```html
1  <!DOCTYPE html>
2
3  <html lang="en">
4      <head>
5          <meta charset="utf-8" />
6          <title></title>
7
8      <script type="text/javascript" src="http://code.jquery.com/jquery-1.9.1.js"></script>
9      <script type="text/javascript" src="js/jquery.touchSwipe.min.js"></script>
10     <script type="text/javascript" src="js/knockout-2.2.0.js"></script>
11     <script type="text/javascript" src="http://maps.google.com/maps/api/js?
       libraries=geometry&sensor=true_or_false"></script>
12     <script type="text/javascript" src="js/data.js"></script>
13
14     </head>
15     <body>
16
17  <style>
18
19    html, body {
20              height: 100%;
21              margin: 0;
22              padding: 0;
23          }
24
25          #map {
26              height: 100%;
27          }
28
29
30          #floating-panel {
31              position: absolute;
32              top: 10px;
33              left: 5%;
34              z-index: 5;
35              background-color: #fff;
36              padding: 5px;
37              border: 1px solid #999;
38              text-align: center;
39              font-family: 'Roboto','sans-serif';
40              line-height: 30px;
41              padding-left: 10px;
42          }
43  </style>
44
45   <div id="floating-panel">
46          <b>Place: </b>
47          <input data-bind="value: userInput" />
48          <button data-bind="click: filterMarkers">Filter</button>
49   </div>
50   <div id="map"></div>
51
52      <script type="text/javascript" src="~/Scripts/knockout-2.3.0.debug.js"></script>
53      <script type="text/javascript" src="js/data.js"></script>
54
```

```javascript
55  <script type="text/javascript">
56  var koViewModel = function(map,courses) {
57    var self = this;
58
59    self.googleMap = map;
60
61    self.allPlaces = [];
62      courses.forEach(function(place) {
63        self.allPlaces.push(new Place(place));
64    });
65
66    self.allPlaces.forEach(function(place) {
67      var markerOptions = {
68        map: self.googleMap,
69        position: place.latLng,
70        animation: google.maps.Animation.DROP
71      };
72
73      place.marker = new google.maps.Marker(markerOptions);
74    });
75
76    self.visiblePlaces = ko.observableArray();
77
78    self.allPlaces.forEach(function(place) {
79      self.visiblePlaces.push(place);
80    });
81
82    self.userInput = ko.observable('');
83
84    self.filterMarkers = function() {
85      var searchInput = self.userInput().toLowerCase();
86
87      self.visiblePlaces.removeAll();
88
89      self.allPlaces.forEach(function(place) {
90        place.marker.setMap(null);
91
92        if (place.name.toLowerCase().indexOf(searchInput) !== -1) {
93          self.visiblePlaces.push(place);
94        }
95      });
96
97      self.visiblePlaces().forEach(function(place) {
98        place.marker.setMap(self.googleMap);
99      });
100   };
101
102   function Place(dataObj) {
103     this.name = dataObj.name;
104     this.latLng = dataObj.latLng;
105     this.marker = null;
106   }
107
108 };
109
```

```
110
111  function createMap() {
112      return new google.maps.Map(document.getElementById('map'), {
113          center: { lat: 33.444735, lng: -84.453223 },
114          zoom: 11
115      });
116  }
117
118  google.maps.event.addDomListener(window, 'load', function(){
119
120  var googleMap = createMap();
121  ko.applyBindings(new koViewModel(googleMap,courses));
122
123  });
124
125  </script>
126
127
128      </body>
129  </html>
130
```