

4. Random Selections with jQuery and JavaScript

There are times when too much content exists for reasonable comprehension of the complete scope. techniques for managing large quantities of content include time-based presentations such as slideshows or carousels as well as randomization. We can use hidden HTML elements' content creatively with random selection and display, aided by JavaScript's Math object and its built-in **floor()** and **random()** methods in combination with built-in methods from the jQuery library,

jQuery Methods in Use

Here we look at the use of the jQuery library's built-in **children()**, **show()** and **hide()** methods.

<code>\$('.mygroup').length;</code>	Returns the count of elements with class="mygroup". Note that this is a property and not a method, so no parentheses are used after the term.
<code>\$('.mygroup').eq(0);</code>	Returns the first element found in the array of elements returned with class="mygroup".
<code>\$('#myitem').hover(function() { });</code>	The hover() event handler runs code in anonymous function code block when user moves pointer over element with id="myitem".
<code>\$('.mygroup').html('text');</code>	Sets the contents to the phrase "text" for all elements with class="mygroup".

Example

Our example takes a parent unordered list element and hides it and its children. The code then establishes a hover event handler whose code creates a random number between zero and the number of children in the previously hidden element. The code proceeds to select the index-positioned child element of the hidden unordered list, and copy its contents into a designated container element.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>jQuery Example: Random Selections</title>
  <!-- load bootstrap css via cdn -->
  <link rel="stylesheet" href="https://netdna.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap.min.css">
  <!-- load jquery js via cdn -->
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.3/jquery.min.js"></script>
  <!-- load bootstrap js via cdn -->
  <script src="https://netdna.bootstrapcdn.com/bootstrap/3.3.6/js/bootstrap.min.js"></script>
</head>
<body>
  <div class="container">
    <div class="row">
      <div class="col-md-12">
        <h2>Display random content</h2>
        <!-- container to use for display of random element -->
        <div id="billboard">What?</div>
        <!-- list containing content items for display-->
        <ul id="itemlist">
          <li>Apple</li>
          <li>Banana</li>
          <li>Carrot</li>
          <li>Date</li>
```

```

</li>Date</li>
<li>Endive</li>
<li>Fig</li>
<li>Grape</li>
<li>Honeydew melon</li>
<li>Iceberg lettuce</li>
<li>Jerusalem artichoke</li>
<li>Kiwi</li>
<li>Lemon</li>
<li>Mango</li>
<li>Nectarine</li>
<li>Orange</li>
<li>Pear</li>
<li>Quince</li>
<li>Radish</li>
<li>Strawberry</li>
<li>Tomato</li>
<li>Uglifruit</li>
<li>Victoria plum</li>
<li>Watermelon</li>
<li>Yam</li>
<li>Zucchini</li>
</ul>
</div>
</div>
</div>
<!-- custom javascript using jquery to handle dynamic search filtering -->
<script>
    // hide item with id="itemlist" when script first runs
    $("#itemlist").hide();

    // create event handler for user pointing at billboard div
    $("#billboard").hover(
        function() {
            // get total count of children in itemlist
            var t = $("#itemlist").children().length;
            // get random number 0-t with JavaScript Math object's random() & floor()
            var r = Math.floor( Math.random() * t );
            // get random child list item contents
            var c = $("#itemlist").children().eq( r ).html()
            // replace billboard contents
            $("#billboard").html( c );
        }
    );
</script>
</body>
</html>

```

Check out W3School's JavaScript reference site for more details on the Math object in the JavaScript language, where many mathematical functions reside for easy access and use in our code. The W3School page on the Math object can be found at http://www.w3schools.com/js/js_math.asp (http://www.w3schools.com/js/js_math.asp).