

```
1:
2: <!DOCTYPE html
3:     PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
4:     "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
5:
6: <html xmlns="http://www.w3.org/1999/xhtml">
7:     <head>
8:         <link href="styles.css" rel="stylesheet" type="text/css" />
9:         <title>hello, world</title>
10:    </head>
11:    <body>
12:        <a href="http://world.com/">hello, world</a>
13:    </body>
14: </html>
15:
```

```
1: <?
2:     ****
3:     * dictionary.inc
4:     *
5:     * Computer Science 50
6:     * David J. Malan
7:     *
8:     * Implements a dictionary.
9:     ****
10:
11:
12:    // size of dictionary
13:    $size = 0;
14:
15:    // dictionary
16:    $dictionary = array();
17:
18:
19:    /*
20:     * bool
21:     * check($word)
22:     *
23:     * Returns TRUE if word is in dictionary else FALSE.
24:     */
25:
26:    function check($word)
27:    {
28:        global $dictionary;
29:        if ($dictionary[strtolower($word)])
30:            return TRUE;
31:        else
32:            return FALSE;
33:    }
34:
35:
36:
37:    /*
38:     * bool
39:     * load($dict)
40:     *
41:     * Loads dict into memory. Returns TRUE if successful else FALSE.
42:     */
43:
44:    function load($dict)
45:    {
46:        global $dictionary, $size;
47:        if (($fp = fopen($dict, "r")) === FALSE)
48:            return FALSE;
49:        while ((fscanf($fp, "%s", $word)) == 1)
50:        {
51:            $dictionary[$word] = TRUE;
52:            $size++;
53:        }
54:        fclose($fp);
55:        return TRUE;
56:    }
57:
58:
59:    /*
60:     * int
61:     * size()
62:     *
63:     * Returns number of words in dictionary if loaded else 0 if not yet loaded.
64:     */

```

```
65:      function size()
66:      {
67:          global $size;
68:          return $size;
69:      }
70:
71:
72: ?>
```

```
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2: <!DOCTYPE html
3:     PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
4:     "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
5:
6: <html xmlns="http://www.w3.org/1999/xhtml">
7:     <head>
8:         <title>Frosh IMs</title>
9:     </head>
10:    <body>
11:        <div align="center">
12:            <h1>Register for Frosh IMs</h1>
13:            <br /><br />
14:            <form action="register.php" method="post">
15:                <table border="0" style="text-align: left;">
16:                    <tr>
17:                        <td>Name:</td>
18:                        <td><input name="name" type="text" /></td>
19:                    </tr>
20:                    <tr>
21:                        <td>Captain:</td>
22:                        <td><input name="captain" type="checkbox" /></td>
23:                    </tr>
24:                    <tr>
25:                        <td>Gender:</td>
26:                        <td><input name="gender" type="radio" value="F" /> F <input name="gender" type="radio" value="M" /> M</td>
27:                    </tr>
28:                    <tr>
29:                        <td>Dorm:</td>
30:                        <td>
31:                            <select name="dorm" size="1">
32:                                <option value=""></option>
33:                                <option value="Apley Court">Apley Court</option>
34:                                <option value="Canaday">Canaday</option>
35:                                <option value="Grays">Grays</option>
36:                                <option value="Greenough">Greenough</option>
37:                                <option value="Hollis">Hollis</option>
38:                                <option value="Holworthy">Holworthy</option>
39:                                <option value="Hurlbut">Hurlbut</option>
40:                                <option value="Lionel">Lionel</option>
41:                                <option value="Matthews">Matthews</option>
42:                                <option value="Mower">Mower</option>
43:                                <option value="Pennypacker">Pennypacker</option>
44:                                <option value="Stoughton">Stoughton</option>
45:                                <option value="Straus">Straus</option>
46:                                <option value="Thayer">Thayer</option>
47:                                <option value="Weld">Weld</option>
48:                                <option value="Wigglesworth">Wigglesworth</option>
49:                            </select>
50:                        </td>
51:                    </tr>
52:                </table>
53:                <br /><br />
54:                <input type="submit" value="Register!" />
55:            </form>
56:        </div>
57:    </body>
58: </html>
59:
```

```
1:
2: <!DOCTYPE html
3:     PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
4:     "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
5:
6: <html xmlns="http://www.w3.org/1999/xhtml">
7:     <head>
8:         <title>hello, google</title>
9:     </head>
10:    <body>
11:        <div align="center">
12:            <h1>hello, google</h1>
13:            <br /><br />
14:            <form action="http://www.google.com/search" method="get">
15:                <input name="q" type="text" />
16:                <br /><br />
17:                <input type="submit" />
18:            </form>
19:        </div>
20:    </body>
21: </html>
22:
```

```
1: #!/home/c/s/cs50/pub/local/i386/php/bin/php-cgi
2:
3: <!DOCTYPE html
4:     PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
5:     "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
6:
7: <html xmlns="http://www.w3.org/1999/xhtml">
8:     <head>
9:         <title>hello, world</title>
10:    </head>
11:    <body>
12:        hello, world
13:    </body>
14: </html>
15:
```

```
1: #!/home/c/s/cs50/pub/local/i386/php/bin/php-cgi
2:
3: <!DOCTYPE html
4:     PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
5:     "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
6:
7: <html xmlns="http://www.w3.org/1999/xhtml">
8:     <head>
9:         <title><? print("hello, world"); ?></title>
10:    </head>
11:    <body>
12:        <? print("hello, world"); ?>
13:    </body>
14: </html>
15:
```

```
1:
2: <!DOCTYPE html
3:     PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
4:     "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
5:
6: <html xmlns="http://www.w3.org/1999/xhtml">
7:     <head>
8:         <title>hello, world</title>
9:     </head>
10:    <body>
11:        hello, world
12:    </body>
13: </html>
14:
```

```
1: <!DOCTYPE html
2: PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
3: "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
4:
5: <html>
6:   <head>
7:     <title>My Second Webpage</title>
8:   </head>
9:
10:  <body style="background: yellow;">
11:    <div align="center" style="color: #00ff00; font-size: 72pt;">
12:      hello for the second time!
13:    </div>
14:    <div>
15:      
16:    </div>
17:    <div>
18:      <ul style="font-size: 24pt;">
19:        <li><a href="http://cnn.com/">CNN</a></li>
20:        <li>The Crimson</li>
21:      </ul>
22:    </div>
23:  </body>
24:
25: </html>
26:
```

```
1: #!/home/c/s/cs50/pub/local/i386/php/bin/php-cgi
2: <?
3:
4:     // validate submission
5:     if ($_REQUEST[ "name" ] == "" || 
6:         $_REQUEST[ "gender" ] == "" || 
7:         $_REQUEST[ "dorm" ] == "" )
8:     {
9:         header( "Location: http://www.courses.fas.harvard.edu/~cs50/lectures/week
s/10/src/froshims.html" );
10:        exit;
11:    }
12:
13: ?>
14:
15: <!DOCTYPE html
16:     PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
17:     "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
18:
19: <html xmlns="http://www.w3.org/1999/xhtml">
20:     <head>
21:         <title>Registered!</title>
22:     </head>
23:     <body>
24:         You are registered! (Well, not really.)
25:     </body>
26: </html>
27:
```

```
1: #!/home/c/s/cs50/pub/local/i386/php/bin/php
2: <?
3:     ****
4:     * speller.php
5:     *
6:     * Computer Science 50
7:     * David J. Malan
8:     *
9:     * Implements a spell-checker.
10:    ****
11:
12:    require("dictionary.inc");
13:
14:    // suppress notices and warnings
15:    error_reporting(E_ALL ^ E_NOTICE ^ E_WARNING);
16:
17:
18:    // maximum length for a word
19:    // (e.g., pneumonoultramicroscopicsilicovolcanoconiosis)
20:    define("LENGTH", 45);
21:
22:    // default dictionary
23:    $WORDS = "/home/c/s/cs50/pub/share/dict/words";
24:
25:    // check for correct number of args
26:    if ($argc != 2 && $argc != 3)
27:    {
28:        print("Usage: speller.php [dict] file\n");
29:        return 1;
30:    }
31:
32:    // benchmarks
33:    $startup = 0.; $lookups = 0.; $sizing = 0.;
34:
35:    // determine dictionary to use
36:    $dict = ($argc == 3) ? $argv[1] : $WORDS;
37:
38:    // load dictionary
39:    $before = microtime(TRUE);
40:    $loaded = load($dict);
41:    $after = microtime(TRUE);
42:
43:    // abort if dictionary not loaded
44:    if (!$loaded)
45:    {
46:        print("Could not load $dict.\n");
47:        return 2;
48:    }
49:
50:    // calculate time to load dictionary
51:    $startup = $after - $before;
52:
53:    // try to open file
54:    $file = ($argc == 3) ? $argv[2] : $argv[1];
55:    $fp = fopen($file, "r");
56:
57:    // prepare to report misspellings
58:    //printf("\nMISSPELLED WORDS\n\n");
59:
60:    // prepare to spell-check
61:    $word = "";
62:    $index = 0; $misspellings = 0; $words = 0;
63:
64:    // spell-check each word in file
```

```
65:      for ($c = fgetc($fp); $c !== FALSE; $c = fgetc($fp))
66:      {
67:          // allow alphabetical characters and apostrophes (for possessives)
68:          if (preg_match("/[a-zA-Z]/", $c) || ($c == "'" && $index > 0))
69:          {
70:              // append character to word
71:              $word .= $c;
72:              $index++;
73:
74:              // ignore alphabetical strings too long to be words
75:              if ($index >= LENGTH)
76:              {
77:                  // consume remainder of alphabetical string
78:                  while (($c = fgetc($fp)) !== FALSE && preg_match("/[a-zA-Z]/", $c));
79:
80:                  // prepare for new word
81:                  $index = 0; $word = "";
82:              }
83:          }
84:
85:          // ignore words with numbers (like MS Word)
86:          else if (ctype_digit($c))
87:          {
88:              // consume remainder of alphabetical string
89:              while (($c = fgetc($fp)) !== FALSE && ctype_digit($c));
90:
91:              // prepare for new word
92:              $index = 0; $word = "";
93:          }
94:
95:          // we must have found a whole word
96:          else if ($index > 0)
97:          {
98:              // update counter
99:              $words++;
100:
101:             // check word's spelling
102:             $before = microtime(TRUE);
103:             $misspelled = !check($word);
104:             $after = microtime(TRUE);
105:
106:             // update benchmark
107:             $lookups += $after - $before;
108:
109:             // print word if misspelled
110:             if ($misspelled)
111:             {
112:                 print("$word\n");
113:                 $misspellings++;
114:             }
115:
116:             // prepare for next word
117:             $index = 0; $word = "";
118:         }
119:     }
120:
121:     // close file
122:     fclose($fp);
123:
124:     // determine dictionary's size
125:     $before = microtime(TRUE);
126:     $n = size();
127:     $after = microtime(TRUE);
```

```
128:  
129:    // calculate time to determine dictionary's size  
130:    $sizing = $after - $before;  
131:  
132:    // report benchmarks  
133:    printf("\nWORDS MISSPELLED:      %d\n", $misspellings);  
134:    printf("WORDS IN DICTIONARY:  %d\n", $n);  
135:    printf("WORDS IN FILE:        %d\n", $words);  
136:    printf("STARTUP TIME:         %f\n", $startup);  
137:    printf("LOOKUP TIME:          %f\n", $lookups);  
138:    printf("SIZING TIME:          %f\n", $sizing);  
139:    printf("TOTAL TIME:           %f\n\n", $startup + $lookups + $sizing);  
140:  
141: ?>
```

```
1: /*
2:  * styles.css
3:  *
4:  * Computer Science 50
5:  * Week 10
6:  */
7:
8: body
9: {
10:   background: #000000;
11:   color: #ffffff;
12: }
13:
14: a
15: {
16:   color: #ff0000;
17:   text-decoration: underline;
18: }
19:
20: a:hover
21: {
22:   color: #ff0000;
23:   font-size: 72pt;
24:   text-decoration: none;
25: }
```

```
1:
2: <!DOCTYPE html
3:     PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
4:     "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
5:
6: <html xmlns="http://www.w3.org/1999/xhtml">
7:     <head>
8:         <title>hello, table</title>
9:     </head>
10:    <body>
11:        <div align="center">
12:            <h1>hello, table</h1>
13:            <br /><br />
14:            <table border="1">
15:                <tr>
16:                    <td align="center">1</td>
17:                    <td align="center">2</td>
18:                    <td align="center">3</td>
19:                </tr>
20:                <tr>
21:                    <td align="center">4</td>
22:                    <td align="center">5</td>
23:                    <td align="center">6</td>
24:                </tr>
25:                <tr>
26:                    <td align="center">7</td>
27:                    <td align="center">8</td>
28:                    <td align="center">9</td>
29:                </tr>
30:            </table>
31:        </div>
32:    </body>
33: </html>
34:
```