

# NGEO

## A COMPANION LIBRARY FOR OPENLAYERS 3



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# CAMPTOCAMP

## GEOSPATIAL

Web-GIS Portals

Spatial Data  
Infrastructure (IDS)

Mobile applications

## BUSINESS

Enterprise Resource  
Planning (ERP)

Business Intelligence,  
Reporting

## INFRASTRUCTURE

Virtualization,  
Cloud Computing

Automation of system  
administration

Deployment of  
complex architectures

**ADVICE, STUDY, R&D**

**IMPLEMENTATION**

**SUPPORT**

**TRAINING**

# NGEO

JavaScript toolkit combining OpenLayers 3 and AngularJS,  
aimed at creating rich web-mapping applications

<https://github.com/camptocamp/nggeo>

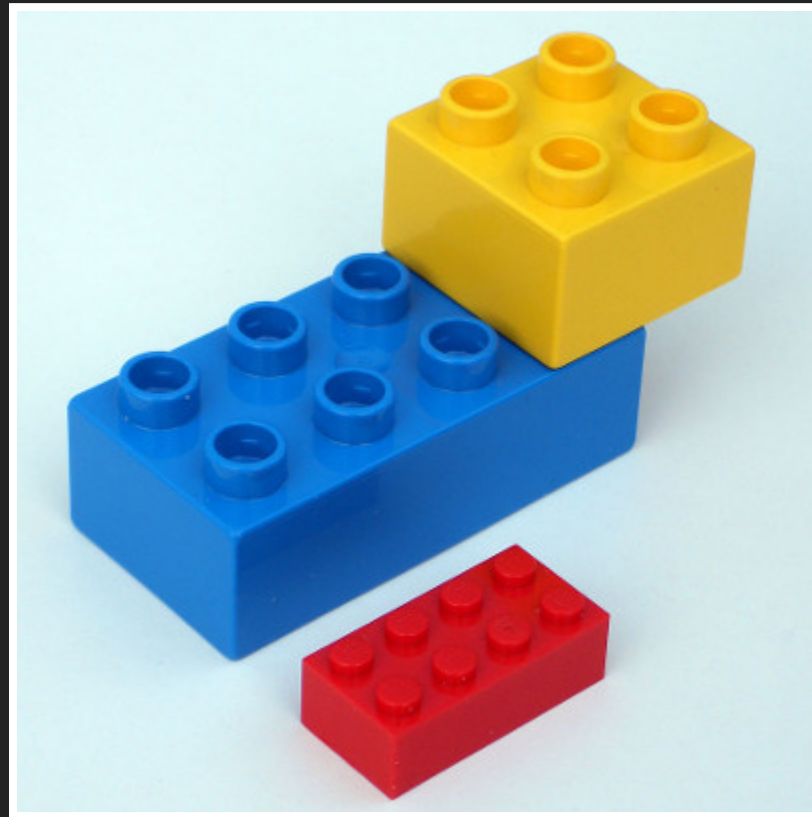
# FEATURES

Targeted features include:

- Layer tree
- Measure tools
- Elevation profile
- ...

# DESIGN PRINCIPLE

Provide *atomic* components that can be combined in *many* different ways



# DECLARATIVE VERSUS IMPERATIVE

[angular-openlayers-directive](#) is a quite popular project

Basically, this is how you use it:

```
<openlayers width="100%" height="400px"></openlayers>
```

→Purely declaratively...

# THE NGE0 APPROACH

HTML code:

```
<div ngeo-map="ctrl.map"></div>
```

JavaScript code:

```
app.MainController = function() {  
  this.map = new ol.Map({  
    layers: [  
      new ol.layer.Tile({source: new ol.source.OSM()})  
    ],  
    // ...  
  });  
};
```



# THE NGE0 APPROACH

→We're not creating a declarative layer/API above  
OpenLayers 3!

# EXAMPLES

Here are a few (pretty crude) examples:

Background layer

Interaction button group

Layer order

Layer tree

Measure

Search

# MORE EXAMPLES

Check out <http://camptocamp.github.io/ngeo/master/> for more examples...

# NGEO IN REAL APPLICATIONS

## Luxembourg beta site

The screenshot displays the Luxembourg beta site interface. At the top, a navigation bar includes a 'Preview' label, the text 'GOVERNEMENT DU GRAND-DUCHÉ DE LUXEMBOURG', a search bar with the placeholder 'Search addresses, parcels, layers ...', and icons for a globe and a user profile. The main interface is divided into a left sidebar and a central map area. The sidebar, titled 'LAYERS', contains a 'Background layer' dropdown set to 'Road map', a 'MY LAYERS (7)' section with a 'CATALOG' tab, and a list of layers: 'Spaces to be saved', 'Cadastral sections (names)', 'Districts', 'Municipalities', 'Upper Sure Lake', 'Beauty, sports and wellness', and 'Municipalities (names)'. A '+ Add layers' button is at the bottom of the sidebar. The central map area shows a map of Lintgen with a green rectangular overlay. A print dialog box is open in the foreground, featuring a title input field, a 'With legend' checkbox, a 'A4 portrait' dropdown, a '1 : 1,500' scale dropdown, and a 'PDF' button. The bottom of the interface has a navigation bar with icons for 'LAYERS', 'MY MAPS', 'INFOS', 'DRAW', 'MEASURE', 'PRINT', and 'SHARE'. On the right side of the map, there are icons for a compass, a location pin, and a full-screen button. The footer contains links for 'ABOUT US', 'HELP', 'CONTACT', 'T & C', and 'ACT'.

# USE ANGULAR IN A GOOD WAY!

ngeo defines a good way to use Angular

→ [guidelines](#) and examples are provided

# CLOSURE COMPILER

We use [Closure Compiler](#), and recommend using it in ngeo applications

```
/**
 * @param {string|function(!angular.JQLite=, !angular.Attributes=)}
 *       ngeoScaleselectorTemplateUrl Template URL for the directive.
 * @return {angular.Directive} Directive Definition Object.
 * @ngInject
 */
ngeo.scaleselectorDirective =
  function(ngeoScaleselectorTemplateUrl) {
  return {
    restrict: 'A',
    scope: true,
    controller: 'NgeoScaleselectorController',
    templateUrl: ngeoScaleselectorTemplateUrl
  };
};
```

# NUMBERS

	Size (gzip'ed)
Full OpenLayers 3 build	143 KB
Full ngeo build	156 KB
Luxembourg App + OpenLayers 3 + ngeo	98 KB

# ROADMAP

- More components
- Higher-level components (maybe, if we find good cases)
- Documentation



# THANKS!

<http://erilem.net/talks/foss4g2015/ngeo.html>  
ngeo-discuss mailing list