

Browser Events

Attaching to HTML

"old" way

```
<button onclick="alert('clicked!');">  
  Click Me!  
</button>
```

```
<input type="text" onblur="alert('lost focus!');">
```

Attaching to DOM elements (modern way)

```
node.addEventListener('click', function (event) {  
    // handle click event  
})
```

```
node.addEventListener('blur', function (event) {  
    // handle blur event  
})
```

Removing event listeners

```
function handler(event) {  
    // handle click event  
}  
  
node.addEventListener('click', handler)  
//..  
  
node.removeEventListener('click', handler);
```

<https://developer.mozilla.org/en-US/docs/Web/API/EventTarget/addEventListener>

Handling events (callbacks)

```
function (event) {  
    // handle event accordingly  
  
    event.target // target node/element  
    event.currentTarget // node listening for event  
    event.type // 'click'  
    event.stopPropagation()  
    event.preventDefault()  
}
```

<https://developer.mozilla.org/en-US/docs/Web/Events>

Event Propagation

"Bubbling"

```
<body>  
  <div id="container">  
    <div id="one">First</div>  
    <div id="two">Second</div>  
    <div id="three">Third</div>  
  </div>  
</body>
```

Event Propagation

"Bubbling"

```
<script>
  var container = document.getElementById('container');

  container.addEventListener('click', function (event) {
    var elementClicked = event.target;
    console.log(elementClicked.id);
  });
</script>
```

Event Propagation

Stopping propagation

```
<script>
  var container = document.getElementById('container');

  container.addEventListener('click', function (event) {
    var elementClicked = event.target;
    console.log(elementClicked.id);
  });

  var firstChild = document.getElementById('one');

  firstChild.addEventListener('click', function (event) {
    console.log('clicked first!');
    event.stopPropagation();
  })
</script>
```


Counter Example

```
<html>
  <body>
    <div id="counter">0</div>
    <script>
      var count = 0;
      var counterNode = document.getElementById( 'counter' );

      function clickHandler(event) {
        count++;
        counterNode.innerHTML = count;
      }

      counter.addEventListener( 'click', clickHandler )
    </script>
  </body>
</html>
```