

Problem statement:

With your knowledge gained in DOM, create a webpage with a button that invokes different functions in different events.

HTML elements:

- Button with ID → To add events by accessing this from JavaScript.
- <p> with ID → To display the name of the event by accessing this from JavaScript.

JavaScript:

- Get the instance of the button and store it in a variable using getElementById() method.
- Create three functions that access the <p> tag in HTML and add the content to the element using the .innerHTML() method.
- The content should be different for all three functions:

Solution:

Html Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>DOM</title>
  <!-- css file -->
  <link rel="stylesheet" href="DOM.css">
</head>
<body>
  <!-- main div -->
  <div class="container">
    <!-- heading -->
    <h4>The button displays different mouse events on it. Try it!</h4>
    <!-- button for mouse events -->
    <button id="btn">Explore the button</button>
    <!-- paragraph to display the event message -->
    <p id="event"></p>
    <!-- js file -->
    <script src="DOM.js" type="text/javascript"></script>
  </div>
</body>
</html>
```

JS Code:

```
//initialisation of button event in the variable
var clickVal = document.getElementById("btn");

//adding events to the button
clickVal.addEventListener("click" , eventfunction);
clickVal.addEventListener("mouseover" , eventfunction2);
clickVal.addEventListener("mouseout" , eventfunction3);

//-----functions definitions-----
```

```

//function definition for clicked
function eventfunction() {
    document.getElementById("event").innerHTML = "Button is clicked!";
}
//function definition for mouse over
function eventfunction2() {
    document.getElementById("event").innerHTML = "Mouse over button!";
}
//function definition for mouse out
function eventfunction3() {
    document.getElementById("event").innerHTML = "Mouse out of button!";
}

```

CSS Code:

```

/* universal styling */
*{
    font-family: Verdana, Geneva, Tahoma, sans-serif;
}
/* main div */
.container{
    background-color: coral;
    padding: 2em;
    text-align: center;
    margin: auto;
    width: 50%;
}
/* buttons styling */
#btn{
    background-color: rgb(191, 205, 191);
    border-style: none;
    padding: 1em;
    border-radius: 1em;
    cursor: pointer;
}
/* event paragraph styling */
#event{
    background-color: rgb(233, 237, 124);
    padding: 1em;
    height: 2em;
    font-size: 2em;
    font-weight: bold;
}

```

Output:

The button displays different mouse events on it. Try it!

Explore the button

Mouse over button!

The button displays different mouse events on it. Try it!

Explore the button

Mouse out of button!

The button displays different mouse events on it. Try it!

Explore the button

Button is clicked!

(when mouse over the button)

(when mouse out)

(when button is clicked)