GENETICS, SOFTWARE

LEAFLET.JS – LAYER ORDER, LAYER ADDRESS AND LINKS

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Leaflet is great for mapping in epidemiology with quick results of just cut & pasting a few lines. Problems do start, however, whenever running a more advanced project. It's a pain, as plugins overwrite functions and basic css layouts. Or layers do not allow clickable links (as propation is being prohibited). Or geojson data that are rejected for whatever reason. A showcase project, that had been planned for 2 days, took more than 1 week as the documentation is frequently unclear, incomplete and often hard to understand without any (jsfiddle) example. Numerous Google searches helped, as well as peaking into the source-code, while also other stack overflow posters have been very helpful.

The following four problems took me several days (with everything referring to leaflet.js 0.7.3) Take care to have NO plugins enabled for testing. And if makes always sense to declare variables before putting the main map setup into some document ready brackets.

```
$(document).ready(function() {
   initmap();
})
var markers = new L.MarkerClusterGroup...
```

Links in popups
Doesn't work out of the box. Stackoverflow helped: Basically a hack, see the comments by Asad, as this is not good practice.

```
var link = $('<a href="#"
class="speciallink">TestLink</a>').click(function() {
    alert("test");
})[0];
marker.bindPopup(link);
```

Order of layers

Cryptic documentation of z-indices. [Stackoverflow helped](#): Undocument feature.

```
//Put explicit zIndexes on your mbstyle and mblabels layers:
var mbstyle = L.mapbox.tileLayer('statecodemog.aa380654', {
    'zIndex': 1
});
var mblabels = L.mapbox.tileLayer('statecodemog.798453f5', {
    'clickable': 'false',
    'zIndex': 99
});
//Then tell your L.control.layers not to mess around with the
zIndexes:
L.control.layers(baseLayers, groupedOverlays, {
    'autoZIndex': false
}).addTo(map);
```

Addressing of layers

Unclear documentation. [Bl.ocks.org helped](#): Again a hack, the original code is missing a comma.

```
var MyMarkerGroup = L.FeatureGroup.extend({
  // override the 'getLayerId' function to return your ids rather then
leaflets internal ids
  getLayerId: function(layer){
    return layer.id;
  },
  getLayersById: function(arrayOfLayerIds){
    var layers = [];
    // some logic to loop over layers and select them by id
    for (var i = arrayOfLayerIds.length - 1; i >= 0; i--) {
      var id = arrayOfLayerIds[i];
      layers.push(this._layers[id]);
    }
    return layers;
  }
});
var markers = new MyMarkerGroup();
var marker = new L.marker(latlng, options);
marker.id = "something"; // assign your id
markers.addLayer(marker); // add your layer
var aMarker = markers.getLayer("something"); // gets  marker by id
var someMarkers = markers.getLayersById(["foo", "bar"]); // get
markers by their ids
```

Error in geojson output
Basically not a leaflet problem. But something that can be easily tested at
http://geojsonlint.com.

Cool stuff: d3.js integration and R data processing...