigment

- Each student get 2 mins to show the website s/he built next week

- Each website demo'ed should have at least 3 pages/HTML files, cover as more elements as possible

- tags like heading, div, paragraph, anchor, image, form, table need be included in the website