# APPMOB - Mapbox

Olivier Liechti & Simon Oulevay
COMEM Applications Mobiles

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Haute Ecole d'Ingénierie et de Gestion
du Canton de Vaud

# Mapbox: Customizable Maps

# Can I use Mapbox with AngularJS?

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http://lmgtfy.com/?q=mapbox+angularjs

# Angular Leaflet Directive

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A directive has already been made for you:

https://github.com/tombatossals/angular-leaflet-directive/

http://tombatossals.github.io/angular-leaflet-directive/

# Using Bower

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```
$> bower search angular-leaflet-directive
    angular-leaflet-directive git://github.com/tombatossals/angular-leaflet-directive
    angular-leaflet git://github.com/tombatossals/angular-leaflet-directive.git
    ws-angular-leaflet-directive git://github.com/ws-anashkin/angular-leaflet-directive.git
    angular-leaflet-directive-ext git://github.com/Asymmetrik/angular-leaflet-directive-ext.git
    angular-leaflet-directive-ws git://github.com/ws-anashkin/angular-leaflet-directive.git
    angular-leaflet-directive-temp git://github.com/TheCodeDestroyer/angular-leaflet-directive.git
    angular-leaflet-directive-websailors git://github.com/ws-anashkin/angular-leaflet-directive.git
    wavel-leaflet-directive git://github.com/Arnooo/angular-leaflet-directive.git
```

```
$> bower install --save angular-leaflet-directive

angular-leaflet-directive#0.10.0 www/lib/angular-leaflet-directive
├── angular#1.4.3
└── leaflet#0.7.7

leaflet#0.7.7 www/lib/leaflet
```

# Include the Javascript files

## Add the required files to index.html:

```html
<html>
  <head>
    …

    <!-- add the stylesheets here -->
    <link href="lib/leaflet/dist/leaflet.css" rel="stylesheet">

    …

    <!-- ionic/angularjs js -->
    <script src="lib/ionic/js/ionic.bundle.js"></script>
    <script src="lib/a0-angular-storage/dist/angular-storage.js"></script>

    <!-- add the javascripts here (AFTER the ionic library) -->
    <script src="lib/leaflet/dist/leaflet-src.js"></script>
    <script src="lib/angular-leaflet-directive/dist/angular-leaflet-directive.js"></script>
  </head>
  <body>
    …
  </body>
</html>
```

# Mapbox Configuration

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You will need:
- a map ID
- a public access token

# Mapbox Configuration

## You should add them to your configuration files:

In:
- config/development.json
- config/production.json

```json
{
  "apiUrl": "http://api.example.com",
  "mapboxMapId": "…",
  "mapboxAccessToken": "…",
}
```

In constants.js (root directory of the app):

```js
angular.module("citizen-engagement.constants", [])
  .constant("apiUrl", "@apiUrl@")
  .constant("mapboxMapId", "@mapboxMapId@")
  .constant("mapboxAccessToken", "@mapboxAccessToken@")
;
```

In gulpfile.js:

```js
.pipe(replace(/@apiUrl@/, config.apiUrl))
.pipe(replace(/@mapboxMapId@/, config.mapboxMapId))
.pipe(replace(/@mapboxAccessToken@/, config.mapboxAccessToken))
```

Don't forget to re-run `gulp config-development` or `gulp config-production` to apply the new configuration.

# Add the AngularJS module

Add the new dependency to your application module:

```
angular.module("citizen-engagement", ["…", "leaflet-directive"])
```

Add the required data to your controller:

```
myApp.controller("MapController", function($scope, mapboxMapId, mapboxAccessToken) {

    var mapboxTileLayer = "http://api.tiles.mapbox.com/v4/" + mapboxMapId;
    mapboxTileLayer = mapboxTileLayer + "/{z}/{x}/{y}.png?access_token=" + mapboxAccessToken;

    $scope.mapDefaults = {
      tileLayer: mapboxTileLayer
    };

    $scope.mapCenter = {
      lat: 51.48,
      lng: 0,
      zoom: 14
    };

    $scope.mapMarkers = [];
});
```

Add the directive to your template:

```
<ion-content scroll="false">
  <leaflet defaults="mapDefaults" center="mapCenter" markers="mapMarkers" height="100%" data-tap-disabled="true"></leaflet>
</ion-content>
```

# Mapbox: Adding a Marker

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Simply add it to the **mapMarkers** $scope variable.
The directive will automatically be updated.

```
myApp.controller("MapController", function(IssueService, mapboxMapId, mapboxAccessToken) {

  // …

  $scope.mapMarkers = [];

  var issue = IssueService.getIssue();

  $scope.mapMarkers.push({
    lat: issue.lat,
    lng: issue.lng,
    message: "<p>{{ issue.description }}</p><img src="{{ issue.imageUrl }}" width="200px" />",
    getMessageScope: function() {
      var scope = $scope.$new();
      scope.issue = issue;
      return scope;
    }
  });
});
```

# Beware of The Bug

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If you copy-paste examples from the angular-leaflet-directive project, don't forget to add the **data-tap-disabled="true"** attribute.

```
<leaflet defaults="mapDefaults" center="mapCenter" markers="mapMarkers" data-tap-disabled="true"></leaflet>
```

http://ionicframework.com/docs/api/page/tap/

http://forum.ionicframework.com/t/click-on-a-marker-of-leafletmap-not-working/4378/