



jQuery Event Handling Part 2

SENG 4640

Software Engineering for Web Apps
Winter 2023

Sina Keshvadi
Thompson Rivers University

Review

- Previously we saw how to use jQuery to retrieve and modify DOM elements and add event listeners
- What other types of events can we handle?

User Events in the Browser

Event Type	Events
Mouse	click, dblclick, mousedown, mouseup, mouseover, mouseout

User Events in the Browser

Event Type	Events
Mouse	click, dblclick, mousedown, mouseup, mouseover, mouseout
Keyboard	keydown, keypress, keyup

User Events in the Browser

Event Type	Events
Mouse	click, dblclick, mousedown, mouseup, mouseover, mouseout
Keyboard	keydown, keypress, keyup
Form	focus, blur, change, reset, submit

User Events in the Browser

Event Type	Events
Mouse	click, dblclick, mousedown, mouseup, mouseover, mouseout
Keyboard	keydown, keypress, keyup
Form	focus, blur, change, reset, submit
Window / Element	load, resize, scroll, unload



Dog Cat Bird

Happy Cute Smart

I'd like to buy a new animal.



Dog Cat Bird

Happy Cute Smart

I'd like to buy a new bird.



Dog Cat Bird

Happy Cute Smart

I'd like to buy a new cat.

Male Female Dog Cat Bird Happy Cute Smart

I'd like to buy a new cat.

Dog Cat Bird

Happy Cute Smart

I'd like to buy a new female cat.

Dog Cat Bird

Happy Cute Smart

I'd like to buy a new happy female cat.

Dog Cat Bird

Happy Cute Smart

I'd like to buy a new happy, smart female cat.

Female ▾

Dog Cat Bird

Happy Cute Smart

I'd like to buy a new happy, smart, cute female cat.

Dog Cat Bird

Happy Cute Smart

I'd like to buy a new happy, cute female cat.

```
<head>
<script src="jquery.js"></script>
</head>

<body>

<form>

<select name="choose">
  <option value="male">Male</option>
  <option value="female">Female</option>
</select>
<p>
<input type="radio" name="species" value="dog">Dog</input>
<input type="radio" name="species" value="cat">Cat</input>
<input type="radio" name="species" value="bird">Bird</input>
<p>
<input type="checkbox" value="happy">Happy</input>
<input type="checkbox" value="cute">Cute</input>
<input type="checkbox" value="smart">Smart</input>

</form>

<p>
I'd like to buy a new <span id="featureSpan"></span>
<span id="genderSpan"></span> <span id="speciesSpan">animal</span>.
```



```
<head>
<script src="jquery.js"></script>
</head>

<body>

<form>

<select name="choose">
  <option value="male">Male</option>
  <option value="female">Female</option>
</select>
<p>
<input type="radio" name="species" value="dog">Dog</input>
<input type="radio" name="species" value="cat">Cat</input>
<input type="radio" name="species" value="bird">Bird</input>
<p>
<input type="checkbox" value="happy">Happy</input>
<input type="checkbox" value="cute">Cute</input>
<input type="checkbox" value="smart">Smart</input>

</form>

<p>
I'd like to buy a new <span id="featureSpan"></span>
<span id="genderSpan"></span> <span id="speciesSpan">animal</span>.
```

```
<head>
<script src="jquery.js"></script>
</head>

<body>

<form>

<select name="choose">
  <option value="male">Male</option>
  <option value="female">Female</option>
</select>
<p>
<input type="radio" name="species" value="dog">Dog</input>
<input type="radio" name="species" value="cat">Cat</input>
<input type="radio" name="species" value="bird">Bird</input>
<p>
<input type="checkbox" value="happy">Happy</input>
<input type="checkbox" value="cute">Cute</input>
<input type="checkbox" value="smart">Smart</input>

</form>

<p>
I'd like to buy a new <span id="featureSpan"></span>
<span id="genderSpan"></span> <span id="speciesSpan">animal</span>.
```

the radio buttons that are together **must** have
the same name

```
<head>
<script src="jquery.js"></script>
</head>

<body>

<form>

<select name="choose">
  <option value="male">Male</option>
  <option value="female">Female</option>
</select>
<p>
<input type="radio" name="species" value="dog">Dog</input>
<input type="radio" name="species" value="cat">Cat</input>
<input type="radio" name="species" value="bird">Bird</input>
<p>
<input type="checkbox" value="happy">Happy</input>
<input type="checkbox" value="cute">Cute</input>
<input type="checkbox" value="smart">Smart</input>

</form>

<p>
I'd like to buy a new <span id="featureSpan"></span>
<span id="genderSpan"></span> <span id="speciesSpan">animal</span>.
```

```
<head>
<script src="jquery.js"></script>
</head>

<body>

<form>

<select name="choose">
  <option value="male">Male</option>
  <option value="female">Female</option>
</select>
<p>
<input type="radio" name="species" value="dog">Dog</input>
<input type="radio" name="species" value="cat">Cat</input>
<input type="radio" name="species" value="bird">Bird</input>
<p>
<input type="checkbox" value="happy">Happy</input>
<input type="checkbox" value="cute">Cute</input>
<input type="checkbox" value="smart">Smart</input>

</form>

<p>
I'd like to buy a new <span id="featureSpan"></span>
<span id="genderSpan"></span> <span id="speciesSpan">animal</span>.
```

spans to change the text

```
<select name="choose">
  . . .
</select>
<p>
<input type="radio" name="species" value="dog">Dog</input>
<input type="radio" name="species" value="cat">Cat</input>
<input type="radio" name="species" value="bird">Bird</input>
. . .
<p>
I'd like to buy a new <span id="featureSpan"></span>
<span id="genderSpan"></span> <span id="speciesSpan">animal</span>.
```

<script>

```
// handling select box
$("select[name='choose']").change(function() {
    $('#genderSpan').html($(this).val());
});

// handling radio buttons
$("input:radio[name='species']").change(function() { if
    ($(this).prop('checked')) {
        $('#speciesSpan').html($(this).val());
    }
});
```

```

<select name="choose">
  . . .
</select>
<p>
<input type="radio" name="species" value="dog">Dog</input>
<input type="radio" name="species" value="cat">Cat</input>
<input type="radio" name="species" value="bird">Bird</input>
. . .
<p>
I'd like to buy a new <span id="featureSpan"></span>
<span id="genderSpan"></span> <span id="speciesSpan">animal</span>.
<script>

  // handling select box
  $("select[name='choose']").change(function() {
    $('#genderSpan').html($(this).val());
  });

  // handling radio buttons
  $("input:radio[name='species']").change(function() { if
    ($(this).prop('checked')) {
      $('#speciesSpan').html($(this).val());
    }
  });

```

```

use // to comment in JS for one line
Multi-line comments start with /* and end with */.
use <!-- --> to comment in HTML Link

```

```

<select name="choose">
  . . .
</select>
<p>
<input type="radio" name="species" value="dog">Dog</input>
<input type="radio" name="species" value="cat">Cat</input>
<input type="radio" name="species" value="bird">Bird</input>
. . .
<p>
I'd like to buy a new <span id="featureSpan"></span>
<span id="genderSpan"></span> <span id="speciesSpan">animal</span>.
<script>
  // handling select box
  $ ("select[name='choose']") .change (function () {
    $ ('#genderSpan') .html ($ (this) .val ());
  });

  // handling radio buttons
  $ ("input:radio[name='species']") .change (function () { if
    ($ (this) .prop ('checked')) {
      $ ('#speciesSpan') .html ($ (this) .val ());
    }
  });

```

Select box change event

```

<select name="choose">
  . . .
</select>
<p>
<input type="radio" name="species" value="dog">Dog</input>
<input type="radio" name="species" value="cat">Cat</input>
<input type="radio" name="species" value="bird">Bird</input>
. . .
<p>
I'd like to buy a new <span id="featureSpan"></span>
<span id="genderSpan"></span> <span id="speciesSpan">animal</span>.
<script>

  // handling select box
  $("select[name='choose']").change(function() {
    $('#genderSpan').html($(this).val());
  });

  // handling radio buttons
  $("input:radio[name='species']").change(function() {
    if ($(this).prop('checked')) {
      $('#speciesSpan').html($(this).val());
    }
  });

```

handle radio button changes to checked status


```
<p>
I'd like to buy a new <span id="featureSpan"></span>
<span id="genderSpan"></span> <span id="speciesSpan">animal</span>.
```

```
<script>
```

```
  . . .
```

```
  var allChecked = [];
```

```
  $('input:checkbox').change(function() {
```

```
    var value = $(this).val();
```

```
    if ($(this).prop('checked')) {
```

```
      allChecked.push(value);
```

```
    }
```

```
    else {
```

```
      var index = allChecked.indexOf(value); if
```

```
        (index !== -1)
```

```
          allChecked.splice(index, 1);
```

```
    }
```

```
    $('#featureSpan').html('');
```

```
    for (var i = 0; i < allChecked.length; i++) {
```

```
      $('#featureSpan').append(allChecked[i]); if
```

```
        (i < allChecked.length - 1)
```

```
          $('#featureSpan').append(', ');
```

```
      else
```

```
        $('#featureSpan').append(' ');
```

```
    }
```

```
  });
```

```
</script>
```

Handle checks boxes changes events

```
<p>
I'd like to buy a new <span id="featureSpan"></span>
<span id="genderSpan"></span> <span id="speciesSpan">animal</span>.
```

```
<script>
```

```
  . . .
```

```
  var allChecked = [];
```

```
  $('input:checkbox').change(function() {
    var value = $(this).val();
    if ($(this).prop('checked')) {
      allChecked.push(value);
    }
    else {
      var index = allChecked.indexOf(value); if
      (index != -1)
        allChecked.splice(index, 1);
    }
    $('#featureSpan').html('');
    for (var i = 0; i < allChecked.length; i++) {
      $('#featureSpan').append(allChecked[i]); if
      (i < allChecked.length - 1)
        $('#featureSpan').append(', ');
      else
        $('#featureSpan').append(' ');
    }
  });
```

```
</script>
```

an array to keep all checked checkboxes' values

```
<p>
I'd like to buy a new <span id="featureSpan"></span>
<span id="genderSpan"></span> <span id="speciesSpan">animal</span>.
```

```
<script>
```

```
  . . .
```

```
  var allChecked = [];
```

```
  $('input:checkbox').change(function() {
```

```
    var value = $(this).val();
```

```
    if ($(this).prop('checked')) {
```

```
      allChecked.push(value);
```

```
    }
```

```
    else {
```

```
      var index = allChecked.indexOf(value); if
```

```
        (index !== -1)
```

```
          allChecked.splice(index, 1);
```

```
    }
```

```
    $('#featureSpan').html('');
```

```
    for (var i = 0; i < allChecked.length; i++) {
```

```
      $('#featureSpan').append(allChecked[i]); if
```

```
        (i < allChecked.length - 1)
```

```
          $('#featureSpan').append(', ');
```

```
      else
```

```
        $('#featureSpan').append(' ');
```

```
    }
```

```
  });
```

```
</script>
```

bind input elements with checkbox type to the change event

```
<p>
I'd like to buy a new <span id="featureSpan"></span>
<span id="genderSpan"></span> <span id="speciesSpan">animal</span>.
```

```
<script>
```

```
  . . .
```

```
  var allChecked = [];
```

```
  $('input:checkbox').change(function() {
```

```
    var value = $(this).val();
```

```
    if ($(this).prop('checked')) {
```

```
      allChecked.push(value);
```

```
    }
```

```
    else {
```

```
      var index = allChecked.indexOf(value); if  
      (index !== -1)
```

```
        allChecked.splice(index, 1);
```

```
    }
```

```
    $('#featureSpan').html('');
```

```
    for (var i = 0; i < allChecked.length; i++) {
```

```
      $('#featureSpan').append(allChecked[i]); if
```

```
      (i < allChecked.length - 1)
```

```
        $('#featureSpan').append(', ');
```

```
      else
```

```
        $('#featureSpan').append(' ');
```

```
    }
```

```
  });
```

```
</script>
```

```
if this element has been checked, add its value to  
the array (push adds an element to the end of an  
array)
```

```
<p>
I'd like to buy a new <span id="featureSpan"></span>
<span id="genderSpan"></span> <span id="speciesSpan">animal</span>.
```

```
<script>
```

```
  . . .
```

```
  var allChecked = [];
```

```
  $('input:checkbox').change(function() {
    var value = $(this).val();
    if ($(this).prop('checked')) {
      allChecked.push(value);
    }
```

```
  else {
```

```
    var index = allChecked.indexOf(value);
```

```
    if (index != -1)
```

```
      allChecked.splice(index, 1);
```

```
  }
```

```
  $('#featureSpan').html('');
```

```
  for (var i = 0; i < allChecked.length; i++) {
```

```
    $('#featureSpan').append(allChecked[i]); if
```

```
    (i < allChecked.length - 1)
```

```
      $('#featureSpan').append(', ');
```

```
    else
```

```
      $('#featureSpan').append(' ');
```

```
  }
```

```
  });
```

```
</script>
```

```
remove the value from the array if the change was
unchecked. splice remove 1 (could be more) item
starting from index
```

```
<p>
I'd like to buy a new <span id="featureSpan"></span>
<span id="genderSpan"></span> <span id="speciesSpan">animal</span>.
```

```
<script>
```

```
  . . .
```

```
  var allChecked = [];
```

```
  $('input:checkbox').change(function() {
```

```
    var value = $(this).val();
```

```
    if ($(this).prop('checked')) {
```

```
      allChecked.push(value);
```

```
    }
```

```
    else {
```

```
      var index = allChecked.indexOf(value); if
```

```
        (index !== -1)
```

```
          allChecked.splice(index, 1);
```

```
    }
```

```
    $('#featureSpan').html('');
```

```
    for (var i = 0; i < allChecked.length; i++) {
```

```
      $('#featureSpan').append(allChecked[i]); if
```

```
        (i < allChecked.length - 1)
```

```
          $('#featureSpan').append(', ');
```

```
      else
```

```
        $('#featureSpan').append(' ');
```

```
    }
```

```
  });
```

```
</script>
```

```
add the checked items to the span
```

```
<p>
I'd like to buy a new <span id="featureSpan"></span>
<span id="genderSpan"></span> <span id="speciesSpan">animal</span>.
```

```
<script>
```

```
  . . .
```

```
  var allChecked = [];
```

```
  $('input:checkbox').change(function() {
```

```
    var value = $(this).val();
```

```
    if ($(this).prop('checked')) {
```

```
      allChecked.push(value);
```

```
    }
```

```
    else {
```

```
      var index = allChecked.indexOf(value); if
```

```
        (index != -1)
```

```
          allChecked.splice(index, 1);
```

```
    }
```

```
    $('#featureSpan').html('');
```

```
    for (var i = 0; i < allChecked.length; i++) {
```

```
      $('#featureSpan').append(allChecked[i]); if
```

```
        (i < allChecked.length - 1)
```

```
          $('#featureSpan').append(', ');
```

```
      else
```

```
        $('#featureSpan').append(' ');
```

```
    }
```

```
  });
```

```
</script>
```

Password length checker



Validate Password

Please fix the following errors:

- The password must contain a number
- The password must be at least 10 characters long

Validate Password

Please fix the following errors:

- The password must be at least 10 characters long

Validate Password

The password is okay!

Validate Password

```
<head>
<script src="jquery.js"></script>

<style>

.errorText {
color: red;
}

.errorBox {
border: 2px solid red;
}

.goodBox {
border: 2px solid green;
}

</style>

</head>
```

add jquery and css styles

```
<head>
<script src="jquery.js"></script>

<style>

.errorText {
color: red;
}

.errorBox {
border: 2px solid red;
}

.goodBox {
border: 2px solid green;
}

</style>

</head>
```

a errorText class for error texts

```
<head>
<script src="jquery.js"></script>

<style>

.errorText {
color: red;
}

.errorBox {
border: 2px solid red;
}

.goodBox {
border: 2px solid green;
}

</style>

</head>
```

errorBox class for error boxes with red border

```
<head>
<script src="jquery.js"></script>

<style>

.errorText {
color: red;
}

.errorBox {
border: 2px solid red;
}

.goodBox {
border: 2px solid green;
}

</style>

</head>
```

goodBox class for correct boxes with green border

Please fix the following errors:

- The password must contain a number
- The password must be at least 10 characters long

Validate Password

```
<body>

<input type="password" name="password"></input>
<br>
<span id="errorMessage" class="errorText" hidden>
    Please fix the following errors:</span>
<ul>
<li id="needsNumber" class="errorText" hidden>
    The password must contain a number</li>

<li id="atLeast10Chars" class="errorText" hidden>
    The password must be at least 10 characters long</li>
</ul>

<span id="successMessage" hidden>The password is okay!</span>
<p>
<button name="submit">Validate Password</button>
```

```
<body>

<input type="password" name="password"></input>
<br>
<span id="errorMessage" class="errorText" hidden>
  Please fix the following errors:</span>
<ul>
<li id="needsNumber" class="errorText" hidden>
  The password must contain a number</li>

<li id="atLeast10Chars" class="errorText" hidden>
  The password must be at least 10 characters long</li>
</ul>

<span id="successMessage" hidden>The password is okay!</span>
<p>
<button name="submit">Validate Password</button>
```

password input type for password text like ***

```
<body>

<input type="password" name="password"></input>
<br>
<span id="errorMessage" class="errorText" hidden>
    Please fix the following errors:</span>
<ul>
<li id="needsNumber" class="errorText" hidden>
    The password must contain a number</li>

<li id="atLeast10Chars" class="errorText" hidden>
    The password must be at least 10 characters long</li>
</ul>

<span id="successMessage" hidden>The password is okay!</span>
<p>
<button name="submit">Validate Password</button>
```

at first, this span is hidden.

```
<body>

<input type="password" name="password"></input>
<br>
<span id="errorMessage" class="errorText" hidden>
    Please fix the following errors:</span>
<ul>
<li id="needsNumber" class="errorText" hidden>
    The password must contain a number</li>

<li id="atLeast10Chars" class="errorText" hidden>
    The password must be at least 10 characters long</li>
</ul>

<span id="successMessage" hidden>The password is okay!</span>
<p>
<button name="submit">Validate Password</button>
```

other hidden texts to show when error happens

```
<body>

<input type="password" name="password"></input>
<br>
<span id="errorMessage" class="errorText" hidden>
  Please fix the following errors:</span>
<ul>
<li id="needsNumber" class="errorText" hidden>
  The password must contain a number</li>

<li id="atLeast10Chars" class="errorText" hidden>
  The passsword must be at least 10 characters long</li>
</ul>

<span id="successMessage" hidden>The password is okay!</span>
<p>
<button name="submit">Validate Password</button>
```

success message is also hidden at first too

```
<body>

<input type="password" name="password"></input>
<br>
<span id="errorMessage" class="errorText" hidden>
    Please fix the following errors:</span>
<ul>
<li id="needsNumber" class="errorText" hidden>
    The password must contain a number</li>

<li id="atLeast10Chars" class="errorText" hidden>
    The password must be at least 10 characters long</li>
</ul>

<span id="successMessage" hidden>The password is okay!</span>
<p>
<b>button name="submit">Validate Password</button>
```

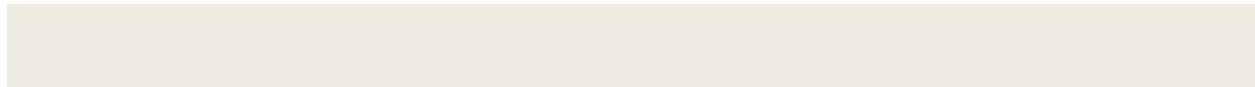
a button to click and validate inputs and show the messages

```
<body>

<input type="password" name="password"></input>
<br>
<span id="errorMessage" class="errorText" hidden>
    Please fix the following errors:</span>
<ul>
<li id="needsNumber" class="errorText" hidden>
    The password must contain a number</li>

<li id="atLeast10Chars" class="errorText" hidden>
    The passsword must be at least 10 characters long</li>
</ul>

<span id="successMessage" hidden>The password is okay!</span>
<p>
<button name="submit">Validate Password</button>
```




```
<script>
$("button[name='submit']").click(function() {
    var passwordField = $("input[name='password']");
    var password = passwordField.val();
    var isOkay = true;
    if (password.length < 10) {
        isOkay = false;
        $('#atLeast10Chars').show();
    }
    if (/\\d/.test(password) == false) {
        isOkay = false;
        $('#needsNumber').show();
    }
    if (isOkay == false) {
        $('#successMessage').hide();
        $('#errorMessage').show();
        passwordField.removeClass("goodBox").addClass("errorBox");
    }
    else {
        $('#.errorText').hide();
        $('#successMessage').show();
        passwordField.removeClass("errorBox").addClass("goodBox");
    }
    return false;
});
</script>
```

JavaScript section

```
<script>
```

```
$("#button[name='submit']").click(function() {  
    var passwordField = $("input[name='password']");  
    var password = passwordField.val();  
    var isOkay = true;  
    if (password.length < 10) {  
        isOkay = false;  
        $('#atLeast10Chars').show();  
    }  
    if (/\\d/.test(password) == false) {  
        isOkay = false;  
        $('#needsNumber').show();  
    }  
    if (isOkay == false) {  
        $('#successMessage').hide();  
        $('#errorMessage').show();  
        passwordField.removeClass("goodBox").addClass("errorBox");  
    }  
    else {  
        $('#.errorText').hide();  
        $('#successMessage').show();  
        passwordField.removeClass("errorBox").addClass("goodBox");  
    }  
    return false;  
});
```

```
</script>
```

bind a click event to the submit button

```
<script>
$("button[name='submit']").click(function() {
    var passwordField = $("input[name='password']");
    var password = passwordField.val();
    var isOkay = true;
    if (password.length < 10) {
        isOkay = false;
        $('#atLeast10Chars').show();
    }
    if (/\\d/.test(password) == false) {
        isOkay = false;
        $('#needsNumber').show();
    }
    if (isOkay == false) {
        $('#successMessage').hide();
        $('#errorMessage').show();
        passwordField.removeClass("goodBox").addClass("errorBox");
    }
    else {
        $('#.errorText').hide();
        $('#successMessage').show();
        passwordField.removeClass("errorBox").addClass("goodBox");
    }
    return false;
});
```

```
</script>
```

use selector to select the user password input element

```
<script>
$("button[name='submit']").click(function() {
    var passwordField = $("input[name='password']");
    var password = passwordField.val();
    var isOkay = true;
    if (password.length < 10) {
        isOkay = false;
        $('#atLeast10Chars').show();
    }
    if (/\\d/.test(password) == false) {
        isOkay = false;
        $('#needsNumber').show();
    }
    if (isOkay == false) {
        $('#successMessage').hide();
        $('#errorMessage').show();
        passwordField.removeClass("goodBox").addClass("errorBox");
    }
    else {
        $('#.errorText').hide();
        $('#successMessage').show();
        passwordField.removeClass("errorBox").addClass("goodBox");
    }
    return false;
});
</script>
```

get the value of the password field

```
<script>
$("button[name='submit']").click(function() {
    var passwordField = $("input[name='password']");
    var password = passwordField.val();
    var isOkay = true;
    if (password.length < 10) {
        isOkay = false;
        $('#atLeast10Chars').show();
    }
    if (/\\d/.test(password) == false) {
        isOkay = false;
        $('#needsNumber').show();
    }
    if (isOkay == false) {
        $('#successMessage').hide();
        $('#errorMessage').show();
        passwordField.removeClass("goodBox").addClass("errorBox");
    }
    else {
        $('#.errorText').hide();
        $('#successMessage').show();
        passwordField.removeClass("errorBox").addClass("goodBox");
    }
    return false;
});

```

define a boolean isOkay variable to check whether the password is validate or not. By default is true

```
<script>
$( "button[name='submit']" ).click( function() {
    var passwordField = $( "input[name='password']" );
    var password = passwordField.val();
    var isOkay = true;
    if ( password.length < 10 ) {
        isOkay = false;
        $( '#atLeast10Chars' ).show();
    }
    if ( /\d/.test( password ) == false ) {
        isOkay = false;
        $( '#needsNumber' ).show();
    }
    if ( isOkay == false ) {
        $( '#successMessage' ).hide();
        $( '#errorMessage' ).show();
        passwordField.removeClass( "goodBox" ).addClass( "errorBox" );
    }
    else {
        $( '.errorText' ).hide();
        $( '#successMessage' ).show();
        passwordField.removeClass( "errorBox" ).addClass( "goodBox" );
    }
    return false;
});

```

```
</script>
```

if the password length is less than 10, set isOkay as false and show its error message element

```
<script>
$( "button[name='submit']" ).click( function() {
    var passwordField = $( "input[name='password']" );
    var password = passwordField.val();
    var isOkay = true;
    if ( password.length < 10 ) {
        isOkay = false;
        $( '#atLeast10Chars' ).show();
    }
    if ( /\d/.test( password ) == false ) {
        isOkay = false;
        $( '#needsNumber' ).show();
    }
    if ( isOkay == false ) {
        $( '#successMessage' ).hide();
        $( '#errorMessage' ).show();
        passwordField.removeClass( "goodBox" ).addClass( "errorBox" );
    }
    else {
        $( '.errorText' ).hide();
        $( '#successMessage' ).show();
        passwordField.removeClass( "errorBox" ).addClass( "goodBox" );
    }
    return false;
});
```

```
</script>
```

use regular expression to check whether the password is all digits or not

```
<script>
$("button[name='submit']").click(function() {
    var passwordField = $("input[name='password']");
    var password = passwordField.val();
    var isOkay = true;
    if (password.length < 10) {
        isOkay = false;
        $('#atLeast10Chars').show();
    }
    if (/\\d/.test(password) == false) {
        isOkay = false;
        $('#needsNumber').show();
    }
    if (isOkay == false) {
        $('#successMessage').hide();
        $('#errorMessage').show();
        passwordField.removeClass("goodBox").addClass("errorBox");
    }
    else {
        $('#.errorText').hide();
        $('#successMessage').show();
        passwordField.removeClass("errorBox").addClass("goodBox");
    }
    return false;
});
```

```
</script>
```

is password is not valid, show the error message and hide the success message and make it a errorBox message (red)


```
<script>
$("button[name='submit']").click(function() {
    var passwordField = $("input[name='password']");
    var password = passwordField.val();
    var isOkay = true;
    if (password.length < 10) {
        isOkay = false;
        $('#atLeast10Chars').show();
    }
    if (/\\d/.test(password) == false) {
        isOkay = false;
        $('#needsNumber').show();
    }
    if (isOkay == false) {
        $('#successMessage').hide();
        $('#errorMessage').show();
        passwordField.removeClass("goodBox").addClass("errorBox");
    }
    else {
        $('#.errorText').hide();
        $('#successMessage').show();
        passwordField.removeClass("errorBox").addClass("goodBox");
    }
    return false;
});
</script>
```

if the input password is validate, hide all errors, show the success message and make it a goodBox message (green)

```
<script>
$("button[name='submit']").click(function() {
    var passwordField = $("input[name='password']");
    var password = passwordField.val();
    var isOkay = true;
    if (password.length < 10) {
        isOkay = false;
        $('#atLeast10Chars').show();
    }
    if (/\\d/.test(password) == false) {
        isOkay = false;
        $('#needsNumber').show();
    }
    if (isOkay == false) {
        $('#successMessage').hide();
        $('#errorMessage').show();
        passwordField.removeClass("goodBox").addClass("errorBox");
    }
    else {
        $('#.errorText').hide();
        $('#successMessage').show();
        passwordField.removeClass("errorBox").addClass("goodBox");
    }
    return false;
});
</script>
```

return false prevents the page reload

Summary

- jQuery can be used to retrieve and modify DOM elements and add event listeners
- We have seen how to handle events from the mouse, keyboard, and forms

Review: Part 2 - jQuery

- **JavaScript:** a general-purpose, easy-to-use programming language
- **DOM:** representation of structure of HTML page, which can be manipulated using JavaScript
- **jQuery:** library that simplifies accessing/using the DOM