

EVENT LISTENERS

CAN YOU HEAR ME NOW?

EVENT HANDLING TO EVENT LISTENERS

We've covered event handlers – let's review their syntax below.

```
myElement.onclick = function(){
```

```
//your event handler code
```

```
};
```

or

```
myElement.onclick = myFunction;
```

```
function myFunction(){
```

```
function defined
```

```
}
```

BUTTON EVENTHANDLER



Change Me!

```
<script>
window.onload = init;
function init() {
var myButton = document.getElementById("changeMe");
myButton.onclick = showAnswer;
}
function showAnswer() {
var image = document.getElementById("zero");
image.src = "zero.jpg";
}
</script>
</head>
<body>
<br>
<input type="button" id="changeMe" value="Change Me!">
</body>
</html>
```

EVENT LISTENERS

Now let's now cover a more modern approach to events with event listeners.

Event listeners are *methods*, called either on the document object, or on any element that you have. (in contrast, `.onload` is a *property* of the window object).

They provide 3 arguments:

```
element.addEventListener('click', myFunction, false);
```

1. `click` – the event (notice it's not `onclick`)
2. `myFunction` -- the function you want to run
3. `false` – determines if the event is “bubbled up” to parent elements (this can be left off...)

EVENT LISTENER MODELS

```
element.addEventListener('click', myFunction, false);
```

```
//or without false...
```

```
element.addEventListener('click', myFunction);
```

```
//For both of the above, the function would then be defined externally
```

```
//below has a function defined in it
```

```
element.addEventListener('click', function(){  
    if (this){  
        do this;  
    });
```

BUTTON EVENT LISTENER

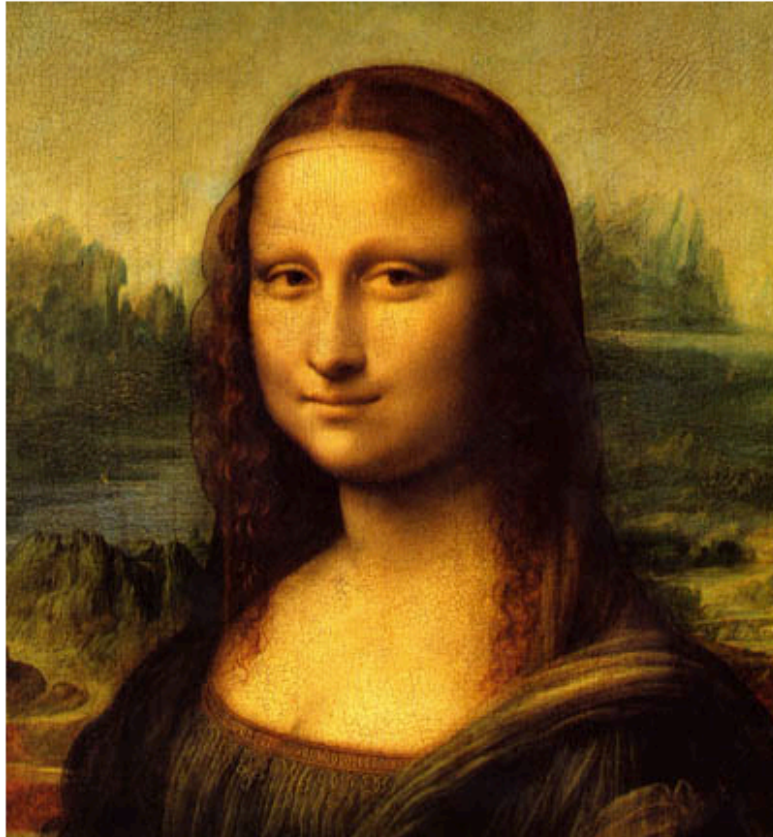


Change Me!

```
<script>
window.onload = init;
function init() {
var myButton = document.getElementById("changeMe");
myButton.addEventListener('click', showAnswer, false);
}
function showAnswer() {
var image = document.getElementById("zero");
image.src = "zero.jpg";
}

</script>
</head>
<body>
<br>
<input type="button" id="changeMe" value="Change Me!">
</body>
```

BUTTON EVENT LISTENER – FUNCTION DEFINED INSIDE



Change Me!

```
<script>
window.onload = init;
function init() {
var myButton = document.getElementById("changeMe");

myButton.addEventListener("click", function(){
    var image = document.getElementById("zero");
    image.src = "zero.jpg";
});
}
</script>
</head>
<body>
<br>
<input type="button" id="changeMe" value="Change Me!>
</body>
</html>
```


BUTTON EVENT LISTENER – VARIATION 1



```
<script>
window.onload = init;
function init() {
document.getElementById("changeMe").addEventListener("click", function(){
    var image = document.getElementById("zero");
    image.src = "zero.jpg";
});
}
</script>
</head>
<body>
<br>
<input type="button" id="changeMe" value="Change Me!">
</body>
</html>
```

Change Me!

BUTTON EVENT LISTENER – VARIATION2



Change Me!

```
<script>
window.onload = init;
function init() {
button.addEventListener("click", function(){
    var image = document.getElementById("zero");
    image.src = "zero.jpg";
});
}
</script>
</head>
<body>
<br>
<input type="button" id="button" value="Change Me!">
</body>
</html>
```