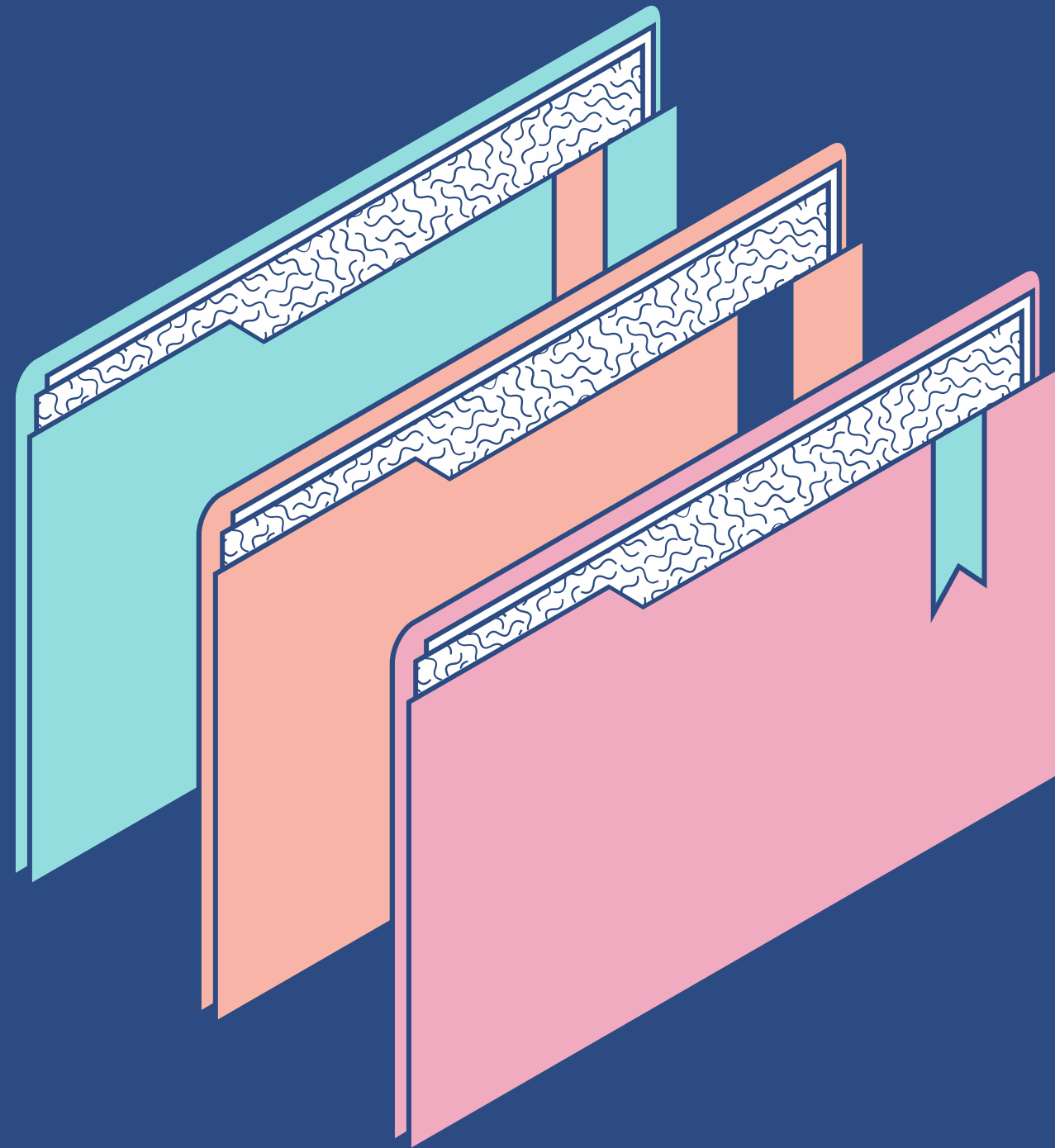




# Web programming

Week 4



# Lesson plan:

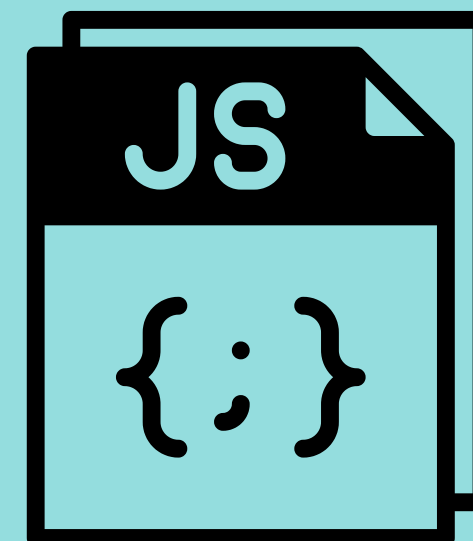
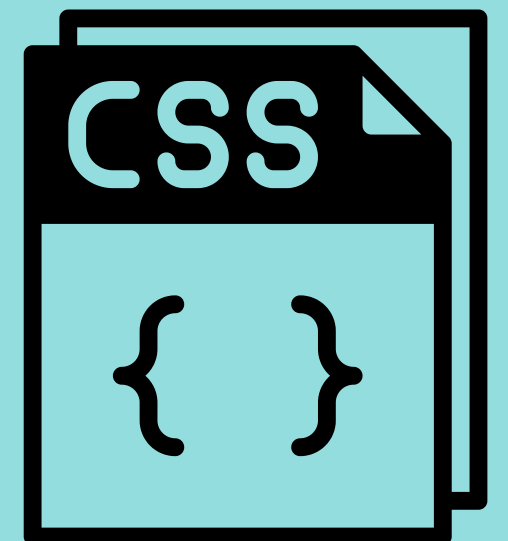
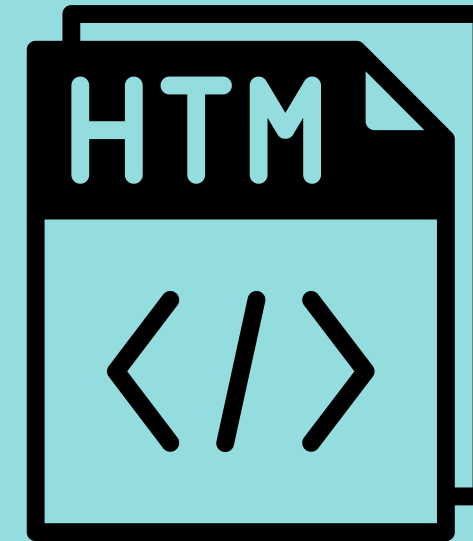
- HTML Styles - CSS
- Class, ID
- HTML Layout

# Using CSS

CSS can be added to HTML documents in 3 ways:

- Inline - by using the style attribute inside HTML elements
- Internal - by using a `<style>` element in the `<head>` section
- External - by using a `<link>` element to link to an external CSS file

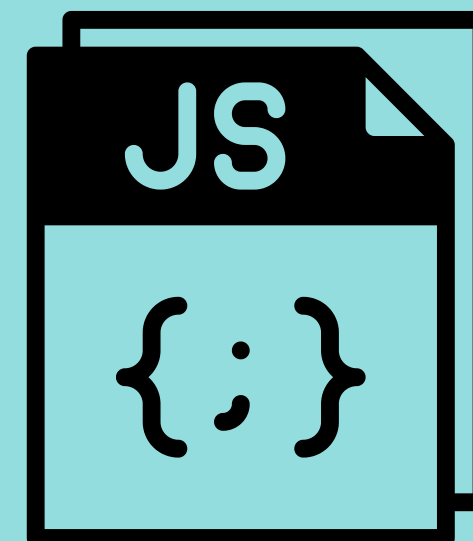
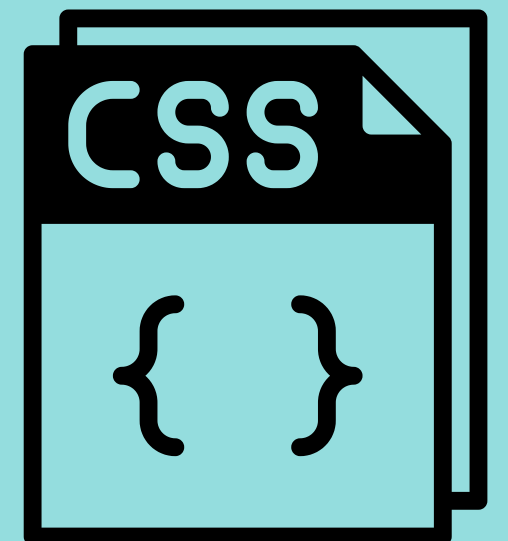
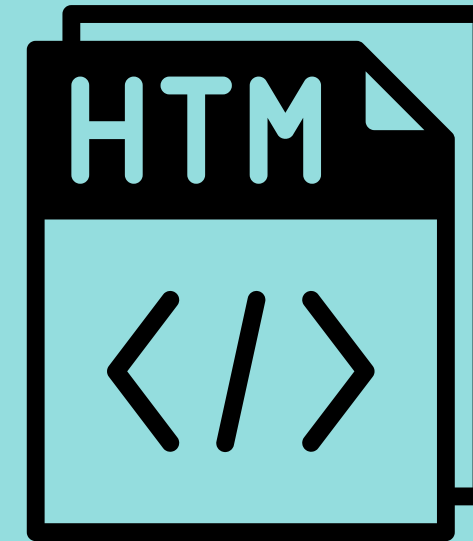
The most common way to add CSS, is to keep the styles in external CSS files.



# Inline CSS

- An inline CSS is used to apply a unique style to a single HTML element.
- An inline CSS uses the style attribute of an HTML element.
- The following example sets the text color of the `<h1>` element to blue, and the text color of the `<p>` element to red:

```
<h1 style="color:blue;">A Blue Heading</h1>  
  
<p style="color:red;">A red paragraph.</p>
```



# Internal CSS

- An internal CSS is used to define a style for a single HTML page.
- An internal CSS is defined in the <head> section of an HTML page, within a <style> element.
- The following example sets the text color of ALL the <h1> elements (on that page) to blue, and the text color of ALL the <p> elements to red. In addition, the page will be displayed with a "powderblue" background color:

```
<!DOCTYPE html>
<html>
<head>
<style>
body {background-color: powderblue;}
h1   {color: blue;}
p    {color: red;}
</style>
</head>
<body>

<h1>This is a heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

# External CSS

- An external style sheet is used to define the style for many HTML pages.
- To use an external style sheet, add a link to it in the <head> section of each **HTML page**:
- The external style sheet can be written in any text editor. The file must not contain any HTML code, and must be saved with a **.css** extension.
- Here is what the "**styles.css**" file looks like:

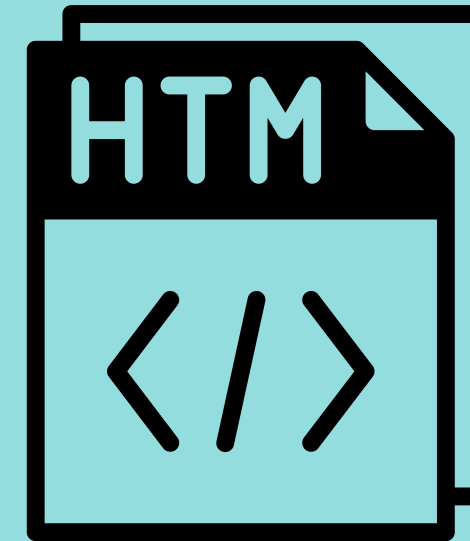
```
<!DOCTYPE html>
<html>
<head>
  <link rel="stylesheet" href="styles.css">
</head>
<body>

<h1>This is a heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

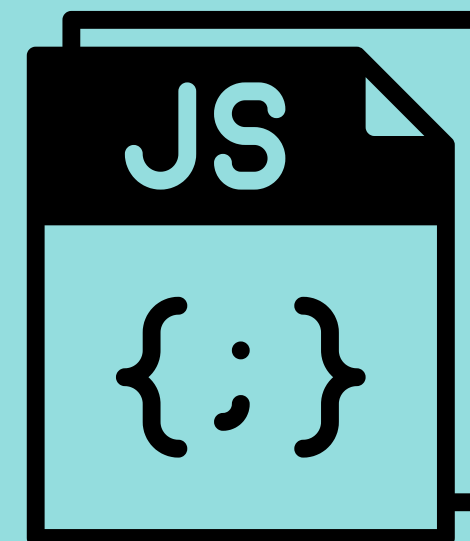
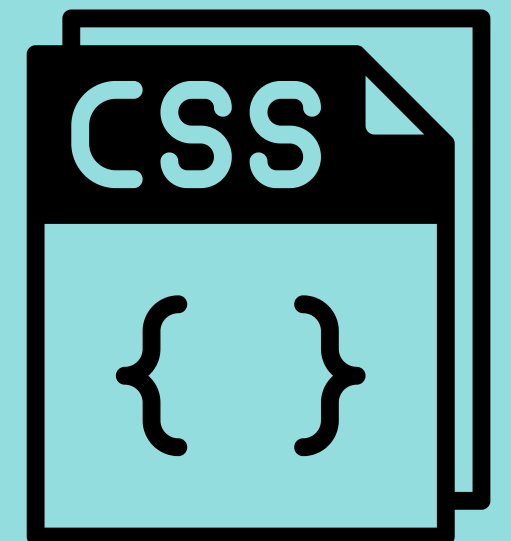
```
body {
  background-color: powderblue;
}
h1 {
  color: blue;
}
p {
  color: red;
}
```

# CSS Colors, Fonts and Sizes



We have already considered how to change colors, fonts and sizes

Please see the file **lab3.pdf**



# HTML class Attribute

The HTML class attribute is used to specify a class for an HTML element.

Multiple HTML elements can share the same class.

To create a class; write a period (.) character, followed by a class name. Then, define the CSS properties within curly braces {}:

## London

London is the capital of England.

## Paris

Paris is the capital of France.

## Tokyo

Tokyo is the capital of Japan.

Create a class named "city":

```
<!DOCTYPE html>
<html>
<head>
<style>
.city {
    background-color: tomato;
    color: white;
    padding: 10px;
}
</style>
</head>
<body>

<h2 class="city">London</h2>
<p>London is the capital of England.</p>

<h2 class="city">Paris</h2>
<p>Paris is the capital of France.</p>

<h2 class="city">Tokyo</h2>
<p>Tokyo is the capital of Japan.</p>

</body>
</html>
```



# Multiple Classes

HTML elements can belong to more than one class.  
To define multiple classes, separate the class names with a space, e.g. `<div class="city main">`.  
The element will be styled according to all the classes specified.

## Multiple Classes

London

Paris

Tokyo

```
<!DOCTYPE html>
<html>
<head>
<style>
.city {
  background-color: tomato;
  color: white;
  padding: 10px;
}

.main {
  text-align: center;
}
</style>
</head>
<body>

<h2>Multiple Classes</h2>

<h2 class="city main">London</h2>
<h2 class="city">Paris</h2>
<h2 class="city">Tokyo</h2>

</body>
</html>
```

# Different Elements Can Share Same Class

Different HTML elements can point to the same class name.

In the following example, both `<h2>` and `<p>` point to the "city" class and will share the same style:

## Different Elements Can Share Same Class

Paris

Paris is the capital of France.

```
<!DOCTYPE html>
<html>
<head>
<style>
.city {
  background-color: tomato;
  color: white;
  padding: 10px;
}
</style>
</head>
<body>

<h2>Different Elements Can Share Same Class</h2>

<h2 class="city">Paris</h2>
<p class="city">Paris is the capital of France.</p>

</body>
</html>
```

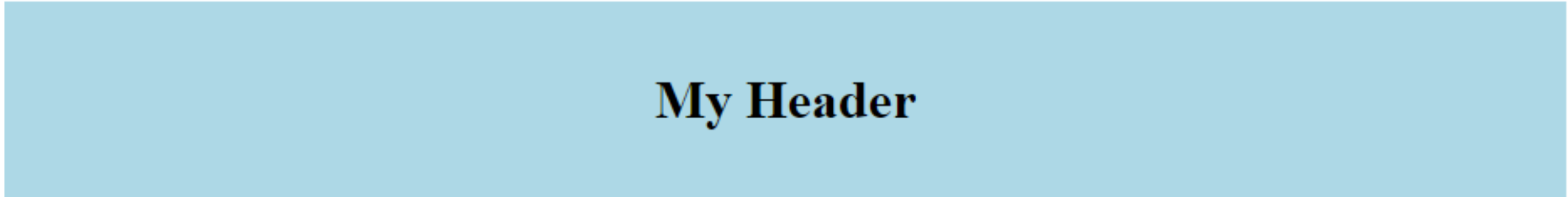
# HTML id Attribute

The HTML id attribute is used to specify a unique id for an HTML element.

You cannot have more than one element with the same id in an HTML document.

**The syntax for id is: write a hash character (#), followed by an id name. Then, define the CSS properties within curly braces {}.**

In the following example we have an `<h1>` element that points to the id name "myHeader". This `<h1>` element will be styled according to the `#myHeader` style definition in the head section:



**My Header**

```
<!DOCTYPE html>
<html>
<head>
<style>
#myHeader {
    background-color: lightblue;
    color: black;
    padding: 40px;
    text-align: center;
}
</style>
</head>
<body>

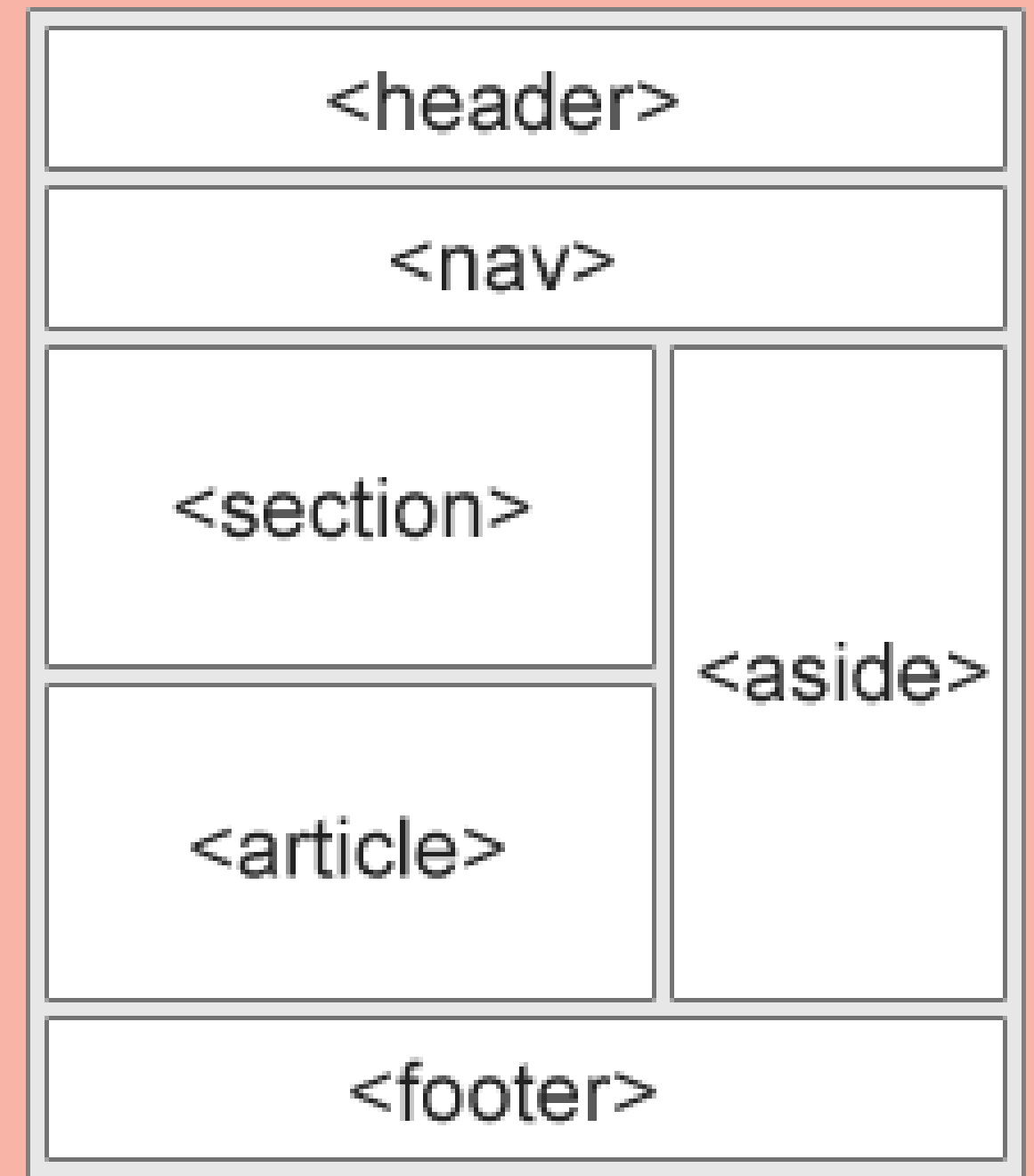
<h1 id="myHeader">My Header</h1>

</body>
</html>
```

# HTML Layout Elements

HTML has several semantic elements that define the different parts of a web page:

- `<header>` - Defines a header for a document or a section
- `<nav>` - Defines a set of navigation links
- `<section>` - Defines a section in a document
- `<article>` - Defines an independent, self-contained content
- `<aside>` - Defines content aside from the content (like a sidebar)
- `<footer>` - Defines a footer for a document or a section



A stylized illustration of a desk setup. In the top left, a portion of a laptop is visible with a pink body and a patterned orange screen. Below it is a teal sticky note. To the right is a smartphone with a pink border and a patterned orange screen. In the center is an open notebook with a white left page and a dotted right page. At the bottom left is a closed notebook with a pink cover and a black strap. In the top right, there is a teal cup with a pink patterned base and two speech bubbles, one teal with a white star and one pink with a white star.

# Assignment

Create Web site about traveling (at least 3 pages).  
HTML Content.Fonts and Colors.Text and List Properties.  
Targeting Elements with IDs and Classes. Sections.  
Borders. Margins and Padding.  
**Use external CSS file.**

**Deadline: 25/09/2022 22:02**  
**(NOT 23:59 and NOT even 22:03)**

**HINT:**

SOME ADDITIONAL INFORMATION ABOUT CSS:  
[HTTPS://WWW.W3SCHOOLS.COM/CSS/DEFAULT.ASP](https://www.w3schools.com/css/default.asp)

