```
 1.  <!--
 2.
 3.  ajax1.html
 4.
 5.  Gets stock quote from quote1.php via Ajax, displaying result with alert().
 6.
 7.  Building Mobile Applications
 8.  Harvard Extension School
 9.  David J. Malan
10.
11.  -->
12.
13.  <!DOCTYPE html>
14.
15.  <html lang="en-us">
16.    <head>
17.      <meta charset="utf-8">
18.      <meta name="viewport" content="width=device-width">
19.      <script>
20.
21.          // an XMLHttpRequest
22.          var xhr = null;
23.
24.          /*
25.           * void
26.           * quote()
27.           *
28.           * Gets a quote.
29.           */
30.          function quote()
31.          {
32.              // instantiate XMLHttpRequest object
33.              try
34.              {
35.                  xhr = new XMLHttpRequest();
36.              }
37.              catch (e)
38.              {
39.                  xhr = new ActiveXObject("Microsoft.XMLHTTP");
40.              }
41.
42.              // handle old browsers
43.              if (xhr == null)
44.              {
45.                  alert("Ajax not supported by your browser!");
46.                  return;
47.              }
48.
```

```
49.              // construct URL
50.              var url = "quote1.php?symbol=" + document.getElementById("symbol").value;
51.
52.              // get quote
53.              xhr.onreadystatechange = handler;
54.              xhr.open("GET", url, true);
55.              xhr.send(null);
56.          }
57.
58.
59.          /*
60.           * void
61.           * handler()
62.           *
63.           * Handles the Ajax response.
64.           */
65.          function handler()
66.          {
67.              // only handle loaded requests
68.              if (xhr.readyState == 4)
69.              {
70.                  // display response if possible
71.                  if (xhr.status == 200)
72.                      alert(xhr.responseText);
73.                  else
74.                      alert("Error with Ajax call!");
75.              }
76.          }
77.
78.      // ]]>
79.      </script>
80.      <title>ajax1</title>
81.    </head>
82.    <body>
83.      <form onsubmit="quote(); return false;">
84.        Symbol: <input autocomplete="off" id="symbol" type="text">
85.        <br><br>
86.        <input type="submit" value="Get Quote">
87.      </form>
88.    </body>
89. </html>
```

```
  1.  <!--
  2.
  3.  ajax2.html
  4.
  5.  Gets stock quote from quote1.php via Ajax, embedding result in page itself.
  6.
  7.  Building Mobile Applications
  8.  Harvard Extension School
  9.  David J. Malan
 10.
 11.  -->
 12.
 13.  <!DOCTYPE html>
 14.
 15.  <html lang="en-us">
 16.    <head>
 17.      <meta charset="utf-8">
 18.      <meta name="viewport" content="width=device-width">
 19.      <script type="text/javascript">
 20.      // <![CDATA[
 21.
 22.          // an XMLHttpRequest
 23.          var xhr = null;
 24.
 25.          /*
 26.           * void
 27.           * quote()
 28.           *
 29.           * Gets a quote.
 30.           */
 31.          function quote()
 32.          {
 33.              // instantiate XMLHttpRequest object
 34.              try
 35.              {
 36.                  xhr = new XMLHttpRequest();
 37.              }
 38.              catch (e)
 39.              {
 40.                  xhr = new ActiveXObject("Microsoft.XMLHTTP");
 41.              }
 42.
 43.              // handle old browsers
 44.              if (xhr == null)
 45.              {
 46.                  alert("Ajax not supported by your browser!");
 47.                  return;
 48.              }
```

```
49.
50.            // construct URL
51.            var url = "quote1.php?symbol=" + document.getElementById("symbol").value;
52.
53.            // get quote
54.            xhr.onreadystatechange = handler;
55.            xhr.open("GET", url, true);
56.            xhr.send(null);
57.        }
58.
59.
60.        /*
61.         * void
62.         * handler()
63.         *
64.         * Handles the Ajax response.
65.         */
66.        function handler()
67.        {
68.            // only handle loaded requests
69.            if (xhr.readyState == 4)
70.            {
71.                // embed respose in page if possible
72.                if (xhr.status == 200)
73.                    document.getElementById("price").innerHTML = xhr.responseText;
74.                else
75.                    alert("Error with Ajax call!");
76.            }
77.        }
78.
79.    // ]]>
80.      </script>
81.      <title>ajax2</title>
82.   </head>
83.   <body>
84.     <form onsubmit="quote(); return false;">
85.       Symbol: <input autocomplete="off" id="symbol" type="text">
86.       <br>
87.       Price: <span id="price"><b>to be determined</b></span>
88.       <br><br>
89.       <input type="submit" value="Get Quote">
90.     </form>
91.   </body>
92. </html>
```

```
 1.  <!--
 2.
 3.  ajax3.html
 4.
 5.  Gets stock quote from Yahoo Finance via YQL using JSONP.
 6.
 7.  Building Mobile Applications
 8.  Harvard Extension School
 9.  David J. Malan
10.
11.  -->
12.
13.  <!DOCTYPE html>
14.
15.  <html lang="en-us">
16.    <head>
17.      <meta charset="utf-8">
18.      <meta name="viewport" content="width=device-width">
19.      <script type="text/javascript">
20.      // <![CDATA[

22.          /*
23.           * void
24.           * quote()
25.           *
26.           * Gets a quote.
27.           */
28.          function quote()
29.          {
30.              // construct URL
31.              var url =
    "http://query.yahooapis.com/v1/public/yql?q=select%20*%20from%20csv%20where%20columns%20%3D%20'price'%20and%20url%20%3D%20'http%3A%2F%2Fdownlo
    ad.finance.yahoo.com%2Fd%2Fquotes.csv%3Ff%3Dl1%26s%3D" + document.getElementById("symbol").value + "'&format=json&callback=handler";
32.
33.              // get quote via JSONP
34.              var script = document.createElement("script");
35.              script.setAttribute("src", url);
36.              document.getElementsByTagName("head")[0].appendChild(script);
37.          }
38.
39.
40.          /*
41.           * void
42.           * handler(response)
43.           *
44.           * Handles the JSONP response.
45.           */
46.          function handler(response)
```

```
47.            {
48.                if (response.query.count == 1)
49.                {
50.                    alert(response.query.results.row.price);
51.                }
52.                else
53.                {
54.                    alert("Error in JSONP response!");
55.                }
56.            }
57.
58.     // ]]>
59.         </script>
60.         <title>ajax3</title>
61.       </head>
62.       <body>
63.         <form onsubmit="quote(); return false;">
64.           Symbol: <input autocomplete="off" id="symbol" type="text">
65.           <br><br>
66.           <input type="submit" value="Get Quote">
67.         </form>
68.       </body>
69.   </html>
```

```php
1.  <?
2.
3.      /**
4.       * quote1.php
5.       *
6.       * Outputs price of given symbol as text/html.
7.       *
8.       * Building Mobile Applications
9.       * Harvard Extension School
10.      * David J. Malan
11.      */
12.
13.      // get quote
14.      $handle = @fopen("http://download.finance.yahoo.com/d/quotes.csv?s={$_GET["symbol"]}&f=e1l1", "r");
15.      if ($handle !== FALSE)
16.      {
17.          $data = fgetcsv($handle);
18.          if ($data !== FALSE && $data[0] == "N/A")
19.              print($data[1]);
20.          fclose($handle);
21.      }
22.  ?>
```

```
 1.  <!DOCTYPE html>
 2.
 3.  <html>
 4.    <head>
 5.      <link rel="apple-touch-icon" href="custom_icon.png">
 6.      <meta name="apple-mobile-web-app-capable" content="yes">
 7.      <meta name="apple-mobile-web-app-status-bar-style" content="black">
 8.      <meta name="viewport" content="width=device-width">
 9.      <title>Tommy App</title>
10.    </head>
11.    <body style="margin: 0">
12.      <img alt="Tommy" src="tommy.png">
13.    </body>
14.  </html>
```

```
 1.  <!--
 2.
 3.  index.html
 4.
 5.  David J. Malan
 6.  malan@harvard.edu
 7.
 8.  A homepage for the course that mimics iOS's UI.
 9.
10.  -->
11.
12.  <!DOCTYPE html>
13.
14.  <html>
15.    <head>
16.      <link href="ios.css" rel="stylesheet">
17.      <meta name="viewport" content="width=device-width">
18.      <title>CSCI E-76</title>
19.    </head>
20.    <body>
21.      <h1>CSCI E-76</h1>
22.      <ul>
23.        <li><a href="lectures.html">Lectures</a></li>
24.        <li><a href="http://cdn.cs76.net/2012/spring/lectures/0/syllabus.pdf">Syllabus</a></li>
25.      </ul>
26.    </body>
27.  </html>
```

```css
1.  body
2.  {
3.      font-family: Helvetica, sans-serif;
4.      margin: 0;
5.  }
6.
7.  h1
8.  {
9.      background-color: #7C92AE;
10.     background-image: -webkit-gradient(linear, 0% 0%, 0% 100%, from(#ABB9CB), color-stop(0.5, #8C9FB8), color-stop(0.51, #7C92AE), to(#6C85A4));
11.     color: #FFF;
12.     font-size: 18px;
13.     margin: 0;
14.     padding: 6px;
15.     text-align: center;
16. }
17.
18. li a
19. {
20.     border-bottom: 1px #CCC solid;
21.     color: #000;
22.     display: block;
23.     font-weight: bold;
24.     padding: 10px;
25.     text-decoration: none;
26. }
27.
28. ul
29. {
30.     list-style: none;
31.     margin: 0;
32.     padding: 0;
33. }
```

```
1.  <!--
2.
3.  lecture0.html
4.
5.  David J. Malan
6.  malan@harvard.edu
7.
8.  Represents a lecture.
9.
10. -->
11.
12. <!DOCTYPE html>
13.
14. <html>
15.   <head>
16.     <link href="ios.css" rel="stylesheet">
17.     <meta name="viewport" content="width=device-width">
18.     <title>Lecture 0</title>
19.   </head>
20.   <body>
21.     <h1>Lecture 0</h1>
22.     <ul>
23.       <li><a href="http://cdn.cs76.net/2012/spring/lectures/0/lecture0.pdf">Slides</a></li>
24.       <li><a href="http://cdn.cs76.net/2012/spring/lectures/0/lecture0.mp4">Video</a></li>
25.     </ul>
26.   </body>
27. </html>
```

```
1.  <!--
2.
3.  lecture1.html
4.
5.  David J. Malan
6.  malan@harvard.edu
7.
8.  Represents a lecture.
9.
10. -->
11.
12. <!DOCTYPE html>
13.
14. <html>
15.   <head>
16.     <link href="ios.css" rel="stylesheet">
17.     <meta name="viewport" content="width=device-width">
18.     <title>Lecture 1</title>
19.   </head>
20.   <body>
21.     <h1>Lecture 1</h1>
22.     <ul>
23.       <li><a href="http://cdn.cs76.net/2012/spring/lectures/1/lecture1.pdf">Slides</a></li>
24.       <li><a href="http://cdn.cs76.net/2012/spring/lectures/1/lecture1.mp4">Video</a></li>
25.     </ul>
26.   </body>
27. </html>
```

```
 1.
 2.  <!DOCTYPE html>
 3.
 4.  <!--
 5.
 6.  lectures.html
 7.
 8.  David J. Malan
 9.  malan@harvard.edu
10.
11.  Links to lectures.
12.
13.  -->
14.
15.  <html>
16.    <head>
17.      <link href="ios.css" rel="stylesheet">
18.      <meta name="viewport" content="width=device-width">
19.      <title>Lectures</title>
20.    </head>
21.    <body>
22.      <h1>Lectures</h1>
23.      <ul>
24.        <li><a href="lecture0.html">Lecture 0</a></li>
25.        <li><a href="lecture1.html">Lecture 1</a></li>
26.      </ul>
27.    </body>
28.  </html>
```

```
 1.  <!--
 2.
 3.  index.html
 4.
 5.  David J. Malan
 6.  malan@harvard.edu
 7.
 8.  Demonstrates jQuery Mobile.
 9.
10.  -->
11.
12.  <!DOCTYPE html>
13.
14.  <html>
15.    <head>
16.      <link rel="stylesheet" href="http://code.jquery.com/mobile/1.0.1/jquery.mobile-1.0.1.min.css">
17.      <meta name="viewport" content="width=device-width">
18.      <script src="http://code.jquery.com/jquery-1.6.4.min.js"></script>
19.      <script src="http://code.jquery.com/mobile/1.0.1/jquery.mobile-1.0.1.min.js"></script>
20.      <title>CSCI E-76</title>
21.    </head>
22.    <body>
23.
24.      <div data-role="page" id="menu">
25.
26.        <div data-role="header" data-theme="b">
27.          <h1>CSCI E-76</h1>
28.        </div>
29.
30.        <div data-role="content">
31.          <ul data-role="listview" data-theme="c">
32.            <li><a href="#lectures">Lectures</a></li>
33.            <li><a href="http://cdn.cs76.net/2012/spring/lectures/0/syllabus.pdf" rel="external">Syllabus</a></li>
34.          </ul>
35.        </div>
36.
37.      </div>
38.
39.      <div data-role="page" id="lectures">
40.
41.        <div data-role="header" data-theme="b">
42.          <h1>Lectures</h1>
43.        </div>
44.
45.        <div data-role="content">
46.          <ul data-role="listview" data-theme="c">
47.            <li><a href="#lecture0">Lecture 0</a></li>
48.            <li><a href="#lecture1">Lecture 1</a></li>
```

```
49.            </ul>
50.          </div>
51.
52.       </div>
53.
54.       <div data-role="page" id="lecture0">
55.
56.         <div data-role="header" data-theme="b">
57.           <h1>Lecture 0</h1>
58.         </div>
59.
60.         <div data-role="content">
61.           <ul data-role="listview" data-theme="c">
62.             <li><a href="http://cdn.cs76.net/2012/spring/lectures/0/lecture0.pdf" rel="external">Slides</a></li>
63.             <li><a href="http://cdn.cs76.net/2012/spring/lectures/0/lecture0.mp4" rel="external">Video</a></li>
64.           </ul>
65.         </div>
66.
67.       </div>
68.
69.       <div data-role="page" id="lecture1">
70.
71.         <div data-role="header" data-theme="b">
72.           <h1>Lecture 1</h1>
73.         </div>
74.
75.         <div data-role="content">
76.           <ul data-role="listview" data-theme="c">
77.             <li><a href="http://cdn.cs76.net/2012/spring/lectures/1/lecture1.pdf" rel="external">Slides</a></li>
78.             <li><a href="http://cdn.cs76.net/2012/spring/lectures/1/lecture1.mp4" rel="external">Video</a></li>
79.           </ul>
80.         </div>
81.
82.       </div>
83.
84.     </body>
85.   </html>
```

```html
1.  <!--
2.
3.  index.html
4.
5.  David J. Malan
6.  malan@harvard.edu
7.
8.  A homepage for the course.
9.
10. -->
11.
12. <!DOCTYPE html>
13.
14. <html>
15.   <head>
16.     <meta name="viewport" content="width=device-width">
17.     <title>CSCI E-76</title>
18.   </head>
19.   <body>
20.     <h1>CSCI E-76</h1>
21.     <ul>
22.       <li><a href="lectures.html">Lectures</a></li>
23.       <li><a href="http://cdn.cs76.net/2012/spring/lectures/0/syllabus.pdf">Syllabus</a></li>
24.     </ul>
25.   </body>
26. </html>
```

```
 1.  <!--
 2.
 3.  lecture0.html
 4.
 5.  David J. Malan
 6.  malan@harvard.edu
 7.
 8.  Represents a lecture.
 9.
10.  -->
11.
12.  <!DOCTYPE html>
13.
14.  <html>
15.    <head>
16.      <meta name="viewport" content="width=device-width">
17.      <title>Lecture 0</title>
18.    </head>
19.    <body>
20.      <h1>Lecture 0</h1>
21.      <ul>
22.        <li><a href="http://cdn.cs76.net/2012/spring/lectures/0/lecture0.pdf">Slides</a></li>
23.        <li><a href="http://cdn.cs76.net/2012/spring/lectures/0/lecture0.mp4">Video</a></li>
24.      </ul>
25.    </body>
26.  </html>
```

```
 1.  <!--
 2.
 3.  lecture1.html
 4.
 5.  David J. Malan
 6.  malan@harvard.edu
 7.
 8.  Represents a lecture.
 9.
10.  -->
11.
12.  <!DOCTYPE html>
13.
14.  <html>
15.    <head>
16.      <meta name="viewport" content="width=device-width">
17.      <title>Lecture 1</title>
18.    </head>
19.    <body>
20.      <h1>Lecture 1</h1>
21.      <ul>
22.        <li><a href="http://cdn.cs76.net/2012/spring/lectures/1/lecture1.pdf">Slides</a></li>
23.        <li><a href="http://cdn.cs76.net/2012/spring/lectures/1/lecture1.mp4">Video</a></li>
24.      </ul>
25.    </body>
26.  </html>
```

```
 1.  <!--
 2.
 3.  lectures.html
 4.
 5.  David J. Malan
 6.  malan@harvard.edu
 7.
 8.  Links to lectures.
 9.
10.  -->
11.
12.  <!DOCTYPE html>
13.
14.  <html>
15.    <head>
16.      <meta name="viewport" content="width=device-width">
17.      <title>Lectures</title>
18.    </head>
19.    <body>
20.      <h1>Lectures</h1>
21.      <ul>
22.        <li><a href="lecture0.html">Lecture 0</a></li>
23.        <li><a href="lecture1.html">Lecture 1</a></li>
24.      </ul>
25.    </body>
26.  </html>
```