

## THE IMPORTANCE OF ELEMENTS RELATED TO TABLES IN CREATING WEBSITES AND ELECTRONIC LEARNING RESOURCES

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**Abstract:** this article highlights the importance of table elements in creating web pages and e-learning resources. When creating direct web pages, using the HTML language, table-related tags are important, with the help of which the general structure of the web page can be represented schematically. Also, in the process of presenting information on the web page, there is a need to use tables of various forms. In such cases, tables of the desired form can be achieved using HTML elements, especially table-related tags, their attributes and parameters.

**Keywords:** web-page, web-design, HTML, tables, Internet, informatics and information technologies, electronic learning resources.

Today, it is more convenient to create tables and perform related actions with the help of special software tools, web page constructors, HTML editors, and not with the help of simple codes. You can also use HTML codes to perform these actions, create tables, or perform tasks of formatting data.

When creating direct web pages, using the HTML language, table-related tags are important, with the help of which the general structure of the web page can be represented schematically. Also, in the process of presenting information on the web page, there is a need to use tables of various forms. In such cases, tables of the desired form can be achieved using HTML elements, especially table-related tags, their attributes and parameters.

The main element for creating a table is `<table>`. An optional element is `<caption>`. `<table>` contains elements `<tr>` indicating table row and `<td>` indicating table column. A column or row heading can be given using the `<th>` element.

Table creation technology:

1. `<table>` and `</table>` elements are written to start creating the table.
2. `<tr>` and `</tr>` elements corresponding to the required number of lines are written between these elements.

3. Now, after the first `<tr>`, as many `<td>` and `</td>` elements are written. Between each `<td>` and `</td>` element, insert the appropriate table value. You can also use `<th>` and `</th>` elements instead of `<td>` and `</td>` elements. These elements are usually used only when writing the first line elements. Many graphical browsers display text between `<th>` and `</th>` in a blacked-out (ugly) appearance.

4. The third step above is then repeated for each `<tr>` element.

Example of a simple table:

```
<table border="1">
  <caption>1 course student assets</caption>
  <tr><th>1-A</th><th>1-B</th><th>1-C</th><th>1-D</th></tr>
  <tr><td>Azimov A.</td><td>Fayziyev K.</td><td>Ikromov
K.</td><td>Rustamov N.</td></tr>
  <tr><td>Karimov B.</td><td>Amrillaev D.</td><td>Jumanov
I.</td><td>Xamraev O.</td></tr>
  <tr><td>Razzokov M.</td><td>Begmatov L.</td><td>Turakulov
I.</td><td>Turaev P.</td></tr>
</table>
```

It was mentioned that the table name should be given using the `<caption>` element. Also, this element can be used as an explanation. For this, if `<caption align="bottom">` is written, it will become a caption at the bottom of the table.

Table rows. Elements of table cells.

String elements have two important attributes: `align` and `valign`. With their help, the text in the table cell can be arbitrarily positioned horizontally and vertically. The `align` element has attributes such as `center`, `left`, `right` (align the text in the cell from the center, left, right), and the `valign` attribute has attributes such as `top`, `bottom`, `center` (align the text in the cell from the top, bottom, center):

```
<table border="1" align="center">
```



```

<tr align="center"><th>Years</th><th>Choy</th><th>Kofe</th></tr>
<tr align="left"><td>2022</td><td>35%</td><td>65%</td></tr>
<tr align="right"><td>2023</td><td>45%</td><td>55%</td></tr>
<tr align="center"><td>2024</td><td>55%</td><td>45%</td></tr></table>

```

In some cases, for example, if table elements have the same, similar information, the result of the valign attribute may not be visible. But if the cells store different amounts of information, the result can be seen.

The <th> element also has a <scope> attribute, which indicates whether the title belongs to a row or column. For example:

```

<table border="1" align="center">
<tr align="center"><th
scope="row">Yillar</th><td>Choy</td><td>Kofe</td></tr>
<tr align="left"><th
scope="row">2022</td><td>35%</td><td>65%</td></tr>
<tr align="right"><th
scope="row">2023</td><td>45%</td><td>55%</td></tr>
<tr align="center"><th
scope="row">2024</td><td>55%</td><td>45%</td></tr>
</table>

```

Cell borders, colors.

There are cases when several cells of the table (several columns or several rows) have to be expressed in the same size (information close to each other or beautiful output of the table...). In any case, for <th> and <td>s: colspan and rowspan attributes are used. One of them indicates the horizontal size of the cell and the other the vertical size.

There is also an option to choose the background color behind the table. The bgcolor attribute is used for this:

```

<table border="1" align="center">
<tr align="center" bgcolor="red"><th>Yillar</th><th>
Choy</th><th>Kofe</th></tr>
<tr align="left" bgcolor="brown"><td>2022</td><td>
>35%</td><td>65%</td></tr>

```



```
<tr align="right" bgcolor="orange"><td>2023</td><td
>45%</td><td>55%</td></tr>
<tr align="center" bgcolor="yellow"><td>2024</td ><td
>55%</td><td>45%</td></tr></table>
```

Additional table attributes.

The <table> element has attributes other than the align and border attributes. They are:

- **width.** Sets the width of the table. It can be sized in two ways: in percentages (width="50%") and in pixels (width="250"). If this attribute is not given, the table will be drawn according to the size of the data inside the table. It is not recommended to provide dimensions in pixels. Because not all users always express the size of the screen in the same way (there are sizes like 800x600, 1024x768).

- **border.** Allows you to choose the thickness of the table frame. Dimensions are specified in pixels (border="3"). If this attribute is not given, the table border will be white (not visible).

- **cellspacing.** Specifies the distance between table columns. Dimensions are given in pixels. Defaults to 1 if the attribute is not used.

- **cellpadding.** Specifies the distance between table rows. Dimensions are given in pixels. Defaults to 1 if the attribute is not used.

- **rules and frames.** Specifies how the inner (rules) and outer (frames) borders of the table should be drawn.

Breakdown tables.

It was said above that it is possible to place an optional element in the tables. Similarly, tables can be nested within a table. If another table is placed inside a table, it is called a nested table. For example, it is necessary to create a table of the following form:

To do this, you need to write the following code:

```
<table border="1" cellpadding="5" width="100%">
<tr><td colspan="2" align="center">
<a href="test.htm"> Home | </a>
<a href="Products/product.html"> Products | </a>
<a href="Products/1/1.html"> First | </a>
```



```

<a href="Products/1/2.html"> Second | </a>
<a href="Images/images/html"> Images | </a>
<a href="Images/table.html"> Table | </a>
</td></tr>
<tr><td width="20 %">
<table border="1">
<tr><td>First line</td></tr>
<tr><td>Second line </td></tr>
<tr><td>Third line </td></tr>
<tr><td>Fourth line </td></tr>
<tr><td>Fifth line </td></tr>
</table>

```

```
<td width="80 %">
```

```
<h1 align="center"> Tables!!!</h1>
```

*<p>The level of professionalism in creating designs has increased several times since the introduction of tables into HTML standards. You can manage table cells and use optional elements - images, text, lists, hyperlinks - wherever needed.*

*<p>In general, tables consist of columns and rows, and there is an opportunity to work on them. Flipping through newspapers or magazines, you can see that they are divided into many cells. Similarly, web pages can be divided into cells.*

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

Similarly, you can create tables similar to the one above by creating three columns, giving 20% to the right and left columns and 60% to the middle column, and inside the right and left columns as well.

Row and column grouping.

Summarizing rows and columns was done in the example above:

The colspan attribute of a table allows you to summarize the columns in a row. Here colspan=«n» is written as n is equal to how many rows should be summarized.

The rowspan of the table allows you to summarize several rows. If how many rows are to be summarized, rowspan=«n» is written.

Frames and lines.

The table also has the following attributes: frame and rules. The first attribute specifies what the outer border should be when border>0, and the second attribute specifies what the borders between the cells should be.



The values that the Frame attribute can take are listed in the following table: void - no limit; above - upper limit; below - lower limit; nsides - no left and right borders; vsides - no upper and lower bounds; lhs - only left border available; rhs - only the right border is present.

The following table lists the values that the Rules attribute can take: None - no line; Groups - when <thead>, <tfoot>, <tbody> elements are involved, only lines between rows, when <colgroup>, <col> elements are involved, only lines between columns; rows - lines only in row spaces; cols - lines only in column spaces; all - will be all lines.

In conclusion, the use of elements related to tables in the creation of web pages and e-learning resources is important in the process of representing the general structure of the web page in a schematic way, in the process of presenting information on the web page in tables of various forms, and also, tables similar to the one above can be generated.

#### References:

1. Khaitov F.N., Sattarov A.R., Tangirov X.E. Web technologies // Methodological guide. - Jizzakh, 2015. - 68 p.
2. Yusupov R.M., Sattarov A.R., Tangirov X.E. Web design. Study guide. - Tashkent, LESSON PRESS, 2022. - 152 pages.
3. Tangirov X.E., Rakhmonkulov F.P., Khaitova N.F. Pedagogical Web-design. Study guide. - Tashkent, LESSON PRESS, 2024. - 168 pages.
4. [https://open-source-peace.github.io/w3schoolsrus/html/html\\_tables.html#gsc.tab=0](https://open-source-peace.github.io/w3schoolsrus/html/html_tables.html#gsc.tab=0)
5. [https://hcdev.ru/learn/html5/tables/#\\_2](https://hcdev.ru/learn/html5/tables/#_2)

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