



# junior web design



# Lesson #3

## Lists. Images. Tables

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# Creating lists in HTML



***List** is a combined set of sentences that start with a digit or marker (for example, dots or ticks).*

Allows you to arrange and organize various information and present it in a user-friendly form.

Any list is a container `<ul>` containing a bulleted list, or a container `<ol>`, which defines a numbered list.

Each element of the list starts and ends with the `<li>` tag.

## Bulleted list

**The bulleted list** is defined as follows:

- a small marker, usually in the form of a filled circle is added before each item of the list.
- the list itself is created using the container `<ul>`.
- each item in the list starts with the `<li>` tag, as shown below:

```
1 <ul>
2   <li>First paragraph</li>
3   <li>Second paragraph</li>
4   <li>Third paragraph</li>
5 </ul>|
```

The list should have a closing `</ul>` tag, otherwise there will be an error.

The closing `</li>` tag is not required, but it's best to always add it to clearly separate the list items.

## Example of creating a bulleted list

```
1 <html>
2   <head>
3     <meta http-equiv="Content-Type" content="text/html;
4     charset=utf-8">
5     <title>Unordered list</title>
6   </head>
7   <body>
8     Shopping list:
9     <ul>
10      <li>Ice cream</li>
11      <li>Soda</li>
12      <li>Milk</li>
13      <li>Cheese</li>
14    </ul>
15  </body>
16 </html>
```

## Numbered list

### Numbered lists:

1. Represent a set of items with their ordinal numbers.
2. The kind and type of numbering depends on the attributes of the `<ol>` tag, which is used to create the list.
3. Each item of a numbered list is indicated by the `<li>` tag, as shown below.

```
1 <ol>
2   <li>First paragraph</li>
3   <li>Second paragraph</li>
4   <li>Third paragraph</li>
5 </ol>
```

## Example of creating a numbered list

```

1 <html>
2   <head>
3     <meta http-equiv="Content-Type" content="text/html;
   charset=utf-8">
4     <title>Unordered list</title>
5   </head>
6   <body>
7     Shopping list:
8     <ol>
9       <li>Ice cream</li>
10      <li>Soda</li>
11      <li>Milk</li>
12      <li>Cheese</li>
13    </ol>
14  </body>
15 </html>|

```

## Images in HTML

Adding an image occurs in two stages:

- first a file of the desired size is prepared,
- then it is added to the page via the `<img>` tag.

HTML itself is intended only to display the desired picture without changes.



**When preparing images, several things should be considered.**

1. Since the web page is loaded over the network, it is important to reduce the original images. **The smaller they are, the faster the page will appear.**
2. The size of the image is best set in width, for example, to **no more than 800 pixels**. Otherwise, the image may not

fit entirely in the browser window, and ugly scrollbars will appear there.

## Adding an image to an HTML page

To add an image to a web page, use the `<img>` tag, the `src` attribute, which determines the address of the graphic file.

The general syntax for adding an image is as follows:

```

```



**URL** (*Universal Resource Locator*) is a path to the file.

To indicate it you can use both absolute (exact Internet link or file on the hard disk) and relative (the address of the relatively current HTML page).

The image should be in a folder near the HTML file.

```
Index.html  
ItStepLogo.png
```

Then, to add images you need to write the following code:

```
<html>  
  <head>  
    <meta charset="utf-8">  
    <title>How to - Image</title>  
  </head>  
  <body>  
    <tr>  
      <h3>Add image</h3>  
        
    </tr>  
  </body>  
</html>
```

## Additional attributes

You always need to use the **src** attribute, which tells the browser where the image is located.

In addition, there are also other attributes that you may need when working with images.

The **alt** attribute is used for an alternative description of the image if, for some reason, it is not shown to the user. This is especially important for visually impaired users or if the page loads very slowly.

```

```

The **title** attribute can be used for a brief description of the image:

```

```

The other two important attributes are **width** and **height**:

```

```

The **width** and **height** attributes can be used to set the width and height of the image. The value should be specified in pixels.

# Tables

Tables are used when it is necessary to display information logically arranged in columns and rows.

## Adding a table to an HTML page

To add a table, you need to write the following code:

```
1      <table>
2      <tr>
3          <td>Cell 1</td>
4          <td>Cell 2</td>
5      </tr>
6      <tr>
7          <td>Cell 3</td>
8          <td>Cell 4</td>
9      </tr>
10     </table>
```

What is the difference between `<tr>` and `<td>`?

**Three basic tags** are used to insert tables:

- `<table>` – beginning and end of the table;
- `<tr>` – "table row", starts and ends the horizontal row of cells;
- `<td>` – short for "table data". This tag starts and ends each cell in the row of the table.



## Additional attributes

The **border** attribute

The **border** attribute is used to specify the thickness of the border around the table:

```

1      <table border="1">
2          <tr>
3              <td>Cell 1</td>
4              <td>Cell 2</td>
5          </tr>
6          <tr>
7              <td>Cell 3</td>
8              <td>Cell 4</td>
9          </tr>
10     </table>

```

Attributes for content positioning

The tables have many attributes. For example:

- **align** aligns the contents of the entire table horizontally, in a row or in a separate cell. For example, *left*, *center* or *right*;
- **valign** aligns vertically (in a cell). For example, *top*, *middle* or *bottom*.

Example:

```

13     <td align="right" valign="top">Cell 1</td>

```

## The **colspan** and **rowspan** attributes

When creating tables, two attributes are used: **colspan** and **rowspan**.

**Colspan** is an abbreviation for “**column span**”. Colspan is used in the `<td>` tag to specify how many columns this cell covers:

```
1      <table border="1">
2      <tr>
3          <td colspan="3">Cell 1</td>
4      </tr>
5      <tr>
6          <td>Cell 2</td>
7          <td>Cell 3</td>
8          <td>Cell 4</td>
9      </tr>
10     </table>
```

Setting **colspan** “3” causes the cell in the first row to span three columns. If we install **colspan** “2”, the cell will cover only two columns, and it will be necessary to insert additional cells in the first row, so that the cells are evenly distributed into two rows.

**Rowspan** specifies how many rows this cell cover.

```
1      <table border="1">
2      <tr>
3          <td rowspan="3">Cell 1</td>
4          <td>Cell 2</td>
5      </tr>
6      <tr>
7          <td>Cell 3</td>
8      </tr>
```

```
9      <tr>
10      <td>Cell 4</td>
11      </tr>
12      </table>
```

In this example, **rowspan** has a value of “3” in cell **Cell 1**. This indicates that the cell covers three rows (its own row and two more).

**Cell 1** and **Cell 2** remain in the same row, and **Cell 3** and **Cell 4** create separate rows.



## Lesson #3

### Lists. Images. Tables

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