

REACTING TO MOUSE CLICK

Locating the Mouse Cursor

An event is a notification about something specific that has occurred because of browser user action, such as mouse click on a form button, radio button etc. Strictly speaking event is an object that is implicitly created by the browser and the JavaScript system in response to something happened. Event object includes information about the event. For example mouse-click is one such event. Whenever user mouse-click on the document, event object is created which includes information like where and on which element event has occurred. A mouse-click event defines two pairs of properties that give geometric coordinates of the position of the element in the display that created the event. One pair of the coordinates, clientX and clientY gives the coordinates of the document display relative to the upper-left corner of the browser display window, in pixels. The other pair, screen and screenY gives coordinates of the element but relative client computer's screen.

In the following example, every time user clicks the mouse button an alter box displays the clientX, clientY, screenX and screen coordinates. The handler show_coords with event as parameter is triggered by the onclick attribute of the body element.

Reacting to a Mouse Click

In the following example mousedown and mouseup events are used to show and hide the image on the display under the mouse cursor whenever the mouse button is clicked. Whenever user clicks the mouse button ie. onmousedown event handler displayIt() is called with event as parameter and whenever user leaves the mouse button ie. onmouseup event handler hideIt() is called.

```
<?xml version = "1.0" encoding = "utf-8"?>
<!DOCTYPE html PUBLIC "-//w3c//DTD XHTML 1.1//EN"
  "http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">

<!--mouse.html -->
<html xmlns = "http://www.w3.org/1999/xhtml">
<head>
<script type="text/javascript">
function show_coords(event)
{
x=event.clientX;
```

```

y=event.clientY;
x1=event.screenX;
y1=event.screenY;

alert("ClientX coords: " + x + ", ClientY coords: " + y + ",ScreenX coords:
" + x1 + ", ScreenY coords: " + y1);
}
</script>
</head>

<body onclick="show_coords(event)">
<p>Click in the document. An alert box will alert the x and y coordinates of
the cursor.</p>
</body>
</html>

```

```

<?xml version = "1.0" encoding = "utf-8"?>
<!DOCTYPE html PUBLIC "-//w3c//DTD XHTML 1.1//EN"
"http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
<!--reacting.html
    Display a image when the mouse button is pressed,
-->
<html xmlns = "http://www.w3.org/1999/xhtml">
<head>
<title> Sense events anywhere </title>

```

```

<script type = "text/javascript">
    function displayIt(evt) {
        var dom = document.getElementById("image");
        dom.style.left = (evt.clientX - 30) + "px";
        dom.style.top = (evt.clientY - 25) + "px";
        dom.style.visibility = "visible";
    }

    function hideIt() {
        document.getElementById("image").style.visibility =
            "hidden";
    }

```

```
}
</script>
</head>
<body onmousedown="displayIt(event);"
      onmouseup = "hideIt();">
  <div id= "image"
      style = " visibility: hidden; position: relative">
    <img src = "smiley.gif" />
  </div>
</body>
</html>
```

Source : <http://elearningatria.files.wordpress.com/2013/10/cse-vii-programming-the-web-10cs73-notes.pdf>