

Semester VI (CS, SE) (Spring 2021) Course Instructor(s): Khalid Hussain

# Lab 05: Introduction to DOM

### Objective(s):

1. Learn Basics of Document Object Model

# Lab Task(s):

### **Exercises**

1. Write a JavaScript function to get the values of First and Last name of the following form.

```
<!DOCTYPE html>
  <html>
   <head>
      <meta charset=utf-8 />
            <title>Return first and last name from a form </title>
         </head>
   <body>
        <form id="form1" onsubmit="getFormvalue()">
           First name:
           <input type="text" name="fname" value="David"><br>
           Last name:
           <input type="text" name="lname" value="Beckham"><br>
           <input type="submit" value="Submit">
        </form>
  </body>
  </html>
2. Write a JavaScript program to set the background color of a paragraph.
  <!DOCTYPE html>
```

```
<html>
<head>
    <meta charset=utf-8 />
    <title>JS Bin</title>
```

3. Here is a sample html file with a submit button. Write a JavaScript function to get the value of the href, hreflang, rel, target, and type attributes of the specified link.

4. Here is a sample html file with a submit button. Now modify the style of the paragraph text (such as fontSize, fontFamily, color, etc.) through javascript code.

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5. Write a JavaScript function to add rows to a table.

```
<!DOCTYPE html>
<html>
<head><br>
  <meta charset=utf-8 />
  <title>Insert row in a table - w3resource</title>
</head>
<body>
  Row1 cell1
        Row1 cell2
     Row2 cell1
        Row2 cell2
     <br>
  <input type="button" onclick="insert_Row()" value="Insert row">
</body>
</html>
```

# 6. Given the following HTML:

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <title>Document</title>
</head>
<body>
   <div class="header">
   </div>
   <section id="container">
      <11>
         class="first">one
         class="second">two
         three
      <01>
          class="first">one
         class="second">two
         class="third">three
      </section>
   <div class="footer">
   </div>
</body>
```

Write the code necessary to do the following:

- 1. Select the section with an id of container without using querySelector.
- 2. Select the section with an id of container using querySelector.
- 3. Select all of the list items with a class of "second".
- 4. Select a list item with a class of third, but only the list item inside of the ol tag.
- 5. Give the section with an id of container the text "Hello!".
- 6. Add the class main to the div with a class of footer.
- 7. Remove the class main on the div with a class of footer.
- 8. Create a new li element.
- 9. Give the li the text "four".
- 10. Append the  $\mbox{li}$  to the  $\mbox{ul}$  element.

- 11.Loop over all of the lis inside the ol tag and give them a background color of "green".
- 12. Remove the div with a class of footer.
- 7. Given the following HTML, create a script.js file to complete the first two parts.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>DOM Exercise</title>
    <style>
        div {
          width: 50px;
          height: 50px;
          display: inline-block;
        }
        .brown{
          background-color: brown;
        .green{
          background-color: green;
        }
        .blue{
          background-color: blue;
        .purple{
          background-color: purple;
        .yellow{
          background-color: yellow;
        }
        .carl {
         background-color: #8C9C12;
        .car2 {
        background-color: #1DA788;
        .car1, .car2 {
            margin-left: 0;
    </style>
</head>
<body>
    <h1 id="change_heading">Change Me!</h1>
    SELECTED COLOR <span class="selected">None!</span>
    <section>
        <div class="brown"></div>
        <div class="green"></div>
```

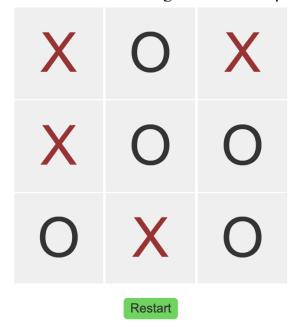
- 1. Add the necessary code to wait for the DOM to load to make sure that anything you manipulate in the DOM has loaded. You can do this either using window.onload or adding an event listener for DOMContentLoaded.
- 2. Replace the text "Change me" with "Hello World!".
- 3. When a user hovers over one of the colored boxes change the text to display the color that is being hovered over.
- 4. Create a new div element.
- 5. Give your new div a class of purple and style it so that it has a background color of purple.
- 6. Append your new div to the page to the section tag.
- 8. For this task you will be combining your knowledge of DOM access and events to build a todo app!

As a user, you should be able to:

- Add a new todo (by submitting a form)
- Mark a todo as completed (cross out the text of the todo)
- Remove a todo

**Now** using localStorage, try to store your todos so that if you refresh the page you do not lose what you have added to the list! As a super bonus, try to also save todos that you have marked as complete!

9. Create a Tic Tac Toe game with two players. Following is a sample output.



**END**