

Creating a Leaflet map using Go server

We will show here how to easily setup a Go server and create a page to display a Leaflet map.

First we create a folder `MapaLeaflet` that we will setup our server. This folder must be placed under the folder `$GOPATH/src/` on your system:

```
MapaLeaflet
├── templates
│   ├── mapa.html
│   └── layout.html
├── static
│   └── js
│       ├── leaflet.js
│       ├── leaflet.css
│       └── images
│           └── ... five .png image files
└── servidor.go
```

Load the files `leaflet.js` and `leaflet.css` inside the folder `MapaLeaflet/static/js/` and load the folder `images` in it too. These files can be downloaded from <http://cdn.leafletjs.com/leaflet/v1.6.0/leaflet.zip> and extract it on your system. Copy only the files and folder showed above.

Inside the folder `MapaLeaflet` create the `servidor.go` file below:

```
package main
import (
    "net/http"
    "html/template"
    "path/filepath"
)

func mapa(w http.ResponseWriter, r *http.Request){
    l := filepath.Join("templates", "layout.html")
    f := filepath.Join("templates", filepath.Clean(r.URL.Path))
    tpl, _ := template.ParseFiles(l, f)
    tpl.ExecuteTemplate(w, "layout", nil)
}

func main() {
    fs := http.FileServer(http.Dir("static"))
    http.Handle("/static/", http.StripPrefix("/static/", fs))
    http.HandleFunc("/mapa.html", mapa)
    println("Server Running...")
    http.ListenAndServe(":8080", nil)
}
```

Inside the folder `MapaLeaflet/templates` create the two files below:

```
layout.html
{{define "layout"}}
<html>
<head>
  <title>Leaflet Map on Go server!</title>
  <link rel="stylesheet" href="static/js/leaflet.css"/>
  <script src="static/js/leaflet.js"></script>
  <style>
    #map{ height: 100%; }
  </style>
</head>
<body>
  <div id="map"></div>
  <script>
    {{template "body"}}
  </script>
</body>
</html>
{{end}}
```

```
mapa.html
{{define "body"}}

  var map = L.map('map').setView([-3.732, -38.527], 12);
  L.tileLayer('http://{s}.www.toolserver.org/tiles/bw-mapnik/{z}/{x}/
{y}.png',{maxZoom: 19,attribution: '&copy; <a
href="https://www.openstreetmap.org/copyright">OpenStreetMap</a>
contributors'}).addTo(map);

{{end}}
```

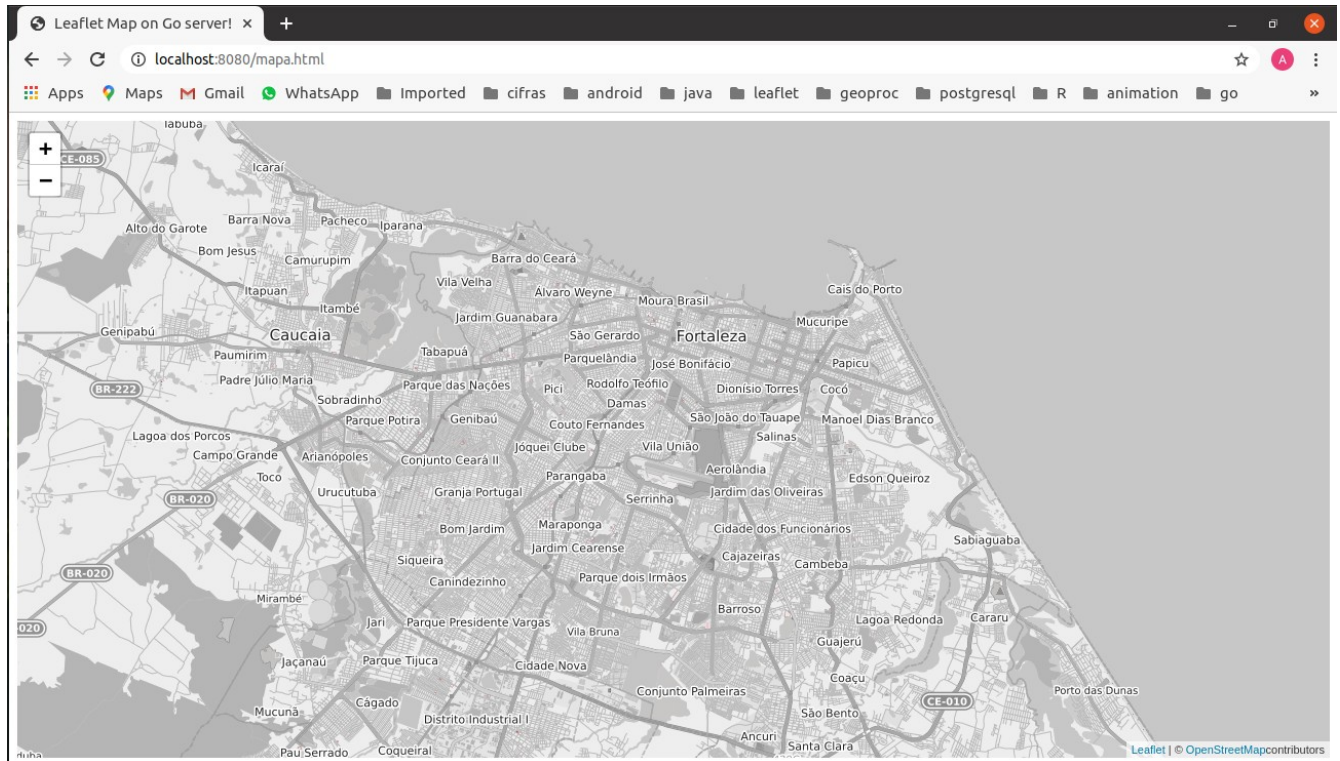
And now we are ready to start our server using (run it inside the folder `MapaLeaflet`):

```
$ go install MapaLeaflet
$GOPATH/bin/MapaLeaflet
Server Running...
```

From your preferred browser type:

```
localhost:8080/mapa.html
```

et voila, you should see the the map below :



Quite simple isn't it? Later we will see how to load spatial data into our map from a Postgis database using Go.

Cheers,

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