# Exercise 7: JavaScript III Events

All exercises must be solved using JavaScript.

1. Start with the HTML below:

```
<!DOCTYPE html>
<html>
      <head>
           <meta charset="utf-8" />
           <title></title>
     </head>
      <body>
           <h1>Mad Talk</h1>
           <l
                 Noun: <input type="text" id="noun">
                 Adjective: <input type="text" id="adjective">
                 Someone's Name: <input type="text" id="person">
            <button id="lib-button">Mad!</putton>
           <div id="story"></div>
     </body>
</html>
```

- a. Add an event listener to the button that calls a function called makeMadTalk, when clicked.
- b. In the makeMadTalk function, take the values that were inputted, make a sentence with those values, and put it in the div (example: "Maki really likes pink mushrooms.")
  - i. The basic sentence doesn't need to change with each input. Only the values from the inputs change.
  - ii. How to combine a basic sentence with the 3 inputs is left to your imagination. Try to end up with a **funny** sentence!

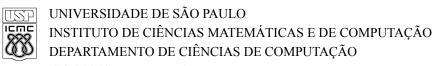
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- 2. Using the index.html provided (at the end of this document) and changing it using only JavaScript, answer the following questions:
  - a. Add what you need to make sure your DOM is loaded before making changes.
  - b. Replace the text "Change me" with something of your choice.
  - c. Make sure that, when the mouse hovers over the "boxes," a text informing the color of each box appears after the SELECTED COLOR phrase.
  - d. Create a new <div> element with class="random", and make the color of this div change every 0.5 seconds. Tip: <a href="setInterval">setInterval</a> function. That is how the page will look at the end:

# Hello world!



3. Modify question 1.4 from Exercise 7 (last week) to only highlight the text when a button is clicked. You may just copy and paste the code and do this modification.



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## CHALLENGE (extra points)

Create a simple calculator that contains the numbers 0-9, and the mathematical functions +, -, /, \*, =. Everything must be done with buttons and it must look like a calculator, something like:





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index.html file for question 2:

```
<!DOCTYPE html>
<html>
<head>
    <meta charset="UTF-8">
    <title>JS 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;
    </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>
        <div class="blue"></div>
        <div class="yellow"></div>
    </section>
    <script src="script.js"></script>
</body>
</html>
```