

Mobile Drupal: Drupal 手機版： *Building a mobile theme* 手機的版型開發

Drupal Camp Taipei 2011

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Traditional way to support mobile 手機版傳統開發方式

- Build a separate mobile website
製作手機版網頁
- Detect mobile device
偵測手機裝置
- Redirect to mobile site
轉到手機版網頁

This is really hard! 這真的很難！

Responsive Design

彈性網頁設計

- Single source of HTML
單一原始HTML
- Responds to different viewport sizes
根據瀏覽器大小調整內容
- First described by Ethan Marcotte's article
初見於Ethan Marcotte的文章

“Responsive Web Design”

<http://www.alistapart.com/articles/responsive-web-design>

Building a responsive mobile theme

建立彈性手機版型

- Mobile First 手機優先
- Responsive Design 彈性設計
 - 1. Flexible Grids 彈性大小網格
 - 2. Flexible Images 彈性大小圖片
 - 3. CSS3 Media Queries
CSS3的Media Queries

Mobile device zooming

手機上的內容縮放

- Meta tags can control the scaling/zooming of mobile devices
使用Meta tags控制手機裝置的比例和縮放
- More info: 其他資訊
<http://davidbcalhoun.com/2010/viewport-metatag>

```
<meta name="viewport"  
      content="width=device-width, initial-scale=1">  
<meta name="MobileOptimized" content="width">  
<meta name="HandheldFriendly" content="true">
```

Flexible grids

彈性大小網格

- Use percentages to set grid sizes
使用百分比設定網格大小
$$\begin{aligned}\text{.content} &\{ \text{width: 62.5\%; } \} // 5 \text{ grids} \\ \text{.sidebar} &\{ \text{width: 37.5\%; } \} // 3 \text{ grids}\end{aligned}$$
- Grid will grow/shrink with the screen size
網格根據視窗大小變大/縮小
- Target ÷ context = result
目標 ÷ 背景 = 結果

Flexible images

彈性大小圖片

- Use max-width to constrain images within the flexible grid.
使用 max-width 屬性來限制彈性網格裡的圖片大小
- ```
img, embed, iframe, object, video {
 max-width: 100%;
}
```

# How do we target different screen sizes? 如何指定不同的視窗大小？

- With CSS2 media types we could target different classes of devices:  
使用CSS2的media types來指定不同裝置的class:  
print, screen, handheld, all
- With CSS3 media queries we target device capabilities.  
使用CSS3的media queries指定裝置性能
  - [type] and ([query])
  - all and (max-width: 768px)

# 3 ways to query

## 三種query方式

1. <link rel="stylesheet" href="wide.css" media="screen and (min-width: 992px)">
2. @import url(wide.css) screen and (min-width: 992px);  
theme.info:  
stylesheets[screen][] = file.css  
stylesheets[screen and (min-width: 992px)][[]] = file.css
3. @media screen and (min-width: 992px) {  
.selector { property: value; }  
}

# Breakpoints 中斷點

320px — iPhone in portrait mode  
iPhone的直向模式

480px — iPhone in landscape mode  
iPhone的橫向模式

768px — iPad in portrait mode  
iPad的直向模式

992px — small laptop (minus browser chrome)  
小筆電

1200px — large desktop  
大型桌機

# Dealing with IE 6-8

## IE6~8的處理

- ▶ IE8 and earlier don't support media queries  
IE8之前不支援media queries
  - 1. They do support IE conditional comments  
但有支援IE conditional comments
  - 2. They do support JavaScript polyfills  
但有支援JavaScript polyfills

# Dealing with IE 6-8 IE6~8的處理

Conditional Stylesheets module:  
[http://drupal.org/project/conditional\\_styles](http://drupal.org/project/conditional_styles)

```
<!--[if lte IE 8]>
<link src="/css/layout/desktop.css">
<![endif]-->
```

# Dealing with IE 6-8

# IE6~8的處理

Scott Jehl, Filament Group  
Respond.js

<https://github.com/scottjehl/Respond>

# Responsive Design

## 彈性設計

1. Flexible Grids 彈性大小網格
2. Flexible Images 彈性大小圖片
3. CSS3 Media Queries  
CSS3的Media Queries

**Zen 7.x-5.x-dev**

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# Related Topics 相關主題

- HTML5  
<http://html5doctor.com/how-to-use-html5-in-your-client-work-right-now/>
- CSS3  
<http://www.css3.info>
- Progressive enhancement  
<http://www.alistapart.com/articles/understandingprogressiveenhancement>
- JavaScript polyfills  
<http://remysharp.com/2010/10/08/what-is-a-polyfill>
- Front-end Performance 前端效能  
<http://developer.yahoo.com/performance/rules.html>