

```

1  <!DOCTYPE html>
2
3  <html>
4  <head>
5      <meta charset="utf-8">
6      <title>Alphabet Concordance (arrays version)</title>
7      <style type="text/css">
8          /* css rules go here. */
9          #output { visibility: hidden; }
10         #text { height: 100px; width: 800px; overflow: scroll; font-size: larger; }
11     </style>
12     <script type="text/javascript">
13         /* scripts go here */
14         /* variables, constants, etc. */
15         const alphabet="abcdefghijklmnopqrstuvwxyz ,.";
16         var charCountArray=[];
17         //_____ends variable, constant decls.
18
19         /* Event handlers, etc. */
20
21         /*
22          * This is the function called by the onload event
23          * handler. Essentially, it reconstructs the
24          * concordance table.
25          */
26         function initTable() {
27             charCountArray = Array ( alphabet.length );
28             for( var index=0; index < charCountArray.length; index++ ) {
29                 charCountArray[ index ] = 0 ;
30             }
31         }
32         /*
33          * called between input sessions ...
34          */
35         function resetTable () {
36             for( var index=0; index < charCountArray.length; index++ ) {
37                 charCountArray[ index ]=0;
38             }
39         }
40         // _____end general functions, event handlers, etc.
41
42         /* String handling functions, procedures ...
43          * stripping punctuation, lowercasing text, ... .
44          */
45         function parseStream ( text ) {
46             var parsedText = (text.trim()).toLowerCase();
47             /* brute force approach ... doesn't use RegEx. */
48             return parsedText;
49         }
50
51         /*
52          * Find the corresponding index of the character (if it's in the
53          * alphabet), and set up that array value by one.
54          */
55         function analyzeText( text ) {
56             var stream = parseStream( text );
57             for( var charIndex=0; charIndex < stream.length; charIndex++ ) {
58                 /* for each alphabetic character, find the CharInt Pair
59                  * entry in the array, and update the corresponding
60                  * counter (see the object/class definition of
61                  * CharIntPair, above)
62                  */
63                 var index = alphabet.indexOf( stream.charAt( charIndex ) ); //findIndex( stream.charAt( charIndex ));
64                 if( index >= 0 ) {
65                     charCountArray[ index ]++;
66                 }
67             }
68         }
69
70         function charCountArrayToHTML( index ) {

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71         return "<tr><td>" + alphabet.charAt( index ) + "</td><td>" + charCountArray[ index ] + "</td></tr>";
72     }
73     /*
74     * Event handler: onclick!
75     */
76     function doConcordance() {
77         var text = document.getElementById( "text" ).value;
78         analyzeText( text );
79         updateTable();
80     }
81
82     function updateTable() {
83         var tableBody = "";
84         for( var index=0; index < charCountArray.length; index++ ) {
85             tableBody += charCountArrayToHTML( index );
86         }
87         document.getElementById( "entries" ).innerHTML=tableBody;
88         document.getElementById( "output" ).style.visibility="visible";
89     }
90
91     function resetAll() {
92         document.getElementById( "text" ).value="";
93         resetTable();
94         document.getElementById( "output" ).style.visibility="hidden";
95     }
96 }
97 </script>
98 </head>
99
100 <body onload="initTable();">
101     <h1>Counting Strings</h1>
102     <p>A <dfn>concordance</dfn> is a mapping from objects, usually strings (words), to the number of times that each appears
103     in a collection (usually a document).
104     For this exercise, you will enter text in the text box below, and write some scripts that construct a table that shows h
105     ow many times each character from the
106     English alphabet appeared in that text. Note, many characters may appear 0 times. See if you can find a "pattern" whereb
107     y certain characters appear
108     more often than others.</p>
109     <br>
110     <div id="input">
111         <textarea id="text" required autofocus>
112     </textarea>
113     </div>
114     <br>
115     <button id="checkIt" onclick="doConcordance();">Build Concordance Table</button>&nbsp;<button id="reset" onclick="resetA
116     ll();">Reset and enter new text</button>
117     <br>
118     <div id="output">
119         <table summary="concordance">
120             <thead><tr><th>Character</th><th>Number of Occurrences</th></tr></thead>
121             <tbody id="entries">
122                 <!-- entries go here as a row -->
123             </tbody>
124         </table>
125     </div>
126 </body>
127 </html>

```