```
angular.module('ClassMaticApp.services', [])
 2
     .factory('RecursionHelper', ['$compile', function($compile){
 3
         //angular factory service that recompiles DOM contents recursively
 4
         return {
 5
             compile: function(element, link){
 6
                 if(angular.isFunction(link)){
 7
                      link = { post: link };
 8
9
                 var contents = element.contents().remove();
10
                 var compiledContents;
11
                 return {
                      pre: (link && link.pre) ? link.pre : null,
12
13
                      post: function(scope, element){
14
                          if(!compiledContents){
15
                              compiledContents = $compile(contents);
16
                          }
                          compiledContents(scope, function(clone){
17
18
                              element.append(clone);
19
                          });
                          if(link && link.post){
2.0
2.1
                              link.post.apply(null, arguments);
22
                          }
                      }
23
2.4
                 };
             }
25
26
         };
     }]).
27
     filter('humanreadable', function () {
2.8
29
         //converts paths to folders into end-user "human-readable" format by putting
         arrows instead of forward-slashes, and the phrase "No Folder" if uploading to root
30
         return function (item) {
             if (item.substring(0, 1) == '/') {
31
32
                 item = item.substring(1);
33
             }
             if (item.length == 0) {
34
                 return "No Folder";
35
36
             }
37
             return item.substring(0).replace(/\//g, " \u2192 ");
38
         };
     }).
39
40
     filter('folderfilter', function() {
41
         //filter for the real-time search based on file and folder names
         var folderfilter = function(obj, searchterm) {
42
43
             if (obj) {
                 if (obj.files || obj.folders) {
44
45
                      if (obj.files) {
                          for (var i = 0; i < obj.files.length; i++) {</pre>
46
                              if (obj.files[i].name.toLowerCase().indexOf(searchterm.
47
                              toLowerCase()) > -1) {
48
                                  return true;
49
                              }
                          }
50
                      }
51
52
                      if (obj.folders) {
53
                          for (var folder in obj.folders) {
54
                              if (folder.toLowerCase().indexOf(searchterm.toLowerCase()) >
```

```
55
                                   return true;
                              }
56
57
                              //recursive call down the folder structure
                              if (folderfilter(obj.folders[folder], searchterm)) {
58
59
                                   return true;
                              }
60
                          }
61
62
63
                      return false;
64
                  } else {
                      return false;
65
                 }
66
             } else {
67
                 return false;
68
69
70
         }
         return function(folders, searchterm) {
71
             var result = {};
72
             if (folders) {
73
                 if (!searchterm) {
74
                      return folders;
75
76
                 }
77
                 for (var folder in folders) {
                      if (folder.toLowerCase().indexOf(searchterm.toLowerCase()) > -1) {
78
                          result[folder] = folders[folder];
79
80
                          continue;
                      }
81
                      if (folderfilter(folders[folder], searchterm)) {
82
83
                          result[folder] = folders[folder];
                      }
84
85
                  }
86
             }
87
             return result;
88
         }
     });
89
```