

# Sass & Compass

薛良斌 a.k.a. hlb / 布丁

about me

# 自我介紹

from Taiwan

台灣

# 驚：人人會翻牆



People love to ask questions

提問多 ♥

job title: the father of two children

兩個孩子的  
爸爸

another job title: Happy Web Designer

快樂

網頁設計師

has translated some articles in my early life

# 閒著沒事 隨便翻譯

css zen garden, a list apart, PIE, W3C Glossary...



**runs a design/development company.  
My company's name, not a sushi shop**

**和多**

**Handlino**

# 和多

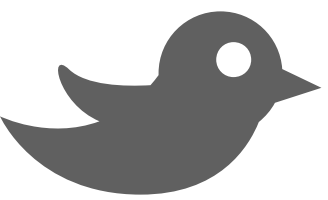
**Rails/Perl/UI/App/Service/Consulting/...**

**6 people: 1 UI Designer, 1 Visual Designer, 3 F2E,  
4 Programmers, 6 Managers**

**和多**



GFW hates me

h1b@t  r

**iamh1b.com** (on tumblr)

# Sass & Compass

better way to write/maintain CSS

write CSS to make a living

靠CSS  
討生活

want IE6 support? budget + 30%

**其實IE6  
惠我良多**

**vendor specific  
property**



keep coding

拜

painful

苦

productivity

效率

**workman must first sharpen this tools  
if he is to do his work well**

**利器善事**







# Sass

CSS Extension

<http://sass-lang.com>



(style with attitude)

```
$ gem install haml
$ mv style.css style.scss
$ sass --watch style.scss:style.css
```

[About](#)[Tutorial](#)[Documentation](#)[Blog](#)[Try Online](#)

**Latest Release:** Classy Cassidy (**3.0.25**)

[What's New?](#)

**Sass makes CSS fun again.** Sass is an extension of CSS3, adding [nested rules](#), [variables](#), [mixins](#), [selector inheritance](#), and [more](#). It's translated to well-formatted, standard CSS using the command line tool or a web-framework plugin.

Sass has two syntaxes. The new main syntax ([as of Sass 3](#)) is known as "SCSS" (for "Sassy CSS"), and is a superset of CSS3's syntax. This means that every valid CSS3 stylesheet is valid SCSS as well. SCSS files use the extension `.scss`.

The second, older syntax is known as [the indented syntax](#) (or just "Sass"). Inspired by [Haml](#)'s terseness, it's intended for people who prefer conciseness over similarity to CSS. Instead of brackets and semicolons, it uses the indentation of lines to specify blocks. Although no longer the primary syntax, the indented syntax will continue to be supported. Files in the indented syntax use the extension `.sass`.



[Download](#)

◆ [Editor Support](#)

◆ [Development](#)

## Variables

Use the same color all over the place? Need to do some math with height and width and text size? Sass supports variables as well as basic math operations and [many useful functions](#).

```
.scss  .sass
$blue: #3bbfce;
$margin: 16px;

.content-navigation {
  border-color: $blue;
```

```
/* CSS */

.content-navigation {
  border-color: #3bbfce;
  color: #2b9eab;
```

## Nesting

Sass avoids repetition by nesting selectors within one another. The same thing works with properties.

```
.scss  .sass
table.hl {
  margin: 2em 0;
  td.in {
    text-align: right;
  }
```

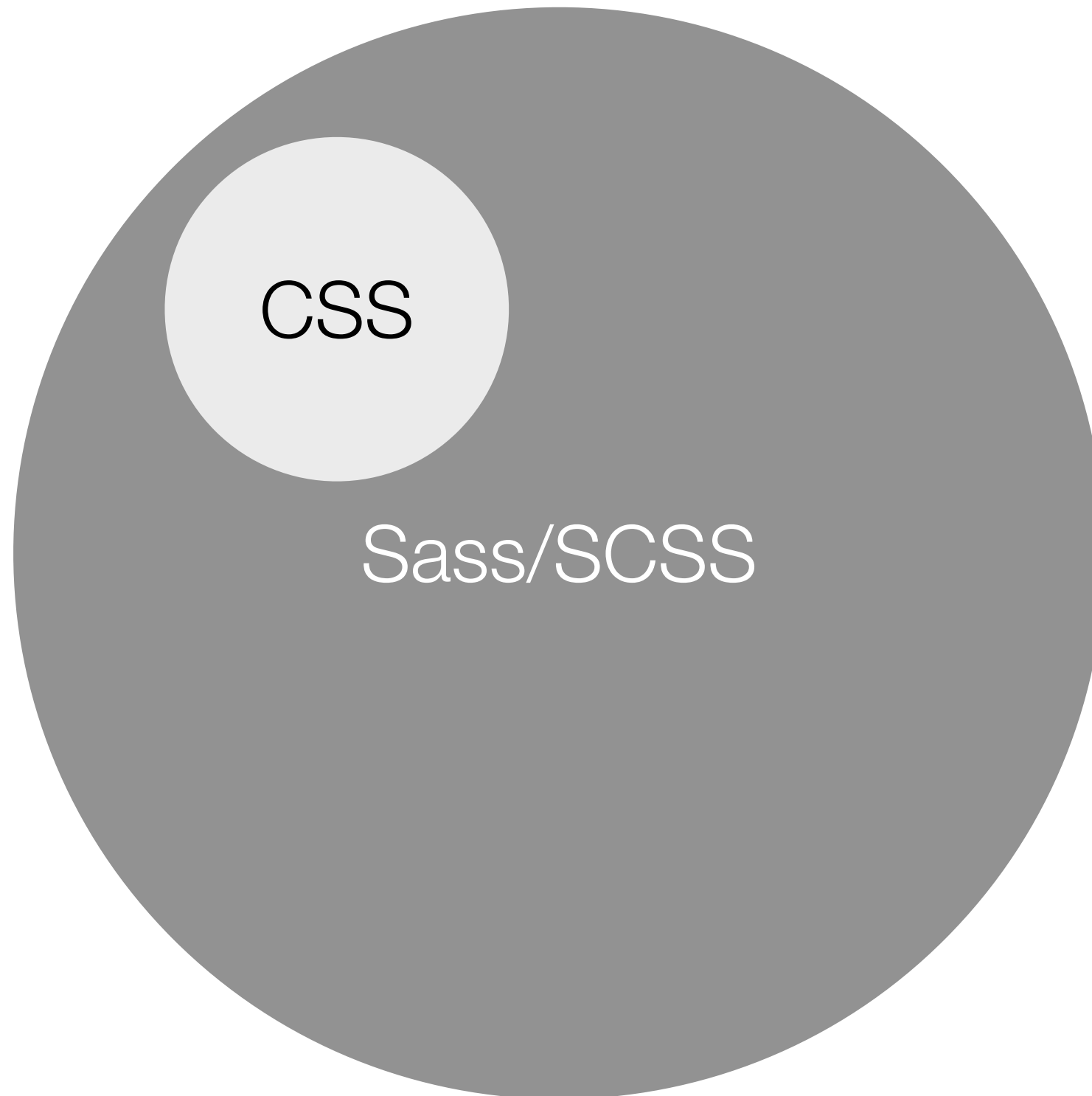
```
/* CSS */

table.hl {
  margin: 2em 0;
}
```

3.1.alpha



# Superset



# 兩種語法

**Sass/SCSS**

# SCSS

跟 CSS 長得一模一樣

```
$blue: #3bbfce;
```

```
$margin: 16px;
```

```
.content-navigation {  
  border-color: $blue;  
  color:  
    darken($blue, 9%);  
}
```

```
.border {  
  padding: $margin / 2;  
  margin: $margin / 2;  
  border-color: $blue;  
}
```

# Sass

舊語法  
更愉快的 **indented syntax**  
對設計師來說很難學 :(

```
$blue: #3bbfce
```

```
$margin: 16px
```

```
.content-navigation  
  border-color: $blue  
  color:  
    darken($blue, 9%)
```

```
.border  
  padding: $margin / 2  
  margin: $margin / 2  
  border-color: $blue
```

# **DRY**

**Don't Repeat Yourself**

**Variables** 變數

**Nesting** 巢狀

**Mixins** 混合

**Selector Inheritance**

選擇符繼承

# Variables 變數

# Variables 變數

```
$blue: #3bbfce;
```

```
$margin: 16px;
```



# Nesting 巢狀

# Nesting 巢狀

```
#sidebar {  
  border: 1px solid #000;  
  a {  
    font-size: 1.2em;  
  }  
}
```

# Nesting 巢狀

```
#sidebar {  
    border: 1px solid #000;  
}  
#sidebar a {  
    font-size: 1.2em;  
}
```

# Nesting 巢狀

```
#sidebar {  
  border: 1px solid #000;  
  a {  
    font-size: 1.2em;  
    text-decoration: none;  
    &:hover {  
      text-decoration: underline;  
    }  
  }  
}
```

&: parent reference

# Nesting 巢狀

```
#sidebar {  
    border: 1px solid #000;  
}  
#sidebar a {  
    font-size: 1.2em;  
    text-decoration: none;  
}  
#sidebar a:hover {  
    text-decoration: underline;  
}
```

# Nesting 巢狀

```
#sidebar {  
  border: 1px solid #000;  
  a {  
    font-size: 1.2em;  
    text-decoration: none;  
    .ie6 & {  
      zoom: 1; // IE MUST DIE  
    }  
  }  
}
```

# Nesting 巢狀

```
#sidebar {  
    border: 1px solid #000;  
}  
#sidebar a {  
    font-size: 1.2em;  
    text-decoration: none;  
}  
.ie6 #sidebar a {  
    zoom: 1;  
}
```

# Nesting 巢狀

```
body {  
    background: url(...), url(...), url(...);  
  
    .no-multiplebgs & {  
        background: url(...);  
    }  
}
```

modernizr <http://www.modernizr.com/>



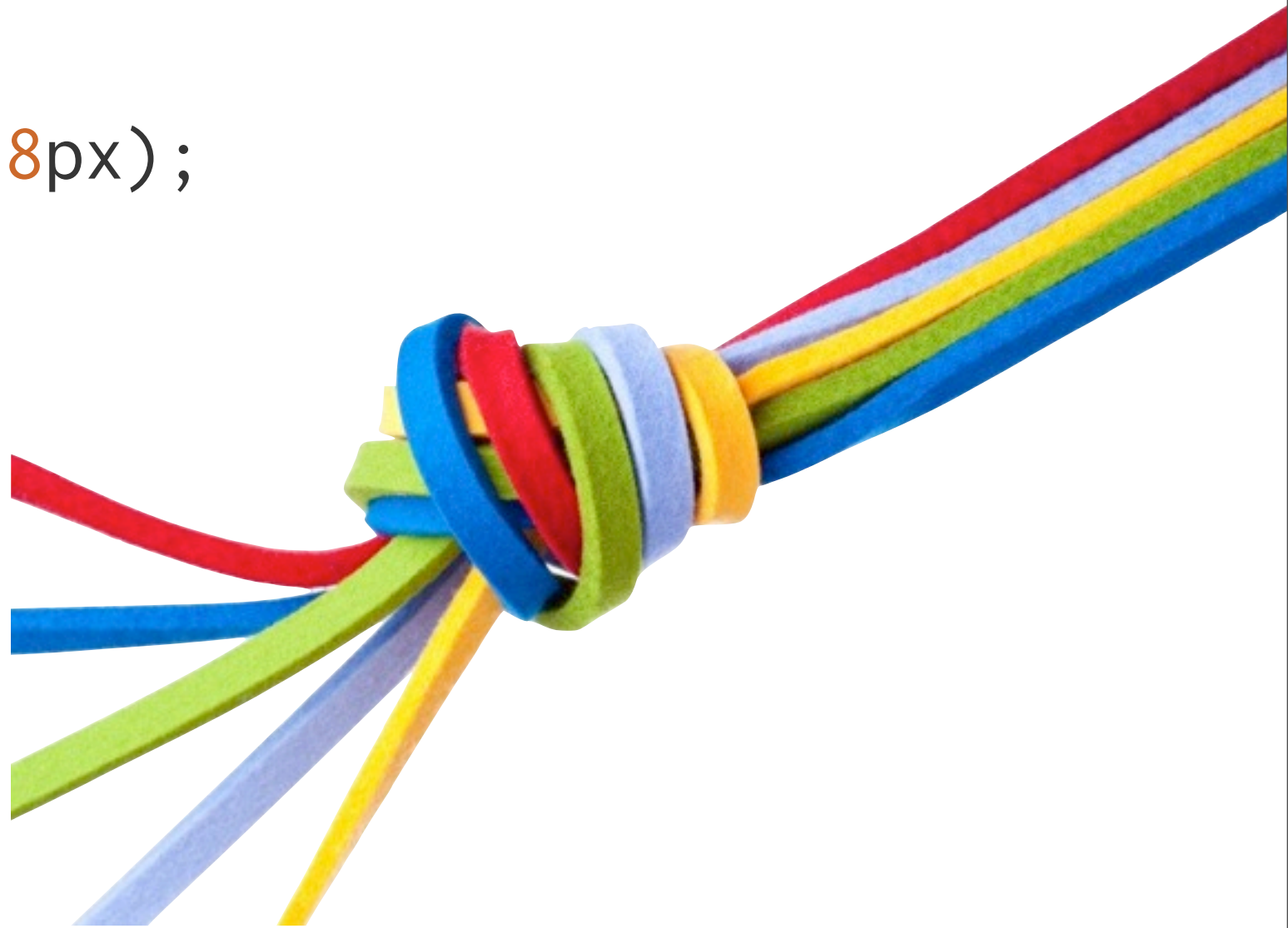
# Mixins 混合

# Mixins 混合

```
@mixin rounded($radius) {  
    -moz-border-radius: $radius;  
    -webkit-border-radius: $radius;  
    -o-border-radius: $radius;  
    border-radius: $radius;  
}
```

# Mixins 混合

```
.box {  
  @include rounded(8px);  
}
```



# Mixins 混合

```
.box {  
    -moz-border-radius: 8px;  
    -webkit-border-radius: 8px;  
    -o-border-radius: 8px;  
    border-radius: 8px;  
}
```

**very important**

# **Inheritance 繼承**

```
.feedback {  
  border: 3px solid black;  
  .icon { background-image: url(/images/  
feedback.png); }  
}  
  
.warning {  
  @extend .feedback;  
  border-color: red;  
  background-color: lighten(red, 30%);  
  .icon { background-image: url(/images/  
warning.png); }  
}
```

```
.feedback, .warning {  
  border: 3px solid black; }  
  .feedback .icon, .warning .icon {  
    background-image: url(/images/  
feedback.png); }  
  
.warning {  
  border-color: red;  
  background-color: #ff9999; }  
  .warning .icon {  
    background-image: url(/images/warning.png); }
```

```
.error {  
  @extend .feedback;  
  border-color: red;  
  background-color: lighten(red, 30%);  
  .icon { background-image: url(/images/  
error.png); }  
}
```



```
.feedback, .warning, .error {  
    border: 3px solid black; }  
    .feedback .icon, .warning .icon, .error .icon {  
        background-image: url(/images/  
feedback.png); }
```

```
.error {  
    border-color: red;  
    background-color: #ff9999; }  
    .error .icon {  
        background-image: url(/images/error.png); }
```

more!

# @import

```
@import "reset.scss";  
@import "fonts.css";
```

# math 數學

height: 50px / \$ratio;

width: 20em \* \$ratio;

font-size: 1in + 2.2cm + 100mm + 3pc;

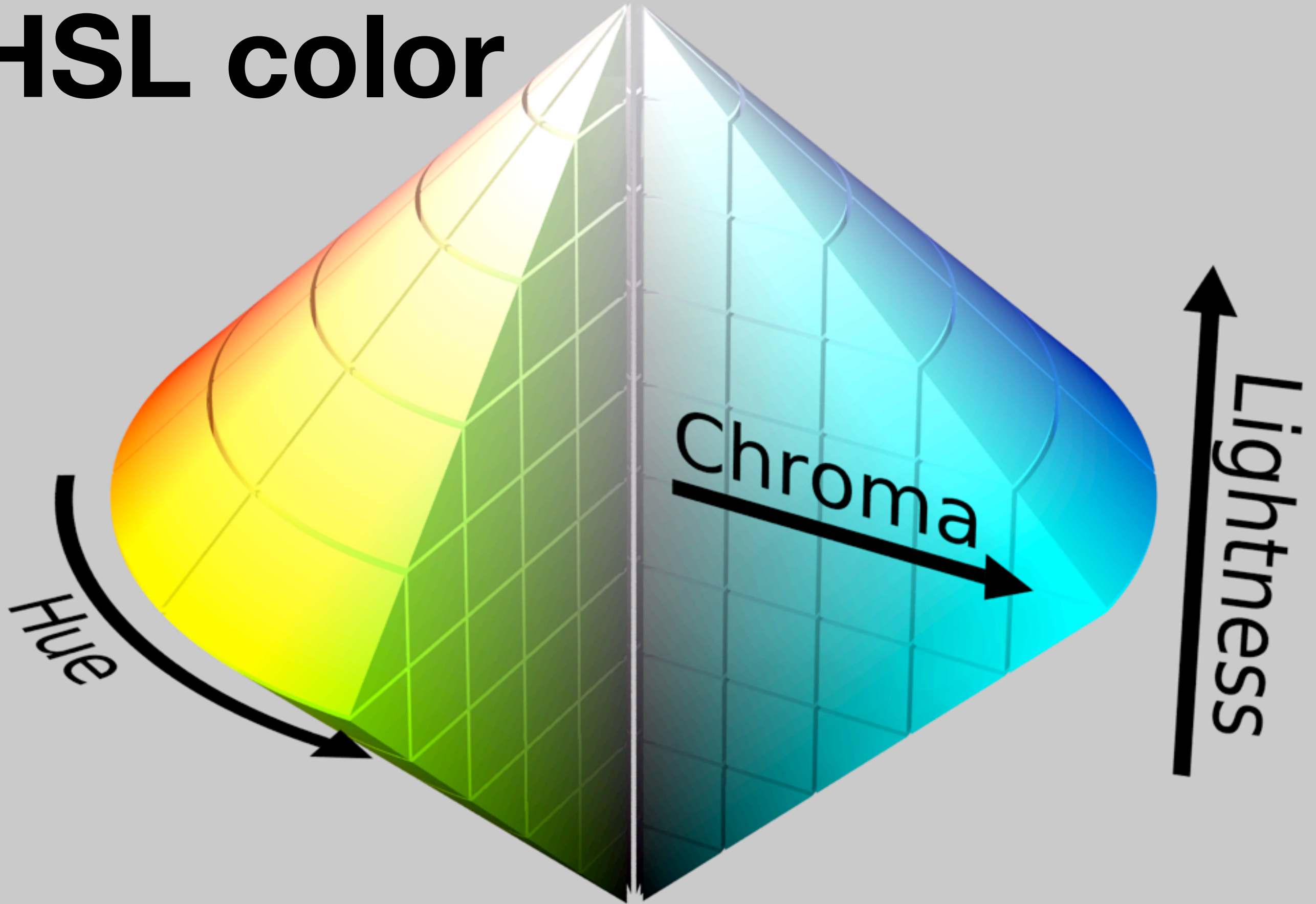
# math 數學

```
.container {  
    width: $num-columns * $grid-unit + ($num-  
columns - 1) * $grid-gutter  
}
```

# color functions

hsl, hsla, darken, saturate, complement, grayscale,  
mix, ...

# HSL color



**@media (latest)**

responsive web design



# @media

```
@media screen {  
  .sidebar {  
    width: 300px;  
    float: left;  
    @media (max-width: 480px) {  
      width: auto;  
      float: none;  
    }  
  }  
}
```

# @media

```
@media screen {  
  .sidebar {  
    width: 300px;  
    float: left; }  
}  
  
@media screen and (max-width: 480px) {  
  .sidebar {  
    width: auto;  
    float: none; }  
}
```

**@if, @else**

**@for, @while, @each**

**@function**

# **move** 無痛轉移

**sass-convert -F css -T scss** your.css new.scss

# **move** 無痛轉移

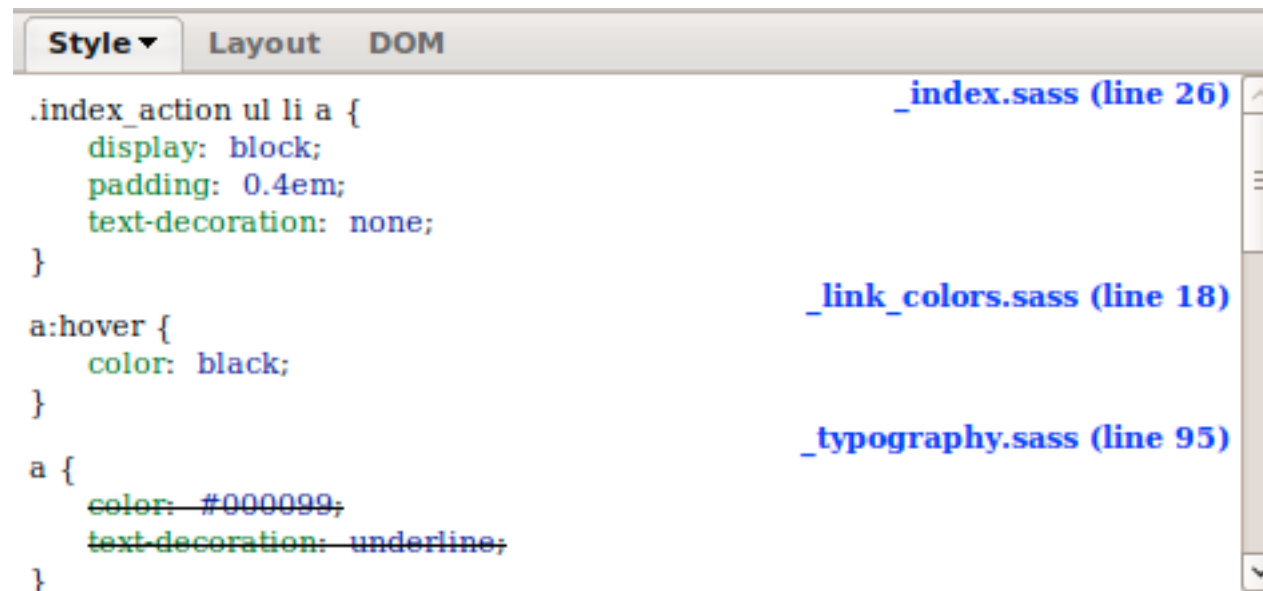
**sass-convert -F css -T scss -R your\_css\_folder**

# **watch**

```
sass --watch sass_folder:css_folder
```

# Output Style 輸出樣式

nested, expanded, compact, compressed



# debug\_info

FireSass

<https://addons.mozilla.org/en-US/firefox/addon/firesass-for-firebug/>

Firefox 4: <https://addons.mozilla.org/en-US/firefox/addon/firesass-for-firebug/versions/>



# and more!

<https://github.com/nex3/sass/tree/master/doc-src/>

**Rails 3.1 uses SCSS by default**

# **Rails 3.1内建SCSS**

– 2011/4/13

**How to Install? Google it.**

# 安裝說明

這份簡報不存在這種東西  
Google It



# Sass/Less Comparison

<https://gist.github.com/674726>



# Compass

stylesheet authoring framework

<http://compass-style.org/> <http://beta.compass-style.org/>



**Compass** is an open-source *CSS Authoring Framework*.

### ♥ Why designers love Compass.

1. Experience cleaner markup without presentational classes.
2. It's chock full of the web's best reusable patterns.
3. Developing a personal framework is simple.
4. Compass mixins make CSS3 easy.
5. Download and create extensions with ease.

### ✓ Compass uses Sass.

[Sass](#) is an extension of CSS3 which adds nested rules, variables, mixins, selector inheritance, and more. Sass generates well formatted CSS and makes your stylesheets easier to organize and maintain.

Brilliant people use Compass, including these *wildly talented* folks:



powered by **Sass**

# 0.11.beta.7

just released in 2011/4/16



Blueprint, 960gs, HTML5 Boilerplate,  
YUI reset/base/grids, ...  
code snippets, frameworks & best practices

# 框架的框架

meta framework

**Helper** 輔助函式  
**Extension** 擴充套件  
**Project Context** 專案環境

# Helpers

# clearfix

```
@import "compass";  
  
section {  
    @include clearfix;  
}  
  
.evil {  
    @include pie-clearfix;  
}
```

```
section {  
    overflow: hidden;  
    *zoom: 1; }  
  
.evil {  
    *zoom: 1; }  
    .evil:after {  
        content: "\0020";  
        display: block;  
        height: 0;  
        clear: both;  
        overflow: hidden;  
        visibility: hidden; }
```

# CSS3

```
@import "compass";  
  
.linear {  
    @include background(linear-gradient(top left,  
#333, #0c0));  
}
```

```
.linear {  
    background: -webkit-gradient(linear, 0% 0%,  
100% 100%, color-stop(0%, #333333), color-stop  
(100%, #00cc00));  
    background: -moz-linear-gradient(top left,  
#333333, #00cc00);  
    background: linear-gradient(top left,  
#333333, #00cc00); }
```



# CSS3

```
@import "compass";
```

```
.box {  
    @include border-radius(8px);  
    @include box-shadow(  
        rgba(#ccc, 0.5) 3px 3px 5px  
    );  
}
```

```
.box {  
  -moz-border-radius: 8px;  
  -webkit-border-radius: 8px;  
  -o-border-radius: 8px;  
  -ms-border-radius: 8px;  
  -khtml-border-radius: 8px;  
  border-radius: 8px;  
  -moz-box-shadow: rgba(204, 204, 204, 0.5) 3px  
3px 5px;  
  -webkit-box-shadow: rgba(204, 204, 204, 0.5)  
3px 3px 5px;  
  -o-box-shadow: rgba(204, 204, 204, 0.5) 3px 3px  
5px;  
  box-shadow: rgba(204, 204, 204, 0.5) 3px 3px  
5px; }  
}
```

# support

```
@import "compass";
```

```
$experimental-support-for-microsoft: false;
```

```
$experimental-support-for-opera: false;
```

```
$experimental-support-for-khtml: false;
```

```
.box {
```

```
    @include border-radius(8px);
```

```
    @include box-shadow(
```

```
        rgba(#ccc, 0.5) 3px 3px 5px
```

```
);
```

```
}
```

```
.box {  
  -moz-border-radius: 8px;  
  -webkit-border-radius: 8px;  
  -o-border-radius: 8px;  
  -ms-border-radius: 8px;  
  -khtml-border-radius: 8px;  
  border-radius: 8px;  
  -moz-box-shadow: rgba(204, 204, 204, 0.5) 3px  
3px 5px;  
  -webkit-box-shadow: rgba(204, 204, 204, 0.5)  
3px 3px 5px;  
  -o-box-shadow: rgba(204, 204, 204, 0.5) 3px 3px  
5px;  
  box-shadow: rgba(204, 204, 204, 0.5) 3px 3px  
5px; }  
}
```

```
.box {  
  -moz-border-radius: 8px;  
  -webkit-border-radius: 8px;  
  border-radius: 8px;  
  -moz-box-shadow: rgba(204, 204, 204, 0.5) 3px  
3px 5px;  
  -webkit-box-shadow: rgba(204, 204, 204, 0.5)  
3px 3px 5px;  
  box-shadow: rgba(204, 204, 204, 0.5) 3px 3px  
5px; }
```

# and lots more

<http://beta.compass-style.org/reference/compass/>

# **Extensions by Communities**

## **社群提供的擴充套件**

# fancy-buttons





blueprint/960/yui/  
html5boilerplate/oocss/...

search “compass” on GitHub

# personal framework

個人框架

<http://beta.compass-style.org/help/tutorials/extensions/>

# Assets 資源

```
config.rb: images_dir = "images"  
          css_dir = "stylesheets"
```

```
@import "compass";
```

```
.logo { background-image: image-url  
("logo.png"); }  
.add-btn { background-image: image-url("icons/  
add.png"); }  
.delete-btn { background-image: image-url("icons/  
delete.png"); }
```

```
config.rb: http_path = "/"  
          relative_assets = true
```

```
.logo { background-image: url('../images/  
logo.png?1293690225'); }  
.add-btn { background-image: url('../images/  
icons/add.png?1142171296'); }  
.delete-btn { background-image: url('../images/  
icons/delete.png?1142171530'); }
```

```
config.rb: http_path = "/"  
          relative_assets = false
```

```
.logo { background-image: url('/images/logo.png?  
1293690225'); }  
.add-btn { background-image: url('/images/icons/  
add.png?1142171296'); }  
.delete-btn { background-image: url('/images/  
icons/delete.png?1142171530'); }
```

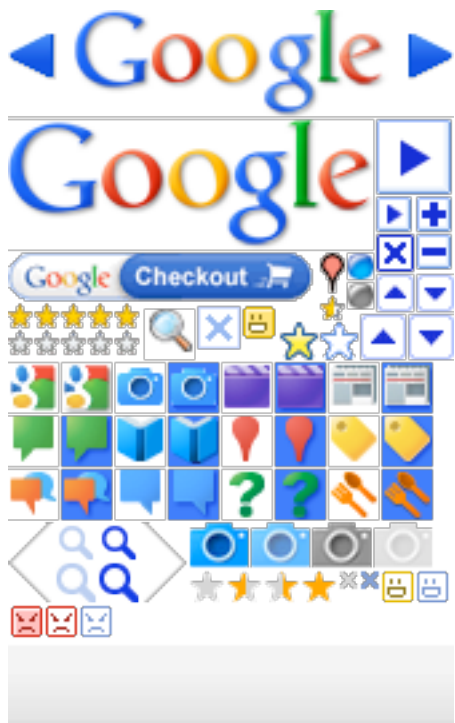
```
config.rb: http_images_path = "http://imag.es/"  
          relative_assets = false
```

```
.logo { background-image: url('http://imag.es/  
logo.png?1293690225'); }  
.add-btn { background-image: url('http://imag.es/  
icons/add.png?1142171296'); }  
.delete-btn { background-image: url('http://  
imag.es/icons/delete.png?1142171530'); }
```

```
.logo { background-image: inline-image  
("logo.png"); }
```



```
.logo { background-image: url('data:image/  
png;base64,Gdj8RfU... '); }
```



# Image Sprites

<http://beta.compass-style.org/help/tutorials/spriting/>

advanced: <http://beta.compass-style.org/reference/compass/helpers/sprites/>

# image sprites

```
@import "compass/utilities/sprites";  
@import "icons/*.png";  
@include all-icons-sprites;
```



# image sprites

```
@import "compass/utilities/sprites";  
@import "icons/*.png";  
@include all-icons-sprites;
```





```
.icons-sprite, .icons-accept, .icons-add, .icons-  
date, .icons-delete, .icons-email, .icons-  
zoom_in, .icons-zoom_out { background: url('/  
images/icions/icons-c3e9a2bc86.png') no-repeat; }
```

```
.icons-accept { background-position: 0 0; }
```

```
.icons-add { background-position: 0 -16px; }
```

```
.icons-date { background-position: 0 -32px; }
```

```
.icons-delete { background-position: 0 -48px; }
```

```
.icons-email { background-position: 0 -64px; }
```

```
.icons-zoom_in { background-position: 0 -80px; }
```

```
.icons-zoom_out { background-position: 0 -96px; }
```

# **create project**

compass create project\_name

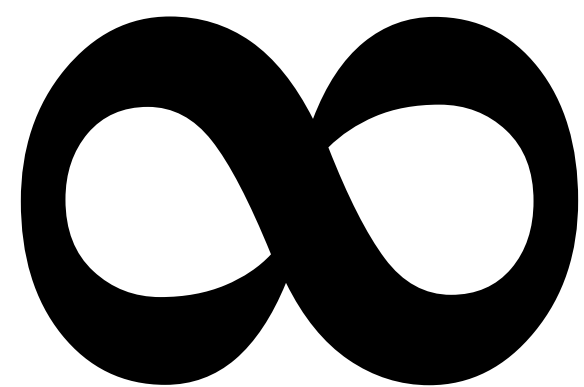
# **watch**

compass watch

# **compile**

compass compile





wonderful

太棒了！

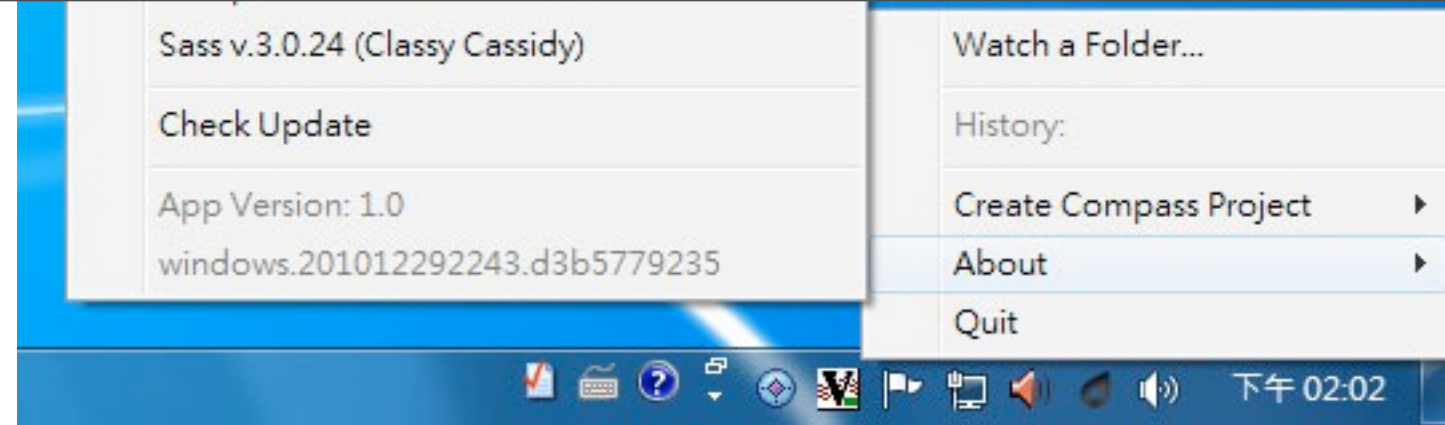
don't want to use CLI

# 拒絕用 命令列

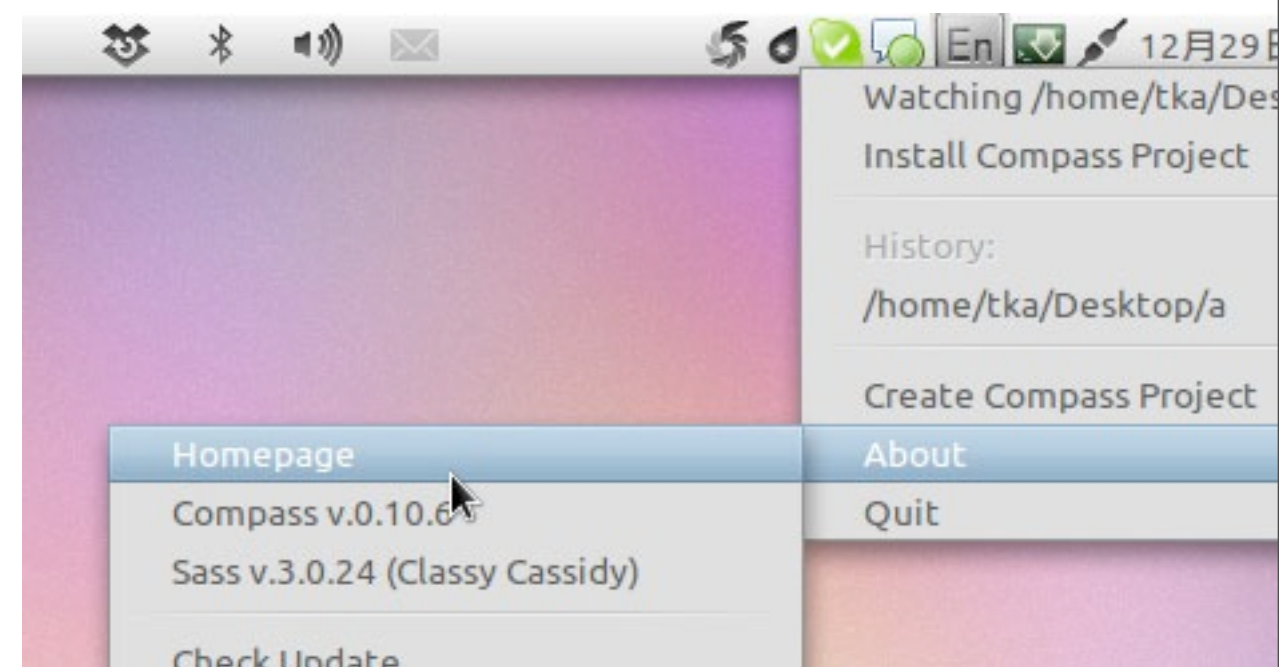
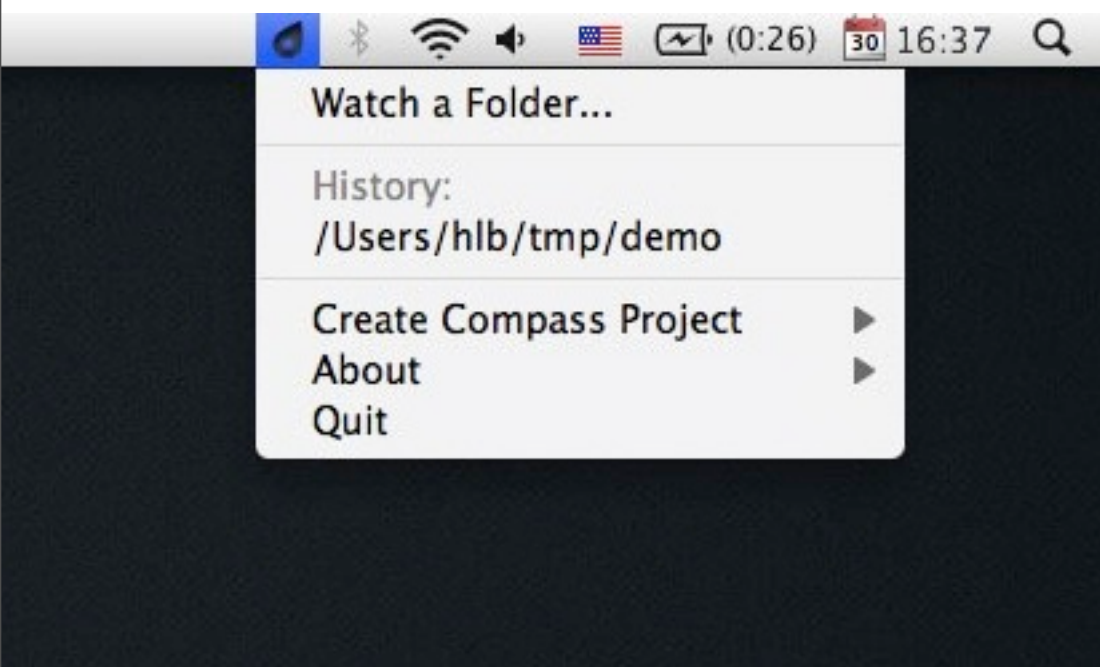




<http://compass.handlino.com>



GUI runs in Mac/Windows/Linux  
by Handlino Inc.





source code is open on GitHub



binary costs \$7  
(30% goes to UMDf)



Let's start using it



一起來用吧

Thank you

敬請指教



**創用 CC**

**姓名標示-非商業性-相同方式分享 2.5 台灣**

這份投影片的文字部分（含備忘稿）以創用 CC 姓名標示-非商業性-相同方式分享 2.5 台灣授權條款授權，請參考完整授權條款。「姓名標示」部分請標註「薛良斌 <http://iamhlb.com>」。