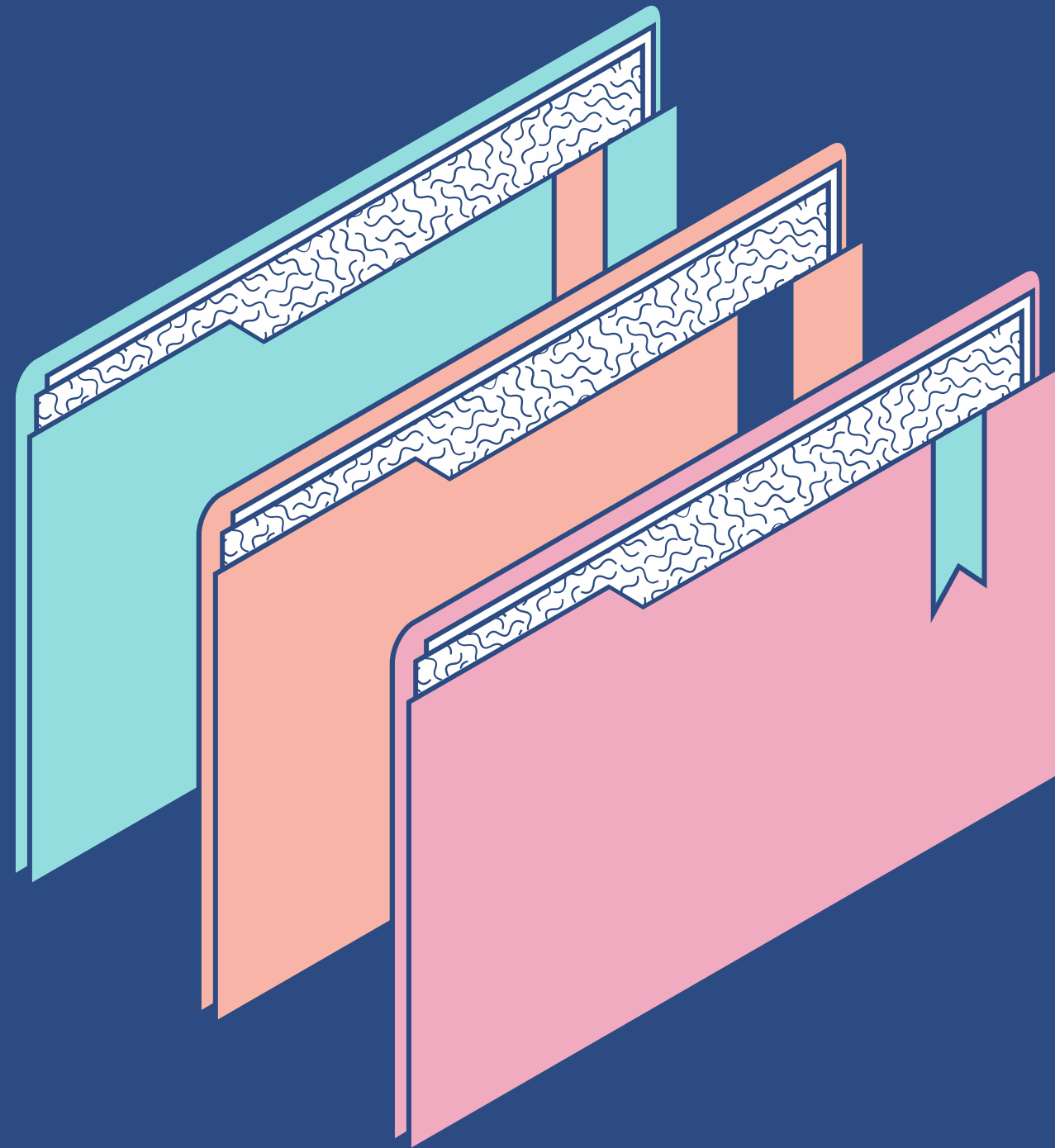




Web programming

Week 3

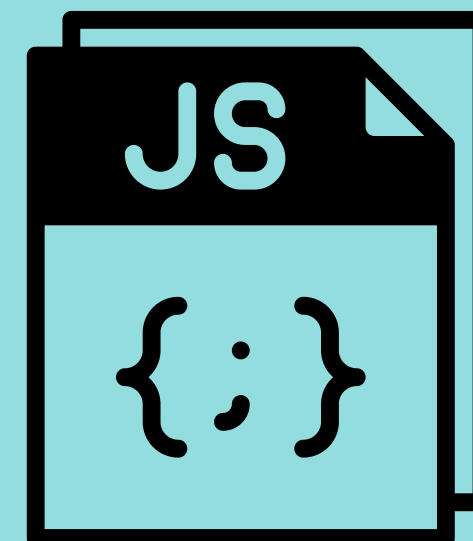
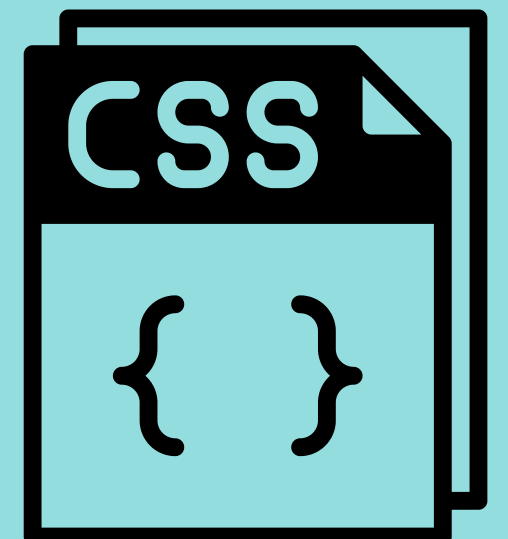
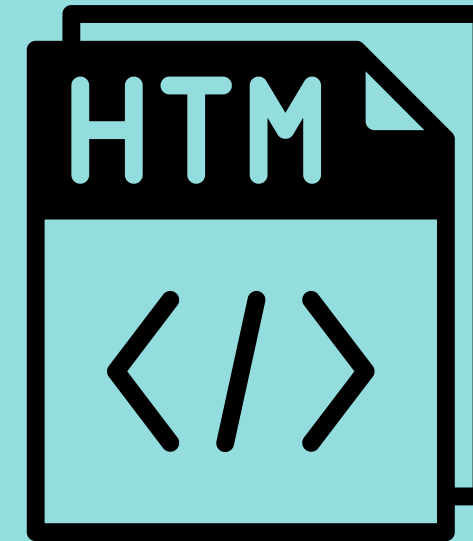


Lesson plan:

- Attributes
- Styles
- Tables
- Lists
- Block & Inline

HTML Attributes

- All HTML elements can have attributes
- Attributes provide additional information about elements
- Attributes are always specified in the start tag
- Attributes usually come in name/value pairs like: `name="value"`



The href Attribute

The **<a>** tag defines a hyperlink. The href attribute specifies the URL of the page the link goes to: **Visit KBTU official page**

The target Attribute

By default, the linked page will be displayed in the current browser window. To change this, you must specify another target for the link.

The target attribute specifies where to open the linked document.

The target attribute can have one of the following values:

- **_self** - Default. Opens the document in the same window/tab as it was clicked
- **_blank** - Opens the document in a new window or tab
- **_parent** - Opens the document in the parent frame
- **_top** - Opens the document in the full body of the window

Visit KBTU official page

Link Titles

The title attribute specifies extra information about an element. The information is most often shown as a tooltip text when the mouse moves over the element.

Visit KBTU official page

The width and height Attributes

For example, the tag should also contain the width and height attributes, which specify the width and height of the image (in pixels):

```

```

The alt Attribute

The required alt attribute for the tag specifies an alternate text for an image, if the image for some reason cannot be displayed. This can be due to a slow connection, or an error in the src attribute, or if the user uses a screen reader.

```

```

The title Attribute

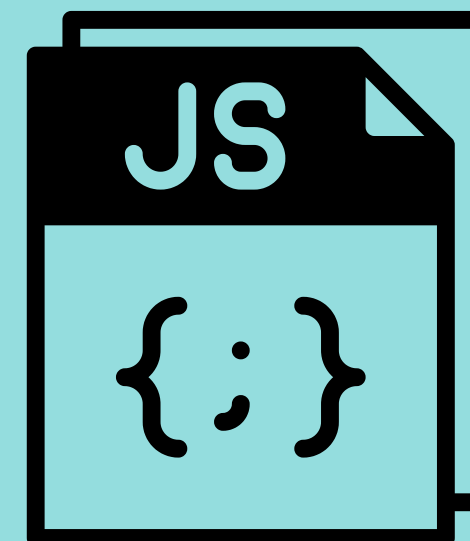
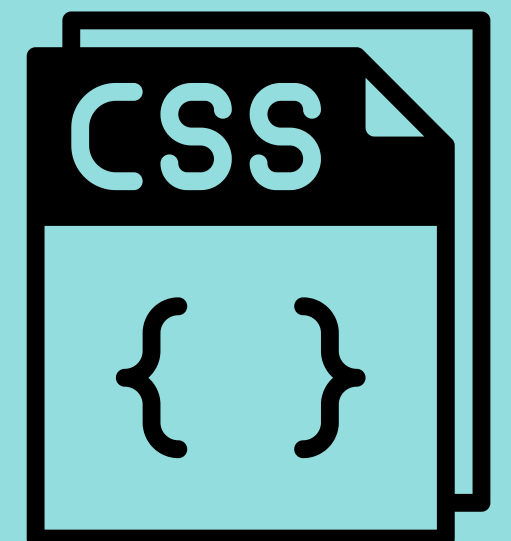
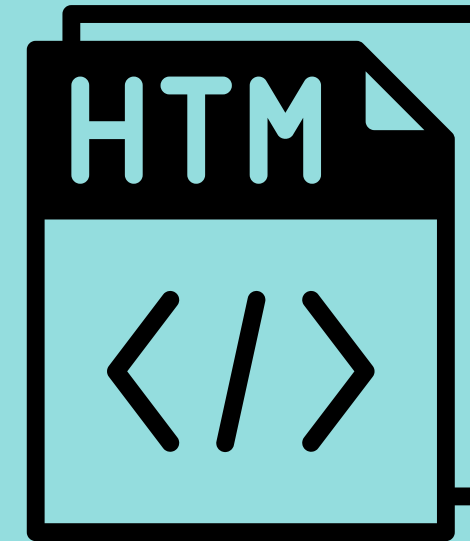
The title attribute defines some extra information about an element.

The value of the title attribute will be displayed as a tooltip when you mouse over the element:

```
<p title="I'm a tooltip">This is a paragraph.</p>
```

HTML Styles

- The HTML style attribute is used to add styles to an element, such as color, font, size, and more.
- Setting the style of an HTML element, can be done with the style attribute.



Fonts

The CSS font-family property defines the font to be used for an HTML element:

```
<h1 style="font-family:verdana;">This is a heading</h1>  
<p style="font-family:courier;">This is a paragraph.</p>
```

Text Size

```
<h1 style="font-family:verdana; font-size:300%;">This is a heading</h1>  
<p style="font-family:courier; font-size:160%;">This is a paragraph.</p>
```

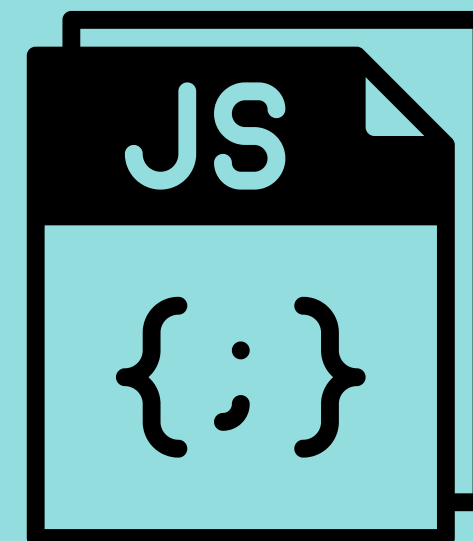
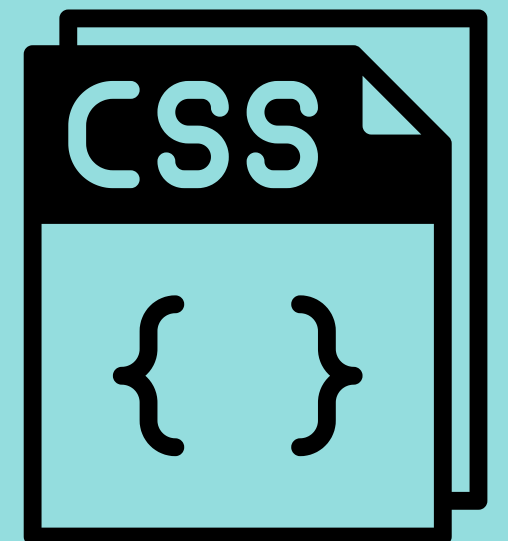
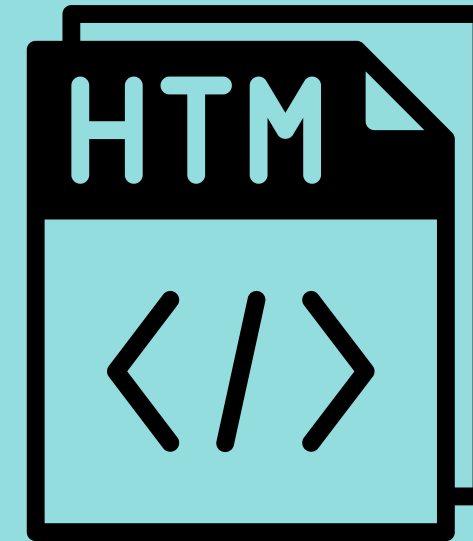
Text Alignment

The CSS text-align property defines the horizontal text alignment for an HTML element:

```
<h1 style="font-family:verdana; font-size:300%; text-align:center;">This is a heading</h1>  
<p style="font-family:courier; font-size:160%; text-align:right;">This is a paragraph.</p>
```

HTML Tables

- HTML tables allow web developers to arrange data into rows and columns.
- HTML tables can have borders of different styles and shapes.
- HTML tables can have different sizes for each column, row or the entire table.
- HTML tables can adjust the padding inside the cells, and also the space between the cells.
- HTML tables can have cells that span over multiple rows and/or columns.



HTML Table Borders

When you add a border to a table, you also add borders around each table cell.

To add a border, use the CSS border property on table, th, and td elements:

```
<head>
<style>
table, th, td {
    border: 1px solid
black;
}
</style>
</head>
```

Collapsed Table Borders

To avoid having double borders like in the example above, set the CSS border-collapse property to collapse. This will make the borders collapse into a single border

```
table, th, td {
    border: 1px solid black;
border-collapse: collapse;
}
```

Style Table Borders

If you set a background color of each cell, and give the border a white color (the same as the document background), you get the impression of an invisible border:

```
table, th, td {  
  border: 1px solid white;  
  border-collapse: collapse;  
}  
th, td {  
  background-color: #96D4D4;  
}
```

Round Table Borders

With the border-radius property, the borders get rounded corners:

```
table, th, td {  
  border: 1px solid black;  
  border-radius: 10px;  
}
```

Skip the border around the table by leaving out table from the css selector:

```
th, td {  
  border: 1px solid black;  
  border-radius: 10px;  
}
```

HTML Table Sizes

Use the style attribute with the width or height properties to specify the size of a table, row or column.

To set the width of a table, add the style attribute to the <table> element.

To set the size of a specific column, add the style attribute on a <th> or <td> element.

To set the height of a specific row, add the style attribute on a table row element.

```
<table style="width:100%">
  <tr>
    <th style="width:70%">Firstname</th>
    <th>Lastname</th>
  </tr>
  <tr style="height:200px">
    <td>Jill</td>
    <td>Smith</td>
  </tr>
  <tr>
    <td>Eve</td>
    <td>Jackson</td>
  </tr>
</table>
```

HTML Table Padding & Spacing

Cell padding is the space between the cell edges and the cell content. By default the padding is set to 0. To add padding on table cells, use the CSS padding property:

```
th, td {  
  padding: 15px;  
}
```

To add padding only above the content, use the padding-top property. And the others sides with the padding-bottom, padding-left, and padding-right properties

```
th, td {  
  padding-top: 10px;  
  padding-bottom: 20px;  
  padding-left: 30px;  
  padding-right: 40px;  
}
```

Cell spacing is the space between each cell. By default the space is set to 2 pixels.

To change the space between table cells, use the CSS border-spacing property on the table element:

```
th, td {  
  border-spacing: 30px;  
}
```

HTML Table Colspan & Rowspan

To make a cell span over multiple columns, use the colspan attribute:

```
<table>
  <tr>
    <th colspan="2">Name</th>
    <th>Age</th>
  </tr>
  <tr>
    <td>Jill</td>
    <td>Smith</td>
    <td>43</td>
  </tr>
  <tr>
    <td>Eve</td>
    <td>Jackson</td>
    <td>57</td>
  </tr>
</table>
```

HTML Table Colspan & Rowspan

To make a cell span over multiple rows, use the rowspan attribute:

```
<table>
  <tr>
    <th>Name</th>
    <td>Jill</td>
  </tr>
  <tr>
    <th rowspan="2">Phone</th>
    <td>555-1234</td>
  </tr>
  <tr>
    <td>555-8745</td>
  </tr>
</table>
```



HTML Lists

HTML lists allow web developers to group a set of related items in lists.

Unordered HTML List

An unordered list starts with the `` tag. Each list item starts with the `` tag.

The list items will be marked with bullets (small black circles) by default:

```
<ul>  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ul>
```

Ordered HTML List

An ordered list starts with the `` tag. Each list item starts with the `` tag.

The list items will be marked with numbers by default:

```
<ol>  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ol>
```

HTML Block and Inline Elements

Every HTML element has a default display value, depending on what type of element it is. There are two display values: block and inline.



Block-level Elements

A block-level element always starts on a new line, and the browsers automatically add some space (a margin) before and after the element.

A block-level element always takes up the full width available (stretches out to the left and right as far as it can).

Two commonly used block elements are: `<p>` and `<div>`.

The `<p>` element defines a paragraph in an HTML document.

The `<div>` element defines a division or a section in an HTML document.

```
<p style="border: 1px solid black">Hello World</p>
```

```
<div style="border: 1px solid black">Hello World</div>
```

`<p>`The P and the DIV elements are both block elements, and they will always start on a new line and take up the full width available (stretches out to the left and right as far as it can).`</p>`

Inline Elements



An inline element does not start on a new line.

An inline element only takes up as much width as necessary.

This is a **** element inside a paragraph.

<p>This is an inline span Hello World element inside a paragraph.</p>

<p>The SPAN element is an inline element, and will not start on a new line and only takes up as much width as necessary.</p>



The <div> Element

The <div> element is often used as a container for other HTML elements.

The <div> element has no required attributes, but style, class and id are common.

When used together with CSS, the <div> element can be used to style blocks of content:

```
<div style="background-color:black;color:white;padding:20px;">  
  <h2>Web development</h2>  
  <p>Web development is the work involved in developing a website  
for the Internet or an intranet.</p>  
</div>
```



The `` Element

The `` element is an inline container used to mark up a part of a text, or a part of a document.

The `` element has no required attributes, but `style`, `class` and `id` are common.

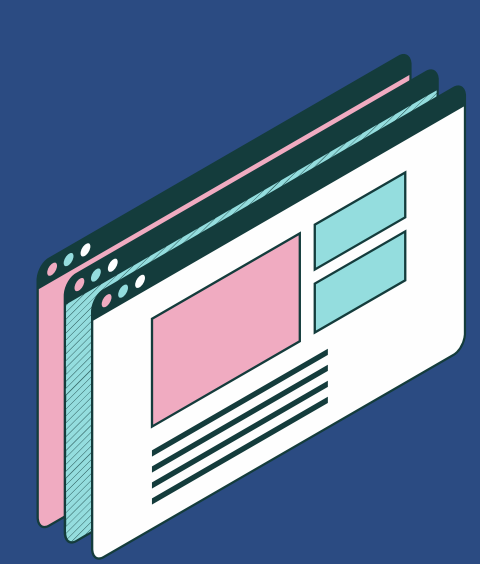
When used together with CSS, the `` element can be used to style parts of the text:

```
<p>My mother has <span style="color:blue;font-weight:bold;">blue</span> eyes and my father has <span style="color:darkolivegreen;font-weight:bold;">dark green</span> eyes.</p>
```



Assignment

Create website about
your favorite book/
movie/ TV show/
Video game



Website must include:

- ① **Home page.** Main information, main characters, content list with links to specific parts of the page, link to second page, pictures and tables
- ② **Page about main characters.** Describe at least 4 characters
- ③ **Additional page.** It can be any page.