

Keyboard Events

The Keyboard Events include

- onkeypress
- onkeydown
- onkeyup

These events are run any time a key is pressed on a keyboard. If different actions are required depending on the key, then that must be checked in a function.

New Variables

event

An object that holds event information. It contains several subvariables/properties. These properties can tell us more about the event. For many events (click, scroll, etc) additional event information may not be necessary, but for keyboard events, we need some of these properties. For a full list of the properties in the event object, look here:

<http://www.htmlgoodies.com/beyond/javascript/events-and-javascript-part-3-the-event-object.html>

event.keyCode

The property within the event object that returns the keycode of the key that was pressed. This is returned as a Unicode key code. Look at this example to find out which keycodes indicate each key.

https://www.w3schools.com/jsref/tryit.asp?filename=tryjsref_event_key_keycode_2

For more information on the Keycode property:

https://www.w3schools.com/jsref/event_key_keycode.asp

Exercise

Build a page where pressing the arrow keys moves a div.

1. Start with a div with the ID 'mover'. Give it a size and background color. Set its position to absolute.
2. create a variable called 'xpos' and set its value to 0.

```
xpos=0;
```

3. Create a JS function called 'moveme' which takes 'event' as an argument

```
function moveme(event){  
  
}
```

4. Inside this function, get the 'mover' div and store it in a variable called 'mbox'

5. `mbox=document.getElementById('mover');` Create a conditional statement that checks the event's keycode, compares it to 39 (Unicode for the right arrow key) . Inside the conditional, increment xpos, and set mbox's 'left' attribute to xpos.

```
if(event.keyCode==39){
    xpos = xpos+10;
    mbox.style.left = xpos+"px";
}
```

7. In the body tag, set the onkeydown event to your new function. Pass it 'event' as an argument.

```
<body onkeydown="moveme(event)">
```

So your full HTML should look like this:

```
<body onkeydown="moveme(event)">
  <div id='mover'></div>
</body>
```

And your JavaScript should look like this:

```
xpos=0;
function moveme(event){
    mbox=document.getElementById('mover');
    if(event.keyCode==39){
        xpos = xpos+10;
        mbox.style.left = xpos+"px";
    }
}
```

If this is working, add additional script to handle the other directions. The remaining arrow keys are 37 (left), 38 (up), and 40 (down).

Post this to your wordpress site with your Javascript Exercises.