```
//all of the user-defined Angular directives
2
    angular.module('ClassMaticApp.directives', []).
    directive('loginform', function() {
3
4
        //directive to display the login form
5
        //bound to the list of classes, terms, years
6
        //also bound to the login model and function to handle authentication
7
        return {
8
           scope: false,
9
           replace: true,
10
           restrict: 'E',
           template: '' +
11
12
               '<form ng-submit="sendLogin()">' +
13
                   '
                   30px; padding-left: 100px; padding-right: 100px; border-radius:
                   10px; border: 1px solid white cellpadding="20" cellspacing="0"
                   border="0" align="center">' +
14
                       '' +
15
                          '' +
                              '<h2>ClassMatic Login</h2>' +
16
17
                              '<span ng-if="error" style="color:</pre>
                              #FFCCCC"><br>Incorrect login credentials, or you are not
                              registered for courses
                              '<span ng-show="loading"><img src="loading.gif"</pre>
18
                              style="max-width: 40px"></span>' +
19
                           '' +
20
                       '' +
                       '' +
21
                           'Banner ID:' +
22
23
                           '' +
24
                              '<input class="loginctrl" type="text"
                              ng-model="login.sid">' +
25
                           '' +
26
                       '' +
27
                       '' +
28
                           'PIN:' +
                           '' +
29
                              '<input class="loginctrl" type="password"</pre>
30
                              ng-model="login.pin">' +
31
                           '' +
32
                       '' +
33
                       '' +
34
                           'Term:' +
                           '' +
35
36
                              '<select ng-model="login.term" ng-options="term for term
                              in terms" ng-init="buildTerms()" style="float: left;
                              width: 45%"><option ng-if="false"></option></select>' +
37
                              '<select ng-model="login.year" ng-options="year for year</pre>
                              in years" ng-init="buildYears()" style="float: right;
                              width: 45%"><option ng-if="false"></option></select>' +
38
                           '' +
39
                       '' +
40
                       '' +
41
                           '' +
42
                              '<input ng-show="false" class="button" type="submit"</pre>
                              value="Submit">' +
43
                           '' +
44
                       '' +
```

```
45
                     '' +
46
                 '</form>',
47
             controller: function ($scope) {
48
             }
49
         };
50
     }).
     directive('viewer', function ($location) {
51
         //directive for inline file previewing
52
53
         //has the capability to preview images, video, audio, pdfs, and text-based
         documents
54
         //uses the Google viewer for documents, browser functionality for all others
55
         return {
56
             restrict: 'E',
57
             scope: false,
58
             replace: true,
59
             link: function (scope, element, attrs) {
60
                 //builds a link to the server where this HTML is currently being served
                 from, in the same format expected for downloading files
                 var link = $location.protocol() + "://" + $location.host() + ':' +
61
                 $location.port() + '/download?active=' + attrs.active + '&hash=' + attrs.
                 hash:
62
                 //relies on the onerror events of individual embedded elements to remove
                 itself from the DOM
63
                 //successful loading removes the other embedded elements from the DOM
64
                 element.html('<div style="background-color: #F8F8F8; border: 1px solid
                 #D8D8D8; padding: 20px; text-align: center; border-radius: 20px"><div
                 style="padding: 0px; line-height: 0px; display: none">' +
                 '<video controls preload = "auto" style="max-height: 500px; max-width:
65
                 500px" src="' + link + '" onerror="if ($(this).siblings().length == 1) {
                 $(this).parent().css(\'display\', \'\'); } $(this).remove();"
                 oncanplay="if (this.duration > 0) { $(this).siblings().remove();
                 $(this).parent().css(\'display\', \'\'); } else { if
                 ($(this).siblings().length == 1) { $(this).parent().css(\'display\',
                 \'\'); } $(this).remove(); }"></video>' +
66
                 '<img style="max-height: 400px; max-width: 400px" src="' + link + '"</pre>
                 onerror="if ($(this).siblings().length == 1) {
                 $(this).parent().css(\'display\', \'\'); } $(this).remove();"
                 onload="$(this).siblings().remove(); $(this).parent().css(\'display\',
                 \'\')">' +
67
                 '<iframe src="https://docs.google.com/gview?url=' + encodeURIComponent(</pre>
                 link) + '&embedded=true" style="width:600px; height:500px;"
                 frameborder="0" onload="if ($(this).siblings().length == 0) {
                 $(this).parent().css(\'display\', \'\'); }"></iframe>' +
68
                 '</div>'/div>');
69
             }
70
         };
     }).
71
     directive('dragAndDrop', function($rootScope) {
72
73
         //directive for dragging and dropping onto a container
74
         return {
75
             scope: false,
             restrict: 'A',
76
77
             link: function($scope, elem, attr) {
78
                 //bind to dragenter to apply green highlighting to folder titles
79
                 elem.bind('dragenter', function(e) {
                     //don't let this event pass on to the default handlers
80
81
                     e.stopPropagation();
```

```
82
                      e.preventDefault();
 83
                      if ($scope.path && !$scope.student) {
 84
                           elem.filter('.titlebar').css('background-color', '#66C166');
 85
                      }
 86
                  });
 87
                  //bind to dragleave to remove green highlighting on folder titles
 88
                  elem.bind('dragleave', function(e) {
                      //don't let this event pass on to the default handlers
 89
 90
                      e.stopPropagation();
 91
                      e.preventDefault();
                      if ($scope.path && !$scope.student) {
 92
 93
                           elem.filter('.titlebar').css('background-color', '#F1F1F1');
 94
                       }
 95
                  });
 96
                  //bind to dragover to provide a secondary mechanism for applying green
                  highlighting on folder titles
 97
                  elem.bind('dragover', function(e) {
 98
                      //don't let this event pass on to the default handlers
 99
                      e.stopPropagation();
                      e.preventDefault();
100
101
                      if ($scope.path && !$scope.student) {
102
                           elem.filter('.titlebar').css('background-color', '#66C166');
103
                      }
104
                  });
105
106
                  //auxiliary function to dynamically create a move link and click it for
                  when a drag-drop action occurs
107
                  var moveFile = function (elem, source) {
108
                      var hash = source.split("/")[source.split("/").length - 1];
109
                      var destination;
110
                      if ($scope.path && $scope.path !== "") {
111
                          if (!hash) {
112
                               destination = $scope.path + source.split("/")[source.split(
                               "/").length - 2] + "/";
113
                           } else {
                               destination = $scope.path + hash;
114
115
                          }
116
                      } else {
117
                          if (!hash) {
                               destination = source.split("/")[source.split("/").length - 2]
118
                                + "/";
119
                           } else {
120
                               destination = hash;
121
                           }
122
                      }
123
                      if (destination.substring(0, source.length) !== source) {
124
                          var link = document.createElement('a');
                          link.href = "move?active=" + angular.element($(elem)).scope().
125
                          activeClass + "&source=" + source + "&destination=" + destination;
126
                          document.body.appendChild(link); //must be in DOM to work in
                          Firefox
127
                          link.target = "hidden-iframe";
128
                          link.click();
129
                          document.body.removeChild(link);
130
                      }
131
                  }
132
```

```
133
                  //bind to the drop action
134
                  elem.bind('drop', function(e) {
135
                      //don't let this event pass on to the default handlers
136
                      e.stopPropagation();
137
                      e.preventDefault();
138
                      if ($scope.path) {
139
                          elem.filter('.titlebar').css('background-color', '#F1F1F1');
140
141
                      //check to make sure we're not in student mode
142
                      if (!$scope.student) {
                          var go = true;
143
144
                          //if there is text data associated with the drop event, then
                          interpret as a move and return
145
                          if (e.originalEvent.dataTransfer.getData("text") && e.
                          originalEvent.dataTransfer.getData("text") !== undefined) {
146
                              moveFile(elem, e.originalEvent.dataTransfer.getData("text"));
147
                              return;
148
                          }
                           //if there are already files that have been dropped onto the
149
                          interface, then alert the user they will be overwritten
150
                          if ($rootScope.fields.droppedFiles.length > 0) {
151
                               go = confirm("This will overwrite your previously dropped
                               files.");
152
                          }
153
                          //if the user accepted the overwrite or there was no conflict,
                          parse the files and reflect it in the interface
154
                          if (go) {
155
                               $rootScope.$apply(function () {
156
                                   //clear the old files that had been dropped
157
                                   $rootScope.fields.droppedFiles = [];
158
                                   var dropped = e.originalEvent.dataTransfer.files; //no
                                   originalEvent if jQuery script is included after angular
159
                                   for (var i in dropped) {
160
                                       //if the file has a type or a size that isn't a
                                       multiple of 4096 or is larger than 4096*3, then it
                                       is a file and not a folder
161
                                       //we don't want to handle folders as that
                                       functionality is not available in any browsers
                                       outside of Chrome
                                       if (dropped[i].type || (dropped[i].size && (dropped[i
162
                                       ].size % 4096 !== 0 || dropped[i].size / 4096 > 3))) {
163
                                           $rootScope.fields.droppedFiles.push(dropped[i]);
164
                                       }
165
                                   if ($rootScope.fields.droppedFiles.length > 0) {
166
167
                                       //if we're not in the upload pane already then open
                                       it and overwrite the folder
168
                                       if ($rootScope.fields.upload == false) {
169
                                           $rootScope.fields.upload = true;
170
                                           if ($scope.path && $scope.path !== "") {
171
                                               $rootScope.fields.folderName = $scope.path.
                                               substring(0, $scope.path.length - 1);
172
                                           } else {
173
                                               $rootScope.fields.folderName = "/";
174
                                           }
175
                                       } else {
176
                                           //if the upload pane is already open and we
```

```
drag-dropped onto no path, keep what was
                                       there... but if we dropped on a custom folder,
                                       take that instead
177
                                       if ($scope.path && $scope.path !== "") {
                                           $rootScope.fields.folderName = $scope.path.
178
                                           substring(0, $scope.path.length - 1);
179
                                       }
                                   }
180
                               }
181
                           });
182
                        }
183
184
                    }
185
                });
            }
186
187
         };
188
     }).
189
     directive('uploadForm', function($rootScope) {
190
         //directive that controls the upload form
191
         return {
192
            scope: false,
193
            restrict: 'A',
194
             template: '' +
                '
195
                \'transparent\'}" style="width: 330px; padding: 15px; border: 1px solid
                #909090" cellpadding="10" cellspacing="0" border="0" align="center">' +
196
                    '' +
197
                        'Folder:' +
                        '' +
198
199
                            '<span ng-bind="fields.folderName | humanreadable"></span>' +
200
                            '<input type="text" ng-show="false" id="folder"</pre>
                           ng-model="fields.folderName" name="folder">' +
201
                        '' +
                    '' +
202
203
                    '' +
204
                        'File(s):' +
205
206
                        //ng-show="!(fields.droppedFiles.length > 0) || this.value !==
                        \ ' \ ' "
207
                            '<input style="width: 100%" id="file"</pre>
                           ng-disabled="fields.loading" type="file"
                           name="{{activeClass}}"
                           ng-required="!(fields.droppedFiles.length > 0)"
                           multiple="multiple">' +
208
                            '<span ng-if="fields.droppedFiles.length > 0"
                           style="color: red"><b>+</b></span>' +
209
                            '<div style="width: 100%"
                           ng-show="fields.droppedFiles.length"><span style="color:
                           red"><b>{{fields.droppedFiles.length}} file(s)
                           drag/dropped</b> <img style="float: right; max-height: 20px"</pre>
                           ng-src="x.png" ng-click="fields.droppedFiles =
                            []"></span></div>' +
210
                        '' +
211
                    '' +
212
                    '' +
213
                        '' +
214
                            '<label><input ng-model="futureReveal"
                           ng-disabled="fields.loading" type="checkbox"></input> Future
```

```
Reveal</label><br />' +
215
                              '' +
216
                                  '<div ng-show="futureReveal"><span style="padding-right:</pre>
                                 10px">Date: </span><input style="width: 170px"
                                 ng-required="futureReveal" ng-model="revealTime"
                                 id="datetimepicker" type="text"
                                 name="reveal"></input><script
                                 type="text/javascript">$("#datetimepicker").AnyTime_picker
                                  ({'+
217
                                      'format: \'%m/%e/%Y %h:%i:%s %p\',' +
218
                                      'earliest: new Date(),' +
219
                                  '});</script></div>' +
220
                              '' +
221
                          '' +
222
                      '' +
223
                      '' +
224
                          '' +
                              '<input style="width: 60%; height: 40px" type="submit"</pre>
225
                             ng-disabled="fields.loading" value="Submit"></input>' +
226
                          '' +
227
                      '' +
228
                  '',
229
             link: function($scope, elem, attr) {
230
                  //when the form is submitted, take over that event
231
                 elem.bind('submit', function(e) {
232
                      //$(elem).children('table').css('background-color', '#FF9999');
233
                     e.preventDefault();
234
                     $scope.$apply(function () {
235
                         if ($scope.futureReveal) {
236
                             $scope.revealTime = new Date($scope.revealTime).getTime();
237
                         } else {
238
                             $scope.revealTime = "";
239
240
                     });
241
                     oData = new FormData(this);
242
                     $scope.$apply(function () {
243
                         $scope.futureReveal = false;
244
                     });
245
                     $rootScope.$apply(function () {
246
                          $rootScope.fields.loading = true; //must be applied after the
                         form data is grabbed since disabling the file input keeps it
                         from actually uploading
247
                     });
248
                     for (var i = 0; i < $rootScope.fields.droppedFiles.length; i++)</pre>
249
                      {
                          //loop through all of the dropped files and append them to the
250
                         formdata
251
                         oData.append($scope.activeClass, $rootScope.fields.droppedFiles[i
                          ]);
252
                     }
253
                     $rootScope.$apply(function () {
254
                          //clear out the dropped files before uploading this batch so if
                         the user drops more on, those can be queued up for the next
                         round after this is finished
255
                         $rootScope.fields.droppedFiles = [];
256
                     });
257
                      //we're sending the data to the server using XMLHttpRequest
```

```
258
                      //uploading to the /upload endpoint
259
                      var oReq = new XMLHttpRequest();
                      oReq.open("post", "upload", true);
260
261
                      oReq.onload = function(oEvent) {
262
                          if (oReq.status == 200) {
263
                              //$(elem).children('table').css('background-color',
                              'transparent');
264
                              $rootScope.$apply(function () {
265
                                  $rootScope.fields.loading = false;
266
                              });
                              try {
267
268
                                  if ($rootScope.fields.droppedFiles.length == 0) {
269
                                      $rootScope.$apply(function () {
270
                                           $rootScope.fields.upload = false;
271
                                       });
272
                                  }
273
                                  document.getElementById('file').value = '';
274
                                  $scope.revealTime = "";
                              } catch (e) {}
275
276
                          } else {
277
                              alert("There was an error uploading your file");
278
                          }
279
                      };
280
                      //send the data
281
                      oReq.send(oData);
282
                  });
283
              }
284
285
          };
286
      }).
      directive('folder', function(RecursionHelper) {
287
288
          //directive that renders folders which may recursively contain other files and
          folders
289
          return {
290
              scope: false,
              restrict: 'E',
291
292
              template: '' +
293
                  '<ul drag-and-drop class="example-animate-container"
                  ng-style="{borderLeft : ((object.files || object.folders) && path &&
                  \'lpx solid #909090\') || \'\'}">' +
294
                      '
                      event.dataTransfer.setData(\'text\',
                      angular.element($(event.target)).scope().path +
                      angular.element($(event.target)).scope().file.hash); })(event);"
                      class="animate-repeat" style="position: relative; border-bottom: 1px
                      solid #909090; text-align: right" ng-repeat="file in object.files |
                      filter: {name: searchterm} | orderBy: \'-date\' track by file.hash"
                      ng-if="!student | currentDate >= file.reveal">' +
                          '<a draggable="false" style="float: left"</pre>
295
                          ng-href="download?active={{activeClass}}&hash={{path +
                          file.hash}}" ng-bind="file.name"></a><div style="display:</pre>
                          inline-block; padding-left: 20px"><div style="display:</pre>
                          inline-block; padding-right: 20px"><a draggable="false" href="#"</pre>
                          ng-click="preview = !preview">{{preview ? "close" :
                          "preview"}}</a></div><div ng-if="!student" style="display:
                          inline-block; padding-right: 20px"><a draggable="false"</pre>
                          ng-href="delete?active={{activeClass}}&hash={{path +
```

```
file.hash}}" target="hidden-iframe">delete</a></div><div</pre>
                          ng-if="currentDate >= file.reveal" style="display: inline-block;
                          width: 65px">{{file.date | date: "M/dd/yy"}}</div><div</pre>
                          ng-if="currentDate < file.reveal" style="display: inline-block;</pre>
                          width: 65px; color: red">{{file.reveal |
                          date:"M/dd/yy"}}</div><div ng-if="currentDate >= file.reveal"
                          style="display: inline-block; width: 80px">{{file.date |
                          date:"h:mma"}}</div><div ng-if="currentDate < file.reveal"</pre>
                          style="display: inline-block; width: 80px; color:
                          red">{{file.reveal | date:"h:mma"}}</div></div><br />' +
                          '<div ng-if="preview" style="padding-bottom: 10px"><viewer</pre>
296
                          hash="{{path + file.hash}}"
                          active="{{activeClass}}"></viewer></div>' +
297
                      '' +
298
                      //ng-if="folder.files || folder.folders"> will hide empty folders by
299
                      ''<li ng-class="divClass" class="animate-repeat noselect"
                      style="padding-left: 20px" ng-repeat="(name, folder) in
                      object.folders | folderfilter:searchterm"' +
300
                          '<div class="noselect">' +
301
                               '' +
302
                               '<div drag-and-drop draggable="true"
                              ondragstart="(function(event){
                              event.dataTransfer.setData(\'text\',
                              angular.element($(event.target)).scope().path); })(event);"
                              class="titlebar" ng-style="{minWidth : (280 + (14 *
                              path.split(\'/\')[path.split(\'/\').length - 2].length)) +
                              \'px\'}" style="background-color: #F1F1F1; border: solid 1px
                              #909090; border-radius: 10px" ng-click="foldershow =
                              !foldershow"><img draggable="false" src="folder.png"
                              style="max-height: 40px; padding-top: 5px; padding-right:
                              5px; padding-left: 10px"> <span style="vertical-align: top;</pre>
                              position: relative; top: 7px; left:
                              5px">{{name}}</span><span style="float: right"><button-group
                              style="position: relative; bottom: 3px; right:
                              10px"></button-group><img draggable="false"
                              ng-src="{{foldershow | | searchterm ? \'expand.png\' :
                               \'collapse.png\'}}" style="padding-top: 5px; max-height:
                              35px"></span></div></div>' +
303
                               '<folder ng-show="!foldershow | searchterm" data="folder"</pre>
                              path="name"></folder>' +
304
                          '</div>' +
305
                      '' +
306
                  '',
              compile: function(element) {
307
308
                  //pull in the RecursionHelper service to handle rendering recursive
                  content
                  return RecursionHelper.compile(element, function(scope, iElement, iAttrs,
309
                   controller, transcludeFn){
310
                      scope.$watch(iAttrs.data, function (value){
311
                          if (value) {
312
                               //watches the attributes on this directive specified by the
                              HTML, and whether those objects are changing and reapplies
                              it here
313
                              scope.object = value;
314
                          }
                      });
315
```

```
316
                      scope.$watch(iAttrs.path, function (value){
317
                           //recursively at each level down inherits the path from the
                          previous scope and redefines it again at this scope with the new
                          value appended
318
                          if (value && scope.path !== undefined) {
319
                               scope.path += value + "/";
320
                           } else {
                              scope.path = "";
321
322
                          }
323
                      });
                  });
324
325
              }
326
          };
327
      }).directive('buttonGroup', function($rootScope) {
328
          //directive to specify a common group of buttons for administrative purposes
329
          return {
330
              scope: false,
331
              restrict: 'E',
              template: '' +
332
                  '<span ng-if="!student"><a draggable="false" class="button" href=""
333
                  ng-click="uploadFolder($event)">Upload</a> <a draggable="false"
                  class="button" target="hidden-iframe"
                  ng-href="newfolder?active={{activeClass}}&path={{path + newname}}}"
                  ng-click="newFolder($event)"><img draggable="false" style="max-height:
                  30px; position: relative; top: 9px" src="newfolder.png"></a> <a
                  draggable="false" ng-if="path" class="button" target="hidden-iframe"
                  ng-href="deletefolder?active={{activeClass}}&path={{deletepath}}"
                  ng-click="deleteFolder($event)"><img draggable="false"
                  style="max-height: 30px; position: relative; top: 9px"
                  src="delete.png"></a></span>',
334
              controller: function ($scope, $rootScope) {
335
                  //function to handle uploading to a folder; pops open the upload form in
                  this context
336
                  $scope.uploadFolder = function (e) {
337
                      e.stopPropagation();
                      $rootScope.fields.upload = true;
338
339
                      if ($scope.path && $scope.path !== "") {
340
                          $rootScope.fields.folderName = $scope.path.substring(0, $scope.
                          path.length - 1);
341
                      } else {
342
                          $rootScope.fields.folderName = "/";
343
344
                  }
345
                  //function to handle creating a new folder in the interface
346
                  $scope.newFolder = function (e) {
347
                      e.stopPropagation();
348
                      $scope.newname = prompt("Please enter a name for your new folder: ");
349
                      if ($scope.newname) {
350
                           //strips non alphanumeric characters from new folder names
351
                          $scope.newname = $scope.newname.replace(/([^a-z 0-9]+)/gi, '');
352
                          $rootScope.fields.upload = true;
353
                          $rootScope.fields.folderName = $scope.path + $scope.newname;
354
                      } else {
355
                          e.preventDefault();
356
                      }
357
358
                  //function to handle deleting a folder
```

```
359
                  $scope.deleteFolder = function (e) {
360
                      e.stopPropagation();
361
                      //confirms with the user before actually deleting
362
                      if (!confirm("This will delete the folder and all of its contents,
                      and cannot be undone. Are you sure?")) {
363
                           //if the user doesn't want to commit to deleting the folder, the
                          link is prevented from loading
364
                          e.preventDefault();
                      } else {
365
366
                          if ($scope.path && $scope.path !== "") {
367
                               //constructs a deletepath for the dynamic destination of the
                              ahref url to load into the hidden iframe to actually perform
                               the deletion
368
                               $scope.deletepath = $scope.path.substring(0, $scope.path.
                               length - 1);
369
                          } else {
370
                               $scope.deletepath = "/";
371
                          }
                      }
372
373
                 }
              }
374
375
          };
376
      });
```