



CSS met LESS waar begin ik?

een presentatie voor de Joomla!dagen
21 april 2013 Woudschoten - Zeist





CSS met LESS waar begin ik?

een presentatie voor de Joomla!dagen
21 april 2013 Woudschoten - Zeist

presentatie kun je downloaden via
<http://slideshare.net/hans2103>





Wat is LESS?

- LESS is een programmeertaal
- LESS compileer je naar CSS
- LESS is een CSS preprocessor
- LESS syntax is gemaakt vanuit CSS
- LESS is dynamisch CSS

@hans2103





Waarom LESS gebruiken

- LESS bespaart tijd
- LESS vermindert fouten
- LESS vermindert herhalingen
- LESS is handig

@hans2103





Hopsakee... aan de slag!

veel code

@hans2103





vooraf compileren

```
<link rel="stylesheet/css" href="style.css" />
```

on the fly compileren

```
<link rel="stylesheet/less" href="style.less" />  
<script src="less.js"></script>
```





style.less

```
// LESS
```

```
// import normalize for CSS resets
```

```
@import "normalize";
```

```
// same as @import "normalize.less";
```

```
// import mixins
```

```
@import "mixins";
```

```
// base for mobile devices
```

```
@import "base";
```

```
//tables and small laptops
```

```
@media only screen and (min-width: 768px) {
```

```
  @import "768up";
```

```
}
```

```
//desktop
```

```
@media only screen and (min-width: 1030px) {
```

```
  @import "1030up";
```

```
}
```

@hans2103





<http://incident57.com/codekit>



Windows GUI for LESS.js

<http://winless.org>

```
#apt-get install node-less
```

@hans2103





clean structure with nesting

// LESS

```
# header {  
  #nav {  
    ul {  
      li {  
        a {}  
      }  
    }  
  }  
}
```

/* Compiled CSS */

```
#header {}  
#header #nav {}  
#header #nav ul {}  
#header #nav ul li {}  
#header #nav ul li a {}
```

lijkt warempel op de HTML structuur





clean structure with nesting

// LESS

```
a {  
  &:hover {}  
  &:active {}  
  &:visited {}  
}
```

/* Compiled CSS */

```
a {}  
a:hover {}  
a:active {}  
a:visited {}
```





variables

standaard waarden om te hergebruiken in de stylesheet.

```
// LESS
```

```
@color: #4D926F;
@serif: serif;
@sans-serif: sans-serif;

#header {
  color: @color;
  font-family: @serif;
}
h2 {
  color: @color;
  font-family: @sans-serif;
}
```

```
/* Compiled CSS */
```

```
#header {
  color: #4D926F;
  font-family: serif;
}
h2 {
  color: #4D926F;
  font-family: sans-serif;
}
```





mixins

Gebruik de waarden van een gehele class in een andere class.

```
// LESS
```

```
.bordered {  
  border-top: dotted 1px black;  
  border-bottom: solid 2px black;  
}
```

```
#menu a {  
  color: #111;  
  .bordered;  
}
```

```
.post a {  
  color: red;  
  .bordered;  
}
```

```
/* Compiled CSS */
```

```
.bordered {  
  border-top: dotted 1px black;  
  border-bottom: solid 2px black;  
}
```

```
#menu a {  
  color: #111;  
  border-top: dotted 1px black;  
  border-bottom: solid 2px black;  
}
```

```
.post a {  
  color: red;  
  border-top: dotted 1px black;  
  border-bottom: solid 2px black;  
}
```





parametric mixins

parameters verwerkt in mixins

```
// LESS
```

```
.rounded-corners (@radius: 5px) {  
  -webkit-border-radius: @radius;  
  -moz-border-radius: @radius;  
  -ms-border-radius: @radius;  
  -o-border-radius: @radius;  
  border-radius: @radius;  
}
```

```
#header {  
  .rounded-corners;  
}
```

```
#footer {  
  .rounded-corners(10px);  
}
```

```
/* Compiled CSS */
```

```
#header {  
  -webkit-border-radius: 5px;  
  -moz-border-radius: 5px;  
  -ms-border-radius: 5px;  
  -o-border-radius: 5px;  
  border-radius: 5px;  
}
```

```
#footer {  
  -webkit-border-radius: 10px;  
  -moz-border-radius: 10px;  
  -ms-border-radius: 10px;  
  -o-border-radius: 10px;  
  border-radius: 10px;  
}
```





operations (simple mathematical operators: + - * /)

// LESS

```
.font-size(@font-size: 16){  
  @remValue: (@font-size / 10);  
  font-size: @font-size * 1px;  
  font-size: ~"@{remValue}rem";  
}
```

```
html {  
  font-size: 62.5%;  
}  
body {  
  .font-size();  
}  
h1 {  
  .font-size(24);  
}
```

/* Compiled CSS */

```
html {  
  font-size: 62.5%;  
}  
body {  
  font-size: 16px;  
  font-size: 1.6rem;  
}  
h1 {  
  font-size: 24px;  
  font-size: 2.4rem;  
}
```

http://snook.ca/archives/html_and_css/font-size-with-rem

@hans2103





operations (simple mathematical operators: + - * /)

```
// LESS
```

```
@the-border: 2px;  
@base-color: #111;
```

```
#header {  
  color: (@base-color * 3);  
  border-top: (@the-border / 2);  
  border-right: (@the-border + 2);  
  border-bottom: (@the-border - 1);  
  border-left: @the-border;  
}  
#footer {  
  color: (@base-color + #003300);  
}
```

```
/* Compiled CSS */
```

```
#header {  
  color: #333;  
  border-top: 1px;  
  border-right: 4px;  
  border-bottom: 1px;  
  border-left: 2px;  
}  
#footer {  
  color: #114411;  
}
```

@hans2103





functions (map one-to-one with Javascript code)

// LESS

```
escape(@string);           // URL encodes a string
e(@string);                // escape string content
%(@string, values...);    // formats a string

unit(@dimension, [@unit: ""]); // remove or change the unit of a dimension
color(@string);           // parses a string to a color
data-uri([mimetype,] url); // * inlines a resource and falls back to url()

ceil(@number);            // rounds up to an integer
floor(@number);           // rounds down to an integer
percentage(@number);      // converts to a %, e.g. 0.5 -> 50%
round(number, [places: 0]); // rounds a number to a number of places
sqrt(number);             // * calculates square root of a number
abs(number);              // * absolute value of a number
sin(number);              // * sine function
```

<http://lesscss.org/#reference>

@hans2103





functions - darken & lighten

```
// LESS
```

```
.background_gradient(@base) {  
  background: @base;  
  background: -webkit-gradient(linear, left top, left bottom, from(lighten(@base, 5%)), to(darken(@base, 5%)));  
  background: -moz-linear-gradient(top, lighten(@base, 5%), darken(@base, 5%));  
}  
  
@orange_base: #f78d1d;  
.orange { .background_gradient(@orange_base);  
  &:hover { .background_gradient(darken(@orange_base, 10%)); }  
  &:active { .background_gradient(lighten(@orange_base, 10%)); }  
}  
  
@blue_base: #7db8db;  
.blue { .background_gradient(@blue_base);  
  &:hover { .background_gradient(darken(@blue_base, 10%)); }  
  &:active { .background_gradient(lighten(@blue_base, 10%)); }  
}
```

<http://lesscss.org/#reference>

@hans2103





functions - darken & lighten

```
/* Compiled CSS */
```

```
.orange {  
  background: #f78d1d;  
  background: -webkit-gradient(linear,left top,left bottom,from(#f89936),to(#f28009));  
  background: -moz-linear-gradient(top,#f89936,#f28009);  
}  
.orange:hover {  
  background: #d97308;  
  background: -webkit-gradient(linear,left top,left bottom,from(#f28009),to(#c16607));  
  background: -moz-linear-gradient(top,#f28009,#c16607);  
}  
.orange:active {  
  background: #f9a64e;  
  background: -webkit-gradient(linear,left top,left bottom,from(#fab267),to(#f89936));  
  background: -moz-linear-gradient(top,#fab267,#f89936);  
}
```

<http://lesscss.org/#reference>

@hans2103





functions - escaping

```
// LESS
```

```
.background_gradient(@base) {  
  background-color: @base;  
  background-image: -webkit-gradient(linear, left top, left bottom, from(lighten(@base, 5%  
  background-image: -webkit-linear-gradient(top, lighten(@base, 5%), darken(@base, 5%  
  background-image: -moz-linear-gradient(top, lighten(@base, 5%), darken(@base, 5%));  
  background-image: -o-linear-gradient(top, lighten(@base, 5%), darken(@base, 5%));  
  background-image: linear-gradient(to bottom, lighten(@base, 5%), darken(@base, 5%));  
  filter: e(progid:DXImageTransform.Microsoft.gradient(startColorstr=lighten(@base, 5%  
}  
@orange_base: #f78d1d;  
.orange { .background_gradient(@orange_base);  
  &:hover { .background_gradient(darken(@orange_base, 10%)); }  
  &:active { .background_gradient(lighten(@orange_base, 10%)); }  
}  
@blue_base: #7db8db;
```

<http://lesscss.org/#reference>

@hans2103





functions - escaping

```
/* Compiled CSS */
```

```
.orange {  
  background-color: #f78d1d;  
  background-image: -webkit-gradient(linear,left top,left bottom,from(#f89936),to(#f28009);  
  background-image: -webkit-linear-gradient(top,#f89936,#f28009);  
  background-image: -moz-linear-gradient(top,#f89936,#f28009);  
  background-image: -o-linear-gradient(top,#f89936,#f28009);  
  background-image: linear-gradient(to bottom,#f89936,#f28009);  
  filter: progid:DXImageTransform.Microsoft.gradient(startColorstr=#f89936,endColorstr  
}  
.orange:hover {  
  background-color: #f78d1d;  
  background-image: -webkit-gradient(linear,left top,left bottom,from(#f28009),to(#c16607);  
  background-image: -webkit-linear-gradient(top,#f28009,#c16607);  
  background-image: -moz-linear-gradient(top,#f28009,#c16607);  
  background-image: -o-linear-gradient(top,#f28009,#c16607);
```

<http://lesscss.org/#reference>

@hans2103





functions - data-uri

```
// LESS
```

```
data-uri('image/jpeg;base64', '../data/image.jpg');
```

```
/* Compiled CSS */
```

```
url('data:image/jpeg;base64,bm90IGFjdHVhbGx5IGEganBlZyBmaWxlCg==');
```

flinke reductie HTTP-request.
voor- en nadelen beschreven in wiki

[http://en.wikipedia.org/wiki/
Data_URI_scheme#Advantages](http://en.wikipedia.org/wiki/Data_URI_scheme#Advantages)

<http://lesscss.org/#reference>

@hans2103





String interpolation

// LESS

```
@baseUrl: "http://joomladagen.nl/";
```

```
@imageUrl: "images/";
```

```
background-image: url('@{baseUrl}@{imageUrl}logo.png');
```

/* CSS Compilation */

```
background-image: url('http://joomladagen.nl/images/logo.png');
```

<http://lesscss.org/#reference>

@hans2103





scope

// LESS

```
header {
  @color: black;
  background-color: @color;
  nav {
    @color: blue;
    background-color: @color;
    a {
      color: @color;
    }
  }
  h1 {
    color: @color;
  }
}
```

/* Compiled CSS */

```
header {
  background-color: black;
}
header nav {
  background-color: blue;
}
header nav a {
  color: blue;
}
header h1 {
  color: black;
}
```

@hans2103





combinator

Gebruik de waarden van een gehele class in een andere class.

```
// LESS
```

```
.bordered, .rounded {  
  &.float {  
    float: left;  
  }  
  .top {  
    margin: 5px;  
  }  
  & + & {  
    color: yellow;  
  }  
}
```

```
/* Compiled CSS */
```

```
.bordered.float,  
.rounded.float {  
  float: left;  
}  
.bordered .top,  
.rounded .top {  
  margin: 5px;  
}  
.bordered + .bordered,  
.rounded + .rounded {  
  color: yellow;  
}
```





lessphp « Back to home

Lessify

`lessify` will attempt to compress and organize your CSS code into LESS code. This is an experimental tool, please report any bugs on the [lessphp issue tracker](#).

As of now, the only CSS to LESS minimization technique used is to match common prefixes for CSS blocks. [Click here](#) for a sample.

CSS goes here:

```
nav li a {
  border-right: 1px solid #fff;
  box-sizing: border-box;
}
nav li:last-child a {
  border-right: 0;
}
nav a:hover, nav a:active {
  background-color: #fff;
}
```

<http://leafo.net/lessphp/lessify/>

Clear Go

LESS comes here:

```
nav {
  height: 40px;
  width: 100%;
  background: #000000;
  border-bottom: 2px solid #ffffff;
  a:hover, a:active {
    background-color: #ffffff;
  }
}
ul {
  padding: 0;
```



@hans2103



lessphp < Back to home



165



245



Online Compiler

Generate Snippet URL

```
1 nav {
2   height:40px;
3   width:100%;
4   background:#000000;
5   border-bottom:2px solid #ffffff;
6   a:hover, a:active {
7     background-color:#ffffff;
8   }
9   ul {
10    padding:0;
11    margin:0 auto;
12  }
13  li {
14    display:inline;
15    float:left;
16  }
```

<http://leafo.net/lessphp/editor.html>

Compile

Clear

lessphp v0.3.9

Output:

```
nav {
  height: 40px;
  width: 100%;
  background: #000000;
  border-bottom: 2px solid #ffffff;
}
nav a:hover,
```

@hans2103





- 1. Choose components >
- 2. Select jQuery plugins >
- 3. Customize variables >**
- 4. Download >

3. Customize variables

Reset to defaults

Scaffolding

@bodyBackground

@white

@textColor

@grayDark

Links

@linkColor

#08c

@linkColorHover

darken(@linkColor, 15%)

Colors

@blue

#049cdb

@green

Typography

@sansFontFamily

'Helvetica Neue', Helvetica, /

@serifFontFamily

Georgia, 'Times New Roman', T:

@monoFontFamily

Menlo, Monaco, 'Courier New',

@baseFontSize

14px

@baseFontFamily

@sansFontFamily

@baseLineHeight

20px

@altFontFamily

@serifFontFamily

Form states & alerts

@warningText

#c09853

@warningBackground

#fcf8e3

@errorText

#b94a48

@errorBackground

#f2dede

@successText

#468847

@successBackground

#dff0d8

@infoText

@hans2103





Joomla!® 3.0

Mobile R3ADY / US3R Friendly



@hans2103



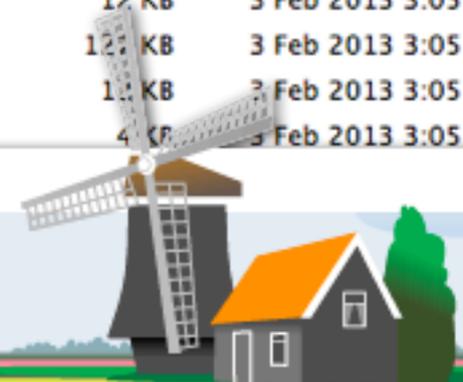


Joomla!dagen Nederland

hans2103 Downloads Joomla_3.0.3-Stable-Full_Package (1)

Name	Size	Date
▶ layouts	--	3 Feb 2013 3:05 PM
▶ libraries	--	3 Feb 2013 3:05 PM
└ LICENSE.txt	20 KB	3 Feb 2013 3:05 PM
▶ logs	--	3 Feb 2013 3:05 PM
▶ media	--	3 Feb 2013 3:05 PM
▶ modules	--	3 Feb 2013 3:05 PM
└ phpunit.xml.dist	4 KB	3 Feb 2013 3:05 PM
▶ plugins	--	3 Feb 2013 3:05 PM
└ README.txt	8 KB	3 Feb 2013 3:05 PM
└ robots.txt	4 KB	3 Feb 2013 3:05 PM
▼ templates	--	19/4/13 2:48 AM
▶ beez3	--	19/4/13 2:48 AM
└ index.html	4 KB	3 Feb 2013 3:05 PM
▼ protostar	--	19/4/13 2:49 AM
└ component.php	4 KB	3 Feb 2013 3:05 PM
▶ css	--	3 Feb 2013 3:05 PM
└ error.php	8 KB	3 Feb 2013 3:05 PM
└ favicon.ico	4 KB	3 Feb 2013 3:05 PM
▶ html	--	3 Feb 2013 3:05 PM
▶ images	--	3 Feb 2013 3:05 PM
▶ img	--	3 Feb 2013 3:05 PM
└ index.php	8 KB	3 Feb 2013 3:05 PM
▶ js	--	3 Feb 2013 3:05 PM
▶ language	--	3 Feb 2013 3:05 PM
▼ less	--	3 Feb 2013 3:05 PM
└ icomoon.less	8 KB	3 Feb 2013 3:05 PM
└ index.html	4 KB	3 Feb 2013 3:05 PM
└ template.less	12 KB	3 Feb 2013 3:05 PM
└ variables.less	12 KB	3 Feb 2013 3:05 PM
└ template_preview.png	12 KB	3 Feb 2013 3:05 PM
└ template_thumbnail.png	1 KB	3 Feb 2013 3:05 PM
└ templateDetails.xml	4 KB	3 Feb 2013 3:05 PM

@hans2103

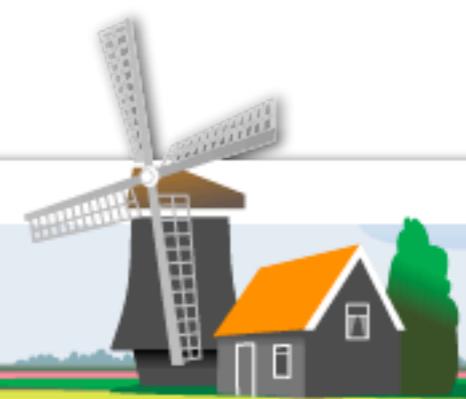




Joomla!dagen Nederland

```
hans2103 Downloads Joomla_3.0.3-Stable-Full_Package (1) templates protostar less template.less Preview +≡
1 // CSS Reset
2 @import "../../../media/jui/less/reset.less";
3
4 // Core variables and mixins
5 @import "variables.less"; // Custom for this template
6 @import "../../../media/jui/less/mixins.less";
7
8 // Grid system and page structure
9 @import "../../../media/jui/less/scaffolding.less";
10 @import "../../../media/jui/less/grid.less";
11 @import "../../../media/jui/less/layouts.less";
12
13 // Base CSS
14 @import "../../../media/jui/less/type.less";
15 @import "../../../media/jui/less/code.less";
16 @import "../../../media/jui/less/forms.less";
17 @import "../../../media/jui/less/tables.less";
18
19 // Components: common
20 // @import "../../../media/jui/less/sprites.less";
21 @import "../../../media/jui/less/dropdowns.less";
22 @import "../../../media/jui/less/wells.less";
23 @import "../../../media/jui/less/component-animations.less";
24 @import "../../../media/jui/less/close.less";
25
26 // Components: Buttons & Alerts
27 @import "../../../media/jui/less/buttons.less";
28 @import "../../../media/jui/less/button-groups.less";
29 @import "../../../media/jui/less/alerts.less"; // Note: alerts share common CSS with buttons and thus have styles in buttons.less
30
31 // Components: Nav
32 @import "../../../media/jui/less/navs.less";
33 @import "../../../media/jui/less/navbar.less";
34 @import "../../../media/jui/less/breadcrumbs.less";
35 @import "../../../media/jui/less/pagination.less";
36 @import "../../../media/jui/less/pager.less";
37
38 // Components: Popovers
39 @import "../../../media/jui/less/modals.less";
40 @import "../../../media/jui/less/tooltip.less";
41 @import "../../../media/jui/less/popovers.less";
42
43 // Components: Misc
44 @import "../../../media/jui/less/thumbnails.less";
45 @import "../../../media/jui/less/labels-badges.less";
46 @import "../../../media/jui/less/progress-bars.less";
47 @import "../../../media/jui/less/accordion.less";
```

@hans2103

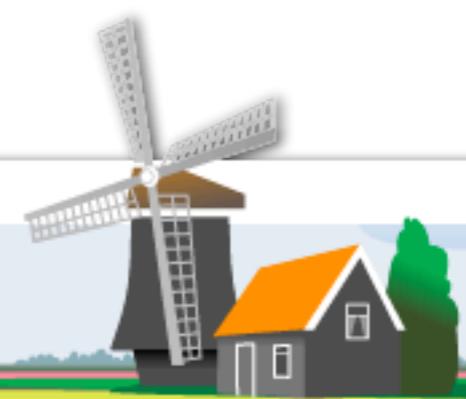




Joomla!dagen Nederland

```
hans2103 Downloads Joomla_3.0.3-Stable-Full_Package (1) templates protostar less template.less Preview +
72
73 // RESPONSIVE NAVBAR
74 // -----
75
76 // From 979px and below, show a button to toggle navbar contents
77 @import "../../../media/jui/less/responsive-navbar.less";
78
79 // Extended for JUI
80 @import "../../../media/jui/less/bootstrap-extended.less"; // Has to be last to override when necessary
81
82 // Icon Font
83 @import "icomoon.less";
84
85 /* Site Body Styles */
86 body.site{
87     border-top:3px solid #0088cc;
88     padding: 20px;
89     background-color: #f4f6f7;
90 }
91 body.site.fluid{
92     background-color: #ffffff;
93 }
94 .thumbnail {
95     margin-bottom:9px;
96 }
97 .accordion-group {
98     background:#fff;
99 }
100 .select[multiple], select[size] {
101     height:28px;
102 }
103 /* Site Title (if no logo) */
104 .site-title {
105     font-size: 40px;
106     line-height: 48px;
107     font-weight: bold;
108 }
109 .brand {
110     color: darken(@linkColor, 20%);
111     .transition(color .5s linear);
112 }
113 .brand:hover {
114     color: @linkColor;
115     text-decoration: none;
116 }
117 /* Header */
118 .header{
119     margin-bottom: 10px;
```

@hans2103





Hopsakee... aan de slag!

gewoon beginnen

@hans2103





veel plezier

@hans2103



thank you for your time and have fun

<http://about.me/hans2103>



hans2103

<http://slideshare.net/hans2103>

<http://www.flickr.com/photos/trasimac/1217071176>