

ORDINA

Verbeter je website met
OpenLayers en de
Closure Compiler

Rob van Loon



A dynamic photograph showing the lower bodies of several runners in motion on a paved road. The runner in the center foreground is wearing red shorts and white running shoes. Other runners are visible in the background, slightly blurred to emphasize movement.

Goede gebruikerservaring: snelheid

- Voorbeelden optimalisatie
- Closure Compiler inzetten
- OpenLayers + jouw applicatie met Closure Compiler
- <https://github.com/borrob/ClosureExamplesOpenLayers>

sneller is beter: minimaliseer javascript

Functienamen en variabelen: 1 letter

```
function startPresentatie(naamPresentatie, presentator) {  
    ...  
}  
  
function a(a,b){...}
```



Optimaliseer: minder code

```
if (somethingTrueOrFalse) {  
    console.log("TRUE");  
} else {  
    console.log("FALSE");  
}
```

```
return 2 + 4;
```



```
return 6;
```



```
somethingTrueOrFalse?console.log("TRUE"):console.log("FALSE");
```

sneller is beter: minimaliseer javascript

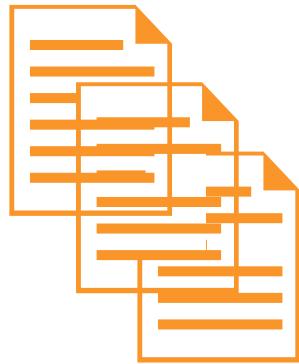
De-granuleer: verminder functieaanroepen

```
function init() {  
    start();  
    setParams();  
  
    ...  
}
```

```
function a() {  
    <<code uit start()>>  
    <<code uit setParams()>>  
  
    ...  
}
```

sneller is beter: minimaliseer javascript

Alles in 1 file: verminder aantal requests



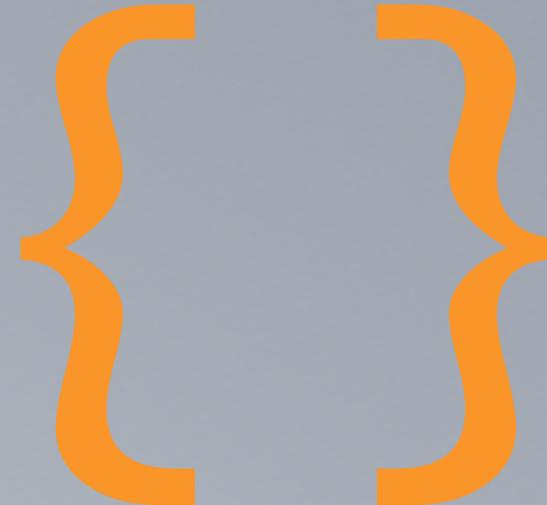


html
Javascript
OpenLayers



Ontwikkelproces

- boylerplate / template
- OpenLayers downloaden
- eigen code schrijven
- test & debug
- "compile" productie-versie
- deploy



Closure compiler

<https://developers.google.com/closure/compiler/>



Search

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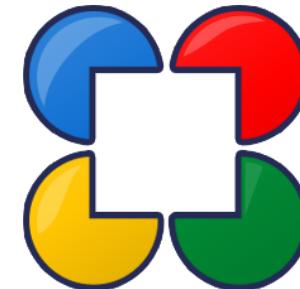
Calendar

Google+

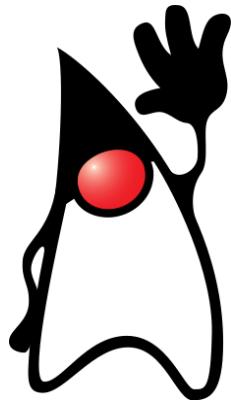
Photos

JavaScript in → Javascript uit

Optimaliseert
Minimaliseert
Controleert



Hoe gebruik je de compiler



JAVA standalone program

Webinterface (of API)



Closure compiler: web interface

<http://closure-compiler.appspot.com/home>

The screenshot shows the Closure Compiler web interface at closure-compiler.appspot.com/home. The left panel contains input fields for a URL (set to <http://www.example.com/bigfile.js>), optimization level (Simple selected), and other options like pretty print. The right panel displays the results of the compilation, including the original and compiled code sizes, a success message, and a link to the generated file ([default.js](#)). The compiled code is shown in a text area.

Add a URL: <http://www.example.com/bigfile.js>

Optimization: Whitespace only Simple Advanced
[Which optimization is right for my code?](#)

Formatting: Pretty print Print input delimiter

```
// ==ClosureCompiler==  
// @compilation_level SIMPLE_OPTIMIZATIONS  
// @output_file_name default.js  
// ==/ClosureCompiler==  
  
// ADD YOUR CODE HERE  
function hello(name) {  
  alert('Hello, ' + name);  
}  
hello('New user');
```

Original Size: 102 bytes gzipped (92 bytes uncompressed)
Compiled Size: 68 bytes gzipped (55 bytes uncompressed)
Saved 33.33% off the gzipped size (40.22% without gzip)
The code may also be accessed at [default.js](#).

Compilation was a success!

Compiled Code Warnings Errors POST data

```
function hello(a){alert("Hello, "+a)}hello("New user");
```

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Whitespace, simple, advanced

- {**WHITESPACE ONLY**} Commentaar, Spatie, regeleinden en te veel aan ; en ()
- {**SIMPLE**} Als whitespace + hernoem lokale variabelen + optimalisatie binnen functies en expressies.
- {**ADVANCED**} Simple + agresief hernoemen + dead code

Voorbeeld: hello world

```
function hello(name) {  
    console.log('Hello ' + name);  
}
```

```
hello('ROB');
```

```
console.log("Hello ROB");
```

Voorbeeld

```
function getOutput() {
    var outString = document.getElementById('helloNameInput').value;
    return outString;
}

function setString(str) {
    document.getElementById('output').innerHTML = str;
}

function doAction() {
    var inputString = getOutput();
    setString(inputString);
}

function init() {
    document.getElementById('laatMaarZienButton').addEventListener('click', doAction);
}

window.onload = function() {
    init();
}
```

```
function a()  
{document.getElementById("output").innerHTML=document.getElementById("helloNameInput").value}  
window.onload=function()  
{document.getElementById("laatMaarZienButton").addEventListener("click",a)};
```



419 B



257 B

Namespaces

```
goog.provide('App.Main');

goog.require('App.Control');

window.onload = function() {
    App.Control.init();
};
```

OpenLayers



```
goog.provide('App.Map');

goog.require('ol.Map');
goog.require('ol.View');
goog.require('ol.layer.Tile');
goog.require('ol.source.OSM');
```

```
App.Map.init = function() {
  App.Map.map = new ol.Map({
    target: 'map',
    layers: [new ol.layer.Tile({source: new ol.source.OSM()})],
    view: new ol.View({center: [620000, 6732600], zoom: 7})
  });
}
```

Voordelen

kleinere bestanden



geoptimaliseerd



geen dead code

GJSLINT

- Verouderd
- Stijl javascript

Compiler

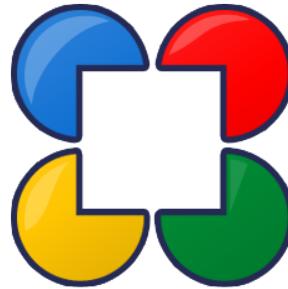
- Veel soorten waarschuwingen
- Let niet op stijl javascript

```
Line 8, E:0220: No docs found for member 'App.Map.init'  
Line 9, E:0005: Illegal tab in whitespace before "App.Map.map"  
Line 10, E:0005: Illegal tab in whitespace before "target"
```

Types en docstrings

```
/**  
 * Say hello to person a couple of times  
 *  
 * @param {string} name The name of the person  
 * @param {number} times The number of times to say hello  
 * @return {string} the hello message  
 */  
var sayHello = function(name, times) {  
    var outString = "Hello " + name + "\n";  
    return outString.repeat(times);  
};
```

Samenvatting



Optimaliseer



Verbeter code



Minimaliseer



Controleer

Contact



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<https://github.com/borrob/ClosureExamplesOpenLayers>

GEO-ICT

**Wilt u weten wat wij voor u op gebied van GEO-ICT kunnen betekenen?
Wij nemen de mogelijkheden graag met u door.**



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