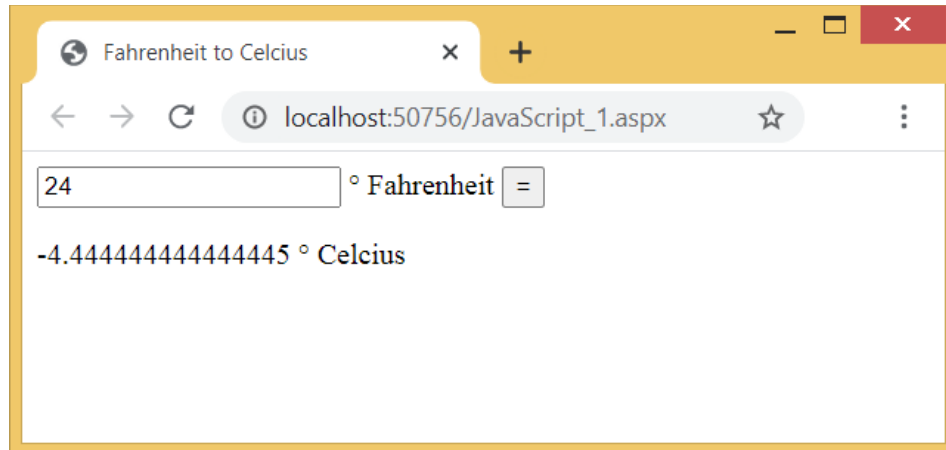


Lab - Introduction to JavaScript

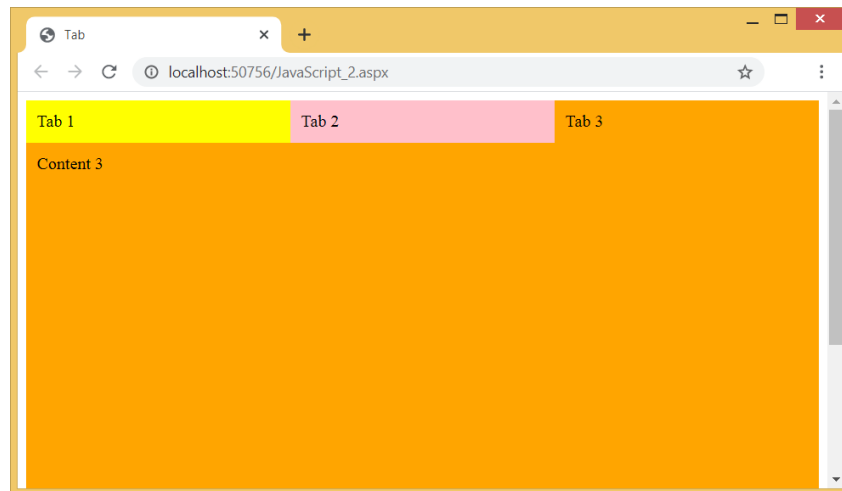
Exercise 1 – Temperature Calculator



1. Create a Web Page named JavaScript_1.html
2. Add an HTML Text Box with attribute `id="fah"`.
3. Add an HTML button with attribute `value="="` and `onclick="toCelsius()"`
4. Add an empty HTML paragraph with attribute `id="result"`.
5. Create a JavaScript function named `"toCelsius()"` and calculate the Fahrenheit to Celsius conversion using this formula $(F - 32) \times 5/9$
6. Display the calculation result in the paragraph created in step 4.
7. Explore the usage of `"onkeyup"` event in textbox created in step 2.

Exercise 2 – Web Layout and Content Control

By using JavaScript function and onClick event with a proper HTML structure and CSS, create a tab content layout as per outcome below:



1. Create a Web Page named JavaScript_2.html
2. Add the HTML Structure within the body section of the Web Page.

HTML structure for the layout above:

```
<div class="flex-container">
  <div class="tab" id="tab1" onclick="tab(1)">Tab 1</div>
  <div class="tab" id="tab2" onclick="tab(2)">Tab 2</div>
  <div class="tab" id="tab3" onclick="tab(3)">Tab 3</div>
</div>

<div class="flex-container">
  <div class="content" id="content1">Content 1</div>
  <div class="content" id="content2">Content 2</div>
  <div class="content" id="content3">Content 3</div>
</div>
```

3. Create a CSS and add the codes below accordingly.

<pre>.flex-container { display: flex; width: 100%; } .flex-container > div { width: 100%; padding: 10px; } .tab { height: 20px; cursor: pointer; } .content { height: 500px; }</pre>	<pre>#tab1, #content1 { background-color: yellow; } #tab2, #content2 { background-color: pink; } #tab3, #content3 { background-color: orange; } #content2, #content3 { display: none; }</pre>
---	---

	<pre>#content1 { display: block; }</pre>
--	--

Note:

`display: flex;`

enables a flex context for all its direct children.

`cursor: pointer;`

generate a bunch of different mouse cursors, depends on cursor type and usage. In this case, pointer cursor type is used to tell the user the box is clickable.

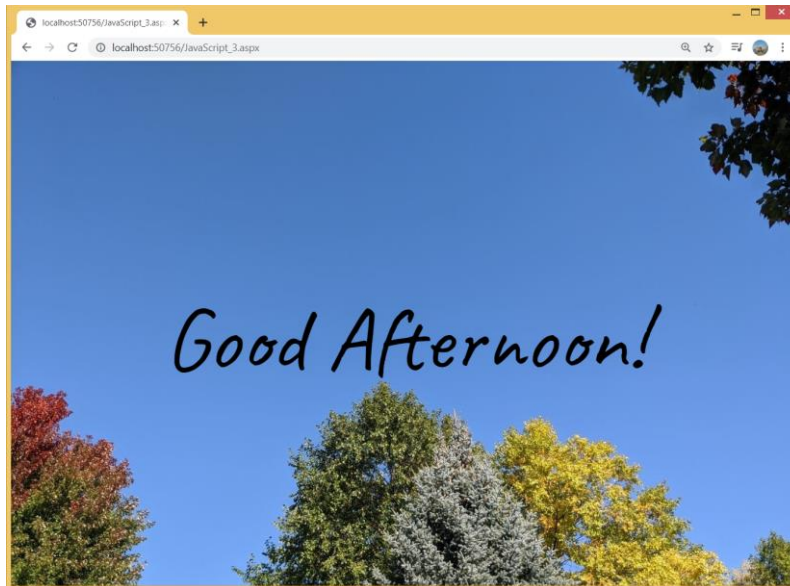
4. Create a JavaScript file and add a JavaScript function name 'tab' with parameter 't'.
5. Add an if statement based on 't' value send from onclick event in HTML as below. Do the same for t=2 and t=3

<pre>if (t == 1) { document.getElementById('content1').style.display = 'block'; document.getElementById('content2').style.display = 'none'; document.getElementById('content3').style.display = 'none'; }</pre>

6. Run the page

Exercise 3 – Content Control

Note: No full source code given for this exercise.



Change the background image of the webpage and greet the user by using JavaScript based on the condition below:

Time	Image File	Greeting
06:00 – 11:59	morning.jpg	Good Morning!
12:00 – 16:59	afternoon.jpg	Good Afternoon!
17:00 – 21:59	evening.jpg	Good Evening!
22:00 – 05:59	night.jpg	Good Night!

You can download any suitable image from Internet, and rename it accordingly.

JavaScript to get the value of the current hour:

```
var currentDate = new Date();  
var currentHour = currentDate.getHours();
```

`new Date()` creates a new date object with the current date and time
`getHours()` method returns the hours of a date as a number (0-23)