

```
1. <!--
2.
3. ajax-0.html
4.
5. Gets stock quote from quote.php via Ajax with jQuery, displaying price with alert.
6.
7. David J. Malan
8. malan@harvard.edu
9.
10. -->
11.
12. <!DOCTYPE html>
13.
14. <html>
15.     <head>
16.         <script src="http://code.jquery.com/jquery-latest.min.js"></script>
17.         <script>
18.
19.             /**
20.              * Gets a quote via JSON.
21.              */
22.             function quote()
23.             {
24.                 var url = 'quote.php?symbol=' + $('#symbol').val();
25.                 $.getJSON(url, function(data) {
26.                     alert(data.price);
27.                 });
28.             }
29.
30.         </script>
31.         <title>ajax-0</title>
32.     </head>
33.     <body>
34.         <form onsubmit="quote(); return false;">
35.             Symbol: <input autocomplete="off" id="symbol" type="text"/>
36.             <br/><br/>
37.             <input type="submit" value="Get Quote"/>
38.         </form>
39.     </body>
40. </html>
```

```
1. <!--
2.
3. ajax-1.html
4.
5. Gets stock quote from quote.php via Ajax with jQuery, displaying price with alert.
6.
7. David J. Malan
8. malan@harvard.edu
9.
10. -->
11.
12. <!DOCTYPE html>
13.
14. <html>
15.     <head>
16.         <script src="http://code.jquery.com/jquery-latest.min.js"></script>
17.         <script>
18.
19.             $(function() {
20.
21.                 $('#quote').submit(function() {
22.
23.                     var url = 'quote.php?symbol=' + $('#symbol').val();
24.                     $.getJSON(url, function(data) {
25.                         alert(data.price);
26.                     });
27.                     return false;
28.
29.                 });
30.
31.             });
32.
33.         </script>
34.         <title>ajax-1</title>
35.     </head>
36.     <body>
37.         <form id="quote">
38.             Symbol: <input autocomplete="off" id="symbol" type="text"/>
39.             <br/><br/>
40.             <input type="submit" value="Get Quote"/>
41.         </form>
42.     </body>
43. </html>
```

```
1. <!--
2.
3. ajax-2.html
4.
5. Gets stock quote from quote.php via Ajax with jQuery, embedding result in page itself.
6.
7. David J. Malan
8. malan@harvard.edu
9.
10. -->
11.
12. <!DOCTYPE html>
13.
14. <html>
15.     <head>
16.         <script src="http://code.jquery.com/jquery-latest.min.js"></script>
17.         <script>
18.
19.             /**
20.              * Gets a quote via JSON.
21.              */
22.             function quote()
23.             {
24.                 var url = 'quote.php?symbol=' + $('#symbol').val();
25.                 $.getJSON(url, function(data) {
26.                     $('#price').html(data.price);
27.                 });
28.             }
29.
30.         </script>
31.         <title>ajax-2</title>
32.     </head>
33.     <body>
34.         <form onsubmit="quote(); return false;">
35.             Symbol: <input autocomplete="off" id="symbol" type="text"/>
36.             <br/>
37.             Price: <span id="price">to be determined</span>
38.             <br/><br/>
39.             <input type="submit" value="Get Quote"/>
40.         </form>
41.     </body>
42. </html>
```

```
1.
2. <!--
3.
4.  blink.html
5.
6.  Flashes a greeting.
7.
8.  Computer Science 50
9.  David J. Malan
10.
11. -->
12.
13. <!DOCTYPE html>
14.
15. <html>
16.   <head>
17.     <script>
18.
19.         // toggles visibility of greeting
20.         function blink()
21.         {
22.             var div = document.getElementById('greeting');
23.             if (div.style.visibility == "hidden")
24.             {
25.                 div.style.visibility = "visible";
26.             }
27.             else
28.             {
29.                 div.style.visibility = "hidden";
30.             }
31.         }
32.
33.         // blink every 500ms
34.         window.setInterval(blink, 500);
35.
36.     </script>
37.     <style>
38.
39.         #greeting
40.         {
41.             font-size: 96pt;
42.             margin: 240px;
43.             text-align: center;
44.         }
45.
46.     </style>
47.     <title>blink</title>
48. </head>
```

```
49.   <body>
50.     <div id="greeting">
51.       hello, world
52.     </div>
53.   </body>
54. </html>
```

```
1. <!--
2.
3. form-0.html
4.
5. A form without client-side validation.
6.
7. David J. Malan
8. malan@harvard.edu
9.
10. -->
11.
12. <!DOCTYPE html>
13.
14. <html>
15.     <head>
16.         <title>form-0</title>
17.     </head>
18.     <body>
19.         <form action="register.php" method="get">
20.             Email: <input name="email" type="text"/>
21.             <br/>
22.             Password: <input name="password" type="password"/>
23.             <br/>
24.             Password (again): <input name="confirmation" type="password"/>
25.             <br/>
26.             I agree to the terms and conditions: <input name="agreement" type="checkbox"/>
27.             <br/><br/>
28.             <input type="submit" value="Register"/>
29.         </form>
30.     </body>
31. </html>
```

```
1. <!--
2.
3. form-1.html
4.
5. A form with client-side validation.
6.
7. David J. Malan
8. malan@harvard.edu
9.
10. -->
11.
12. <!DOCTYPE html>
13.
14. <html>
15.     <head>
16.         <title>form-1</title>
17.     </head>
18.     <body>
19.         <form action="register.php" id="registration" method="get">
20.             Email: <input name="email" type="text" />
21.             <br />
22.             Password: <input name="password" type="password" />
23.             <br />
24.             Password (again): <input name="confirmation" type="password" />
25.             <br />
26.             I agree to the terms and conditions: <input name="agreement" type="checkbox" />
27.             <br /><br />
28.             <input type="submit" value="Register" />
29.         </form>
30.         <script>
31.
32.             var form = document.getElementById('registration');
33.
34.             // onsubmit
35.             form.onsubmit = function() {
36.
37.                 // validate email
38.                 if (form.email.value == '')
39.                 {
40.                     alert('You must provide your email address!');
41.                     return false;
42.                 }
43.
44.                 // validate password
45.                 else if (form.password.value == '')
46.                 {
47.                     alert('You must provide a password!');
48.                     return false;
```

```
49.         }
50.
51.         // validate confirmation
52.         else if (form.password.value != form.confirmation.value)
53.         {
54.             alert('Passwords do not match!');
55.             return false;
56.         }
57.
58.         // validate agreement
59.         else if (!form.agreement.checked)
60.         {
61.             alert('You must agree to the terms and conditions!');
62.             return false;
63.         }
64.
65.         // valid!
66.         return true;
67.
68.     };
69.
70.     </script>
71. </body>
72. </html>
```



```
1. <!--
2.
3. form-2.html
4.
5. A form with client-side validation using jQuery.
6.
7. David J. Malan
8. malan@harvard.edu
9.
10. -->
11.
12. <!DOCTYPE html>
13.
14. <html>
15.     <head>
16.         <script src="http://code.jquery.com/jquery-latest.min.js"></script>
17.         <script>
18.
19.             // onready
20.             $(document).ready(function() {
21.
22.                 // onsubmit
23.                 $('#registration').submit(function() {
24.
25.                     // validate email
26.                     if ($('#registration input[name=email]').val() == '')
27.                     {
28.                         alert('You must provide your email address!');
29.                         return false;
30.                     }
31.
32.                     // validate password
33.                     else if ($('#registration input[name=password]').val() == '')
34.                     {
35.                         alert('You must provide a password!');
36.                         return false;
37.                     }
38.
39.                     // validate confirmation
40.                     else if ($('#registration input[name=password]').val() != $('#registration input[name=confirmation]').val())
41.                     {
42.                         alert('Passwords do not match!');
43.                         return false;
44.                     }
45.
46.                     // validate agreement
47.                     else if (!$('#registration input[name=agreement]').is(':checked'))
48.                     {
```

```
49.             alert('You must agree to the terms and conditions!');
50.             return false;
51.         }
52.
53.         // valid!
54.         return true;
55.
56.     });
57.
58. });
59.
60.     </script>
61.     <title>form-2</title>
62. </head>
63. <body>
64.     <form action="register.php" id="registration" method="get">
65.         Email: <input name="email" type="text"/>
66.         <br/>
67.         Password: <input name="password" type="password"/>
68.         <br/>
69.         Password (again): <input name="confirmation" type="password"/>
70.         <br/>
71.         I agree to the terms and conditions: <input name="agreement" type="checkbox"/>
72.         <br/><br/>
73.         <input type="submit" value="Register"/>
74.     </form>
75. </body>
76. </html>
```

```
1. <!--
2.
3. geolocation-0.html
4.
5. Geolocates a user.
6.
7. David J. Malan
8. malan@harvard.edu
9.
10. -->
11.
12. <!DOCTYPE html>
13.
14. <html>
15.     <head>
16.         <script>
17.
18.             function callback(position)
19.             {
20.                 alert(position.coords.latitude + ', ' + position.coords.longitude);
21.             }
22.
23.             function geolocate()
24.             {
25.                 if (typeof(navigator.geolocation) != 'undefined')
26.                 {
27.                     navigator.geolocation.getCurrentPosition(callback);
28.                 }
29.                 else
30.                 {
31.                     alert('Your browser does not support geolocation!');
32.                 }
33.             }
34.
35.         </script>
36.         <title>geolocation-0</title>
37.     </head>
38.     <body onload="geolocate()"></body>
39. </html>
```

```
1. <!--
2.
3. geolocation-1.html
4.
5. Geolocates a user, demonstrating an anonymous function.
6.
7. David J. Malan
8. malan@harvard.edu
9.
10. -->
11.
12. <!DOCTYPE html>
13.
14. <html>
15.     <head>
16.         <script>
17.
18.             function geolocate()
19.             {
20.                 if (typeof(navigator.geolocation) != 'undefined')
21.                 {
22.                     navigator.geolocation.getCurrentPosition(function(position) {
23.                         alert(position.coords.latitude + ', ' + position.coords.longitude);
24.                     });
25.                 }
26.                 else
27.                 {
28.                     alert('Your browser does not support geolocation!');
29.                 }
30.             }
31.
32.         </script>
33.         <title>geolocation-1</title>
34.     </head>
35.     <body onload="geolocate()"></body>
36. </html>
```

```
1. <?php
2.
3.     // require ?symbol=...
4.     if (empty($_GET["symbol"]))
5.     {
6.         trigger_error("Missing symbol", E_USER_ERROR);
7.     }
8.
9.     // headers for proxy servers
10.    $headers = [
11.        "Accept" => "*/*",
12.        "Connection" => "Keep-Alive",
13.        "User-Agent" => sprintf("curl/%s", curl_version()["version"])
14.    ];
15.
16.    // open connection to Yahoo
17.    $context = stream_context_create([
18.        "http" => [
19.            "header" => implode(array_map(function($value, $key) { return sprintf("%s: %s\r\n", $key, $value); }, $headers,
array_keys($headers))),
20.            "method" => "GET"
21.        ]
22.    ]);
23.    $handle = fopen("http://download.finance.yahoo.com/d/quotes.csv?f=snl1&s={$_GET["symbol"]}", "r", false, $context);
24.    if ($handle === false)
25.    {
26.        trigger_error("Could not connect to Yahoo!", E_USER_ERROR);
27.    }
28.
29.    // download first line of CSV file
30.    $data = fgetcsv($handle);
31.    if ($data === false || count($data) == 1)
32.    {
33.        trigger_error("Missing data", E_USER_ERROR);
34.    }
35.
36.    // close connection to Yahoo
37.    fclose($handle);
38.
39.    // ensure symbol was found
40.    if ($data[2] === "0.00")
41.    {
42.        trigger_error("Missing price", E_USER_ERROR);
43.    }
44.
45.    // prepare stock as an associative array
46.    $stock = [
47.        "symbol" => $data[0],
```

```
48.         "name" => $data[1],
49.         "price" => floatval($data[2])
50.     ];
51.
52.     // output stock as JSON
53.     header("Content-Type: application/json");
54.     print(json_encode($stock));
55.
56. ?>
```

```
1. <!DOCTYPE html>
2.
3. <html>
4.   <head>
5.     <title>register</title>
6.   </head>
7.   <body>
8.     You are registered! (Well, not really.)
9.   </body>
10. </html>
```

```
1. <!DOCTYPE html>
2.
3. <html>
4.   <head>
5.     <meta name="viewport" content="width=device-width">
6.     <script>
7.
8.       function greet()
9.       {
10.        if (typeof(localStorage) !== 'undefined')
11.        {
12.          if (typeof(localStorage['counter']) === 'undefined')
13.          {
14.            localStorage['counter'] = 0;
15.          }
16.          alert('You have visited ' + localStorage['counter'] + ' time(s) before!');
17.          localStorage['counter']++;
18.        }
19.        else
20.        {
21.          alert('Your browser does not support localStorage!');
22.        }
23.      }
24.
25.    </script>
26.    <title>storage</title>
27.  </head>
28.  <body onload="greet()"></body>
29. </html>
```