

## Handling Events In JavaScript

In programming, event-driven programming could be a programming paradigm during which the flow of the program is set by events like user actions (mouse clicks, key presses), sensor outputs, or messages from variety of programs/threads. Event-driven programming is that the dominant paradigm employed in graphical user interfaces and different applications (e.g. JavaScript web applications) that are targeted on performing certain actions in response to user input.

Event-driven programs may be written in any programming language, though the task is simpler in languages that give high-level abstractions, like closures.

- For instance, we're using the `onmousedown` event of the `<body>` element (which represents the whole web page) to respond to mouse down events (that is, the mouse button was pressed).
- When the user presses the mouse button while in the page (Note it down, on the exact body element), the `onmousedown` event "fires" (that's the technical term) and the JavaScript assigned to that event will get executed.



- In this case, that JavaScript is the statement `alert ('WikiTechy, you clicked the page.')`, which displays a JavaScript alert box (that is, a dialog box) with the text "WikiTechy, You clicked the page." in it.

## Mouse Events Handling

Event	Description
onclick	This event happens, while the end user clicks on an element
oncontextmenu	This event happens, while the end user right-clicks on an element to open a context menu
ondblclick	This event happens, while the end user double-clicks on an element
onmousedown	This event happens, while the end user presses a mouse button over an element
onmouseenter	This event happens, while the pointer is moved onto an element
onmouseleave	This event happens, while the pointer is moved out of an element
onmousemove	This event happens, while the pointer is moving while it is over an element
onmouseover	This event happens, while the pointer is moved onto an element, or onto one of its children
onmouseout	This event happens, while the end user moves This mouse pointer out of an element, or out of one of its children
onmouseup	This event happens, while the end user releases a mouse button over an element

## Keyboard Events Handling

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Event	Description
onkeydown	This event occur once the end user is pressing a key
onkeypress	This event occur once the end user presses a key
onkeyup	This event occur once the end user releases a key

## Frame/Object Events

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Event	Description
onabort	This event occurs once the loading of a resource has been aborted
onbeforeunload	The event occurs before the document is about to be unloaded
onerror	This event occurs once the error occurs while loading an external file
onhashchange	The event occurs when there has been changes to the anchor part of a URL
onload	This event occurs once the object has loaded
onpageshow	This event occurs once the end user navigates to a webpage
onpagehide	This event occurs once the end user navigates away from a webpage
onresize	This event occurs once the document view is resized
onscroll	This event occurs once the element's scrollbar is being scrolled
onunload	The event occurs once a page has unloaded (for <code>&lt;body&gt;</code> )



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## From Events Handling

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Event	Description
onblur	This event occur once the element loses focus
onchange	This event occur once the content of a form element, the selection, or the checked state have changed (for <code>&lt;input&gt;</code> , <code>&lt;keygen&gt;</code> , <code>&lt;select&gt;</code> , and <code>&lt;textarea&gt;</code> )
onfocus	This event occur once the element gets focus
onfocusin	This event occur once the element is about to get focus
onfocusout	This event occur once the element is about to lose focus
oninput	This event occur once the element gets end user input
oninvalid	This event occur once the element is invalid
onreset	The event occurs when a form is reset
onsearch	This event occur once the end user writes something in a search field (for <code>&lt;input="search"&gt;</code> )
onselect	The event occurs after the end user selects some text (for <code>&lt;input&gt;</code> and <code>&lt;textarea&gt;</code> )
onsubmit	The event occurs when a form is submitted



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## Drag Events Handling

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Event	Description
ondrag	This event occur once the element is being dragged
ondragend	This event occur once the end user has finished dragging an element
ondragenter	This event occur once the dragged element enters the drop target
ondragleave	This event occur once the dragged element leaves the drop target
ondragover	This event occur once the dragged element is over the drop target
ondragstart	This event occur once the end user starts to drag an element
ondrop	This event occur once the dragged element is dropped on the drop target



## Sample Code:

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```
<html>
<head>
  <title>
    Handling Events in JavaScript
  </title>
</head>
<body onmousedown="alert ('WikiTechy, you clicked the page.')">
  <h1>
    Mouse Event Fired: Click here to see the alert coming
up!
  </h1>
  Go ahead...
</body>
</html>
```



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## Code Explanation:

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```
<html>
<head>
  <title>
    Handling Events in JavaScript
  </title>
</head>
<body onmousedown="alert('WikiTechy, You clicked the page.')">
  <h1>
    Mouse Event Fired: Click here to see the alert coming up!
  </h1>
  Go ahead...
</body>
</html>
```

- 1 Title of the HTML web page
- 2 Onmousedown event located in the body tag. On clicking the body element, automatically the alert box will pop with the specified images.
- 3 Body Tag will have the HTML content. On click of the HTML content, the onmousedown event will fire and an alert box will pop up.

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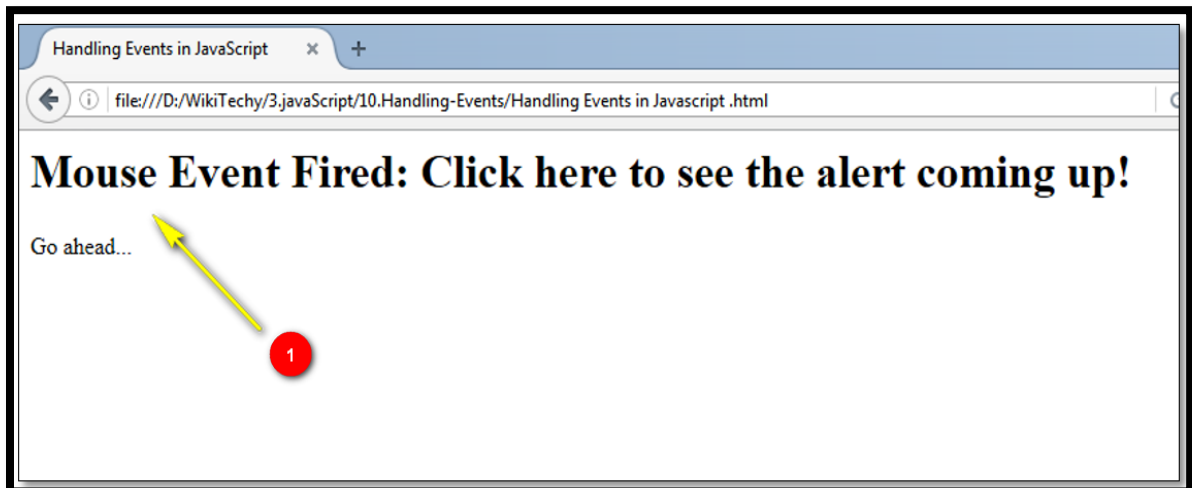
## Sample Code:

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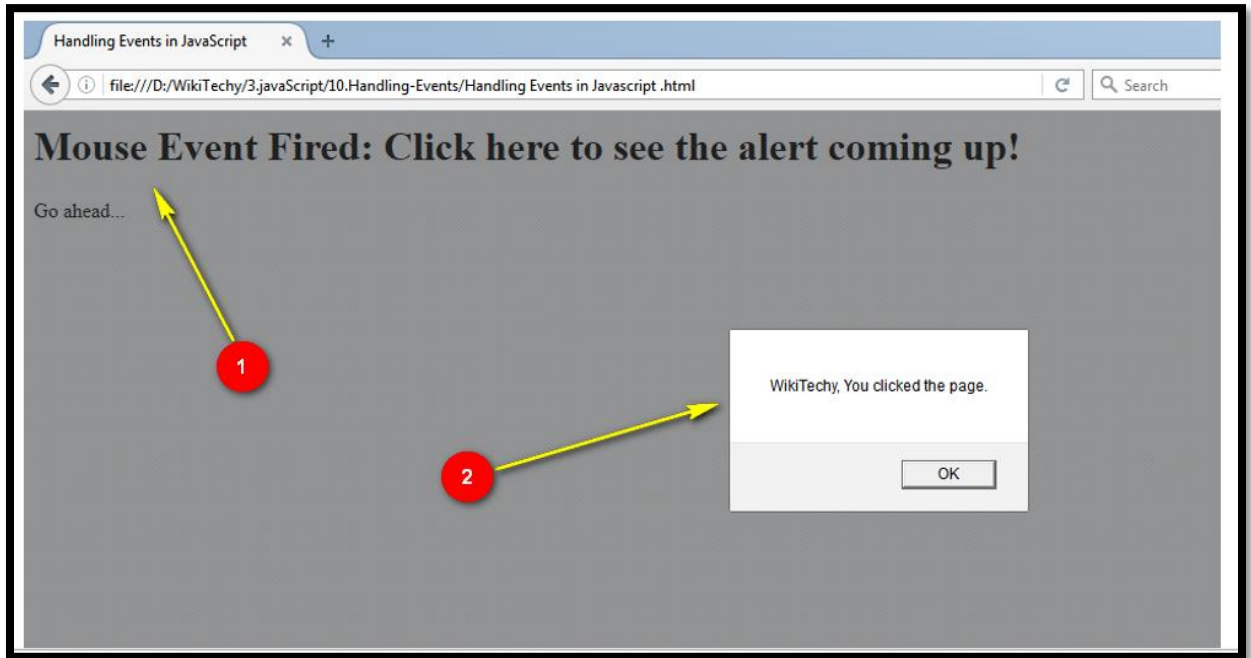


```
<html>
<head>
  <title>
    Handling Events in JavaScript
  </title>
</head>
<body onmousedown="alert('WikiTechy, You clicked the page.')">
  <h1>
    Mouse Event Fired: Click here to see the alert coming up!
  </h1>
  Go ahead...
</body>
</html>
```

## Output:



- 1 Body tag in the above HTML file.



- 1 On clicking the body tag, onmousedown event is fired and automatically an alert box with the specified message is popped up.

```
<body onmousedown="alert ('WikiTechy, you clicked the page.')">
```

- 2 Fired "onmousedown" event popped up the message box.

```
" Alert ('WikiTechy, you clicked the page.')"
```