



>> JavaScript: Event Handling

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Events

- DOM Events are sent to notify code of interesting things that have taken place.
- Any action on the page by the user can trigger an event
- Create Event Listeners to listen and react to an event
- Complete list of events can be found at <https://developer.mozilla.org/en-US/docs/Web/Events>

Add Listener to a Node

- Two methods
 - `addEventListener()`
 - Using "on" property
- The **`addEventListener`** method is the most preferred way to add an event listener
- "on" property does not allow adding multiple event listeners on the same element

ADDEVENTLISTENER() METHOD

```
<!DOCTYPE html>
<html>
  <head>
    <title> Test Page </title>
  </head>
  <body>
    <h1>This is a sample heading</h1>
    <div>
      <p>This is a paragraph </p>
    </div>
    <p>This is another paragraph</p>
    <div id="test">
      <a href="a.html">Link</a>
    </div>
    <p class="para">Last Para</p>
  </body>
</html>
```

If we click on h1, show a pop-up

Step 1

Select the Element

```
var element = document.getElement.....
```

Variable to store the
element

Select Element Function

```
<!DOCTYPE html>
<html>
  <head>
    <title> Test Page </title>
  </head>
  <body>
    <h1>This is a sample heading</h1>
    <div>
      <p>This is a paragraph </p>
    </div>
    <p>This is another paragraph</p>
    <div id="test">
      <a href="a.html">Link</a>
    </div>
    <p class="para">Last Para</p>
  </body>
</html>
```

h1

[0]

<h1>This is a sample heading</h1>

```
<script>
  var h1 = document.getElementsByTagName("h1");

</script>
```

Step 2

Attach an Event Handler to the Element

Function to create a Handler

What to do after action is done

```
h1.addEventListener("click", function(){
```

Node that listens to
event

Event to listen to

```
});
```



```
<!DOCTYPE html>
<html>
  <head>
    <title> Test Page </title>
  </head>
  <body>
    <h1>This is a sample heading</h1>
    <div>
      <p>This is a paragraph </p>
    </div>
    <p>This is another paragraph</p>
    <div id="test">
      <a href="a.html">Link</a>
    </div>
    <p class="para">Last Para</p>
  </body>
</html>
```

h1

[0]

<h1>This is a sample heading</h1>

If we click on h1, a pop-up shows up

```
<script>
  var h1 = document.getElementsByTagName("h1");
  h1[0].addEventListener("click", function(){
    alert("H1 Clicked");
  });
</script>
```

“ON” PROPERTY

Step 2

Attach an Event Handler to the Element

h1.onkeypress = function(event){

Node that listens to
event

What to do after action is done

More information
about the event is
passed as a parameter

};

WILL SHOW THE KEY PRESSED IN THE CONSOLE

```
<script>
  window.onkeypress = function(event){
    console.log(event.key);
  };
</script>
```

EXERCISE 1

Exercise 1

- Download the **First Exercise** in the Class Exercise for Lecture 5: Event Handling
- **Task:** For each button press, change the color of the body background
- Write your code in the `<script>` tag
- **HINT:** Use “document.body” to select the body Element

EXERCISE 2

Exercise 2

- Download the **Second Exercise** in the Class Exercise for Lecture 5: Event Handling
- **Task:** If the **Add Button** is pressed, add the text "Add Clicked" to the DIV (result). If the **Update button** is pressed, add the text "Update Clicked" to the DIV (result). If the **Delete button** is pressed, add the text "Delete Clicked" to the DIV (result)
- Write your code in the `<script>` tag
- **HINT:** Use "+=" for innerHTML so that it can append to the text inside the DIV and not overwrite it.