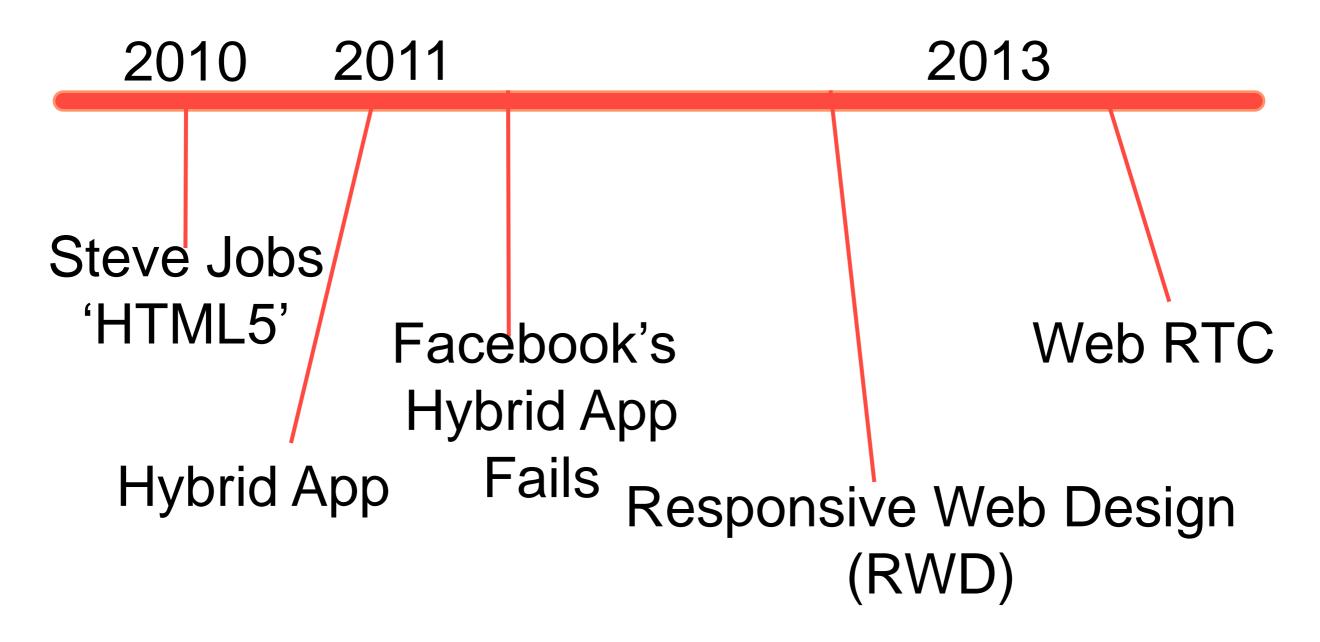
# Mobile & Web Evolution

Kang YoChun (cookie\_00@naver.com)

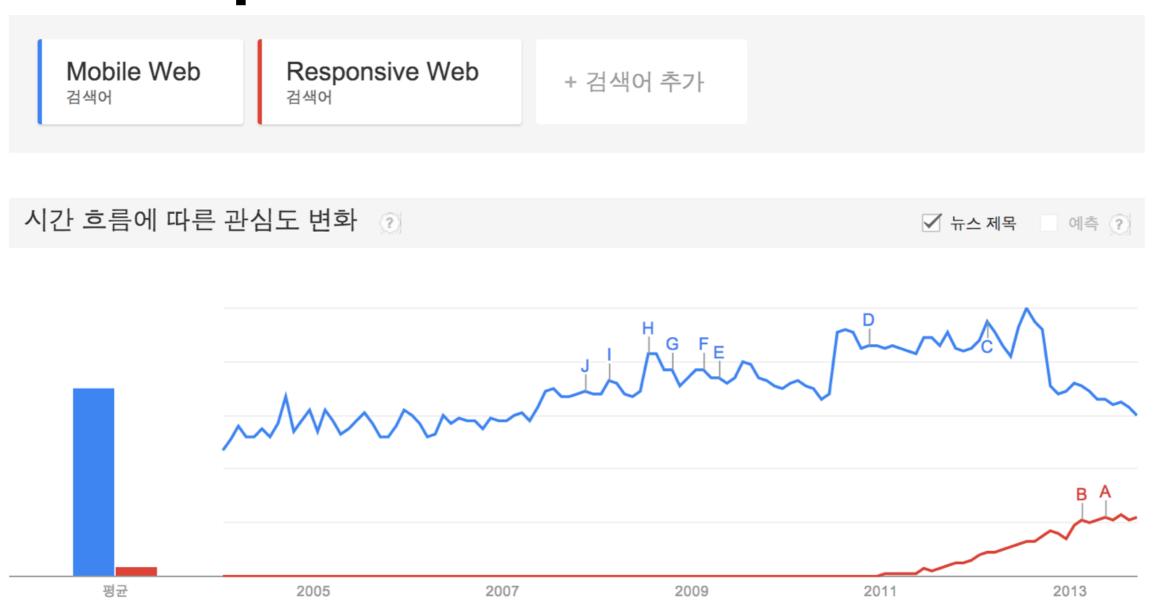
# Subjects

- Responsive Web Design(RWD)
- Twitter's Bootstrap 3.0
- RWD problems and Server Side
- About Web App

### Web Issues timeline



### Responsive Web Birth



Web is Web, App is App! Web is different from App!

### HTML5 can't make money?

- Nothing new at all?
- It's not necessity
- Web is always free!
- HTML5 is not suit for Mobile Age!

# Responsive Web page

- Web is Web! Don't compare with App.
- Mobile Device's Sensors are not used everyday.
- Accessibility



### How to create RWD page

- Media Queries in CSS3
- Fluid Grids
- Web Fonts
- Client Side & Server Side Tech!

### Who interesting RWD?

- CSS is not suit for Developers
- jQuery changes Web World
- HTML5 = HTML + CSS3 + JavaScript
- May be Bootstrap is the easiest way

# Bootstrap

Sleek, intuitive, and powerful mobile first front-end framework for faster and easier web development.

Download Bootstrap

### Bootstrap

jquery mobile adud bootstrap adud + 검색어 추가



퍼가기

### Bootstrap is CSS Framework

- Layouts
- CSS
- Web Components
- JavaScript
- Customize

# Compiled Bootstrap

### **Download Bootstrap**

There are a few easy ways to quickly get started with Bootstrap, each one appealing to a different skill level and use case. Read through to see what suits your particular needs.

### Compiled CSS, JS, and fonts

The fastest way to get Bootstrap is to download the compiled and minified versions of our CSS and JavaScript, along with the included fonts. No documentation or original source files are included.

**Download Bootstrap** 

### Additional downloads

### Download latest source code

Get the original files for all CSS and JavaScript by downloading the latest version directly from GitHub.

### Clone or fork via GitHub

Clone the entire project or fork your own version of Bootstrap to make it your own by visiting us on GitHub.

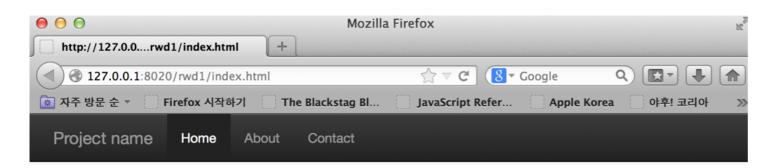
### Install with Bower

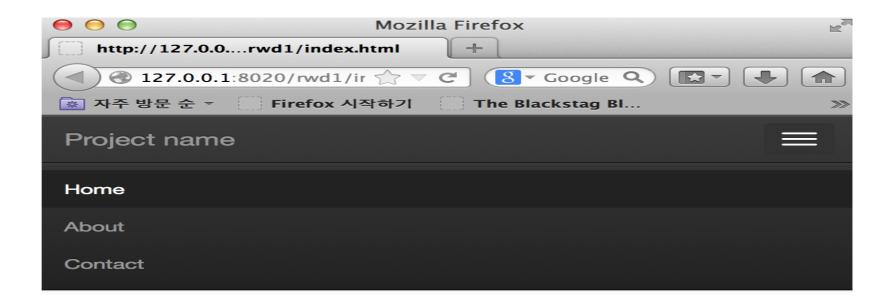
Install and manage the original files for all CSS and JavaScript, along with a local copy of the docs, using Bower.

Bootstrap 은 LESS를 이용해서 컴파일된 CSS파일을 생성할 수 있다.

편하게 사용하려면 dist버전을 이용할 수 있다.

# navigation





# Grid layout

- CSS3 multi column
  - http://www.w3schools.com/css3/css3\_multiple\_columns.asp

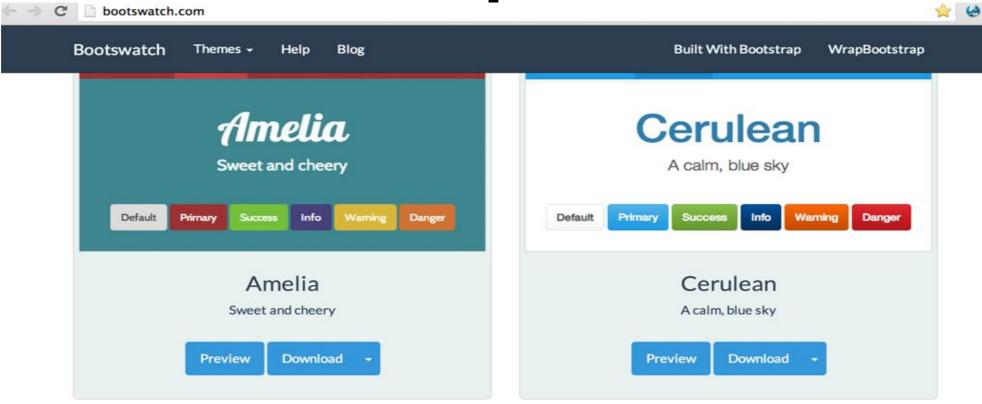
### predefined classes & mixins

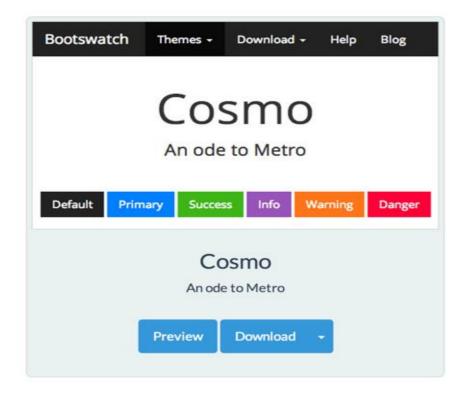
### **Grid options**

See how aspects of the Bootstrap grid system work across multiple devices with a handy table.

	Extra small devices Phones (<768px)	Small devices Tablets (≥768px)	Medium devices Desktops (≥992px)	Large devices Desktops (≥1200px)
Grid behavior	Horizontal at all times	s Collapsed to start, horizontal above breakpoints		
Max container width	None (auto)	750px	970px	1170px
Class prefix	.col-xs-	.col-sm-	.col-md-	.col-lg-
# of columns	12			
Max column width	Auto	60px	78px	95px
Gutter width	30px (15px on each side of a column)			
Nestable	Yes			
Offsets	N/A	Yes		
Column ordering	N/A	Yes		

### Bootstrap themes



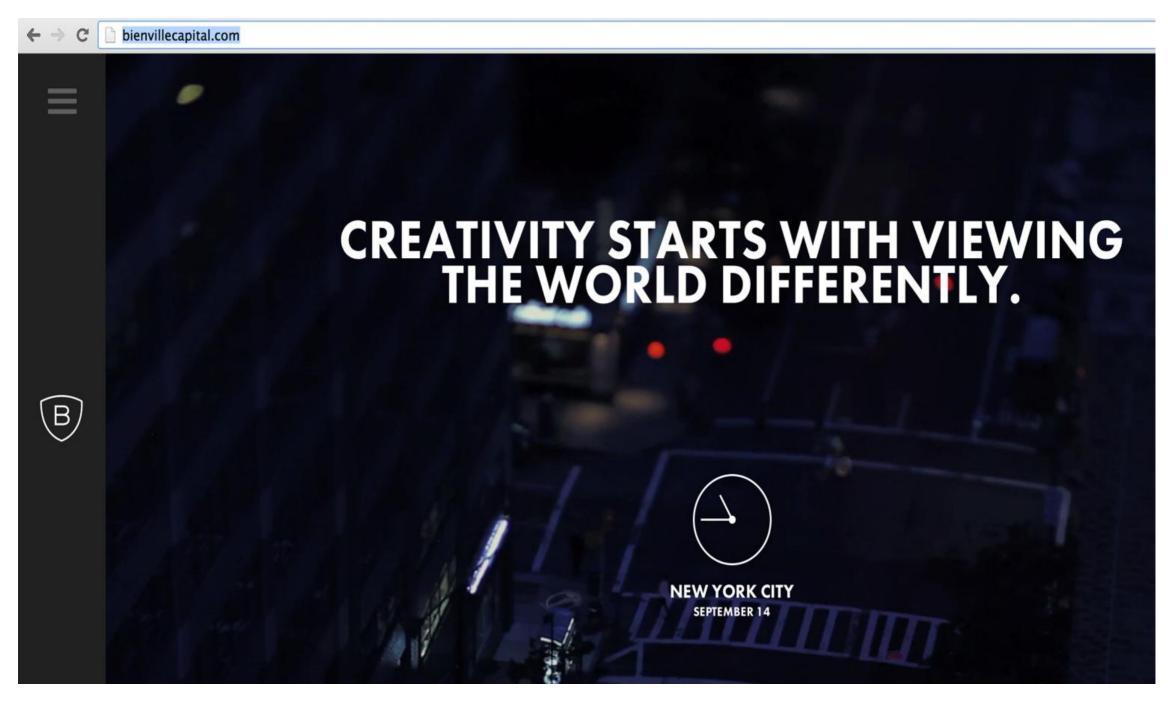




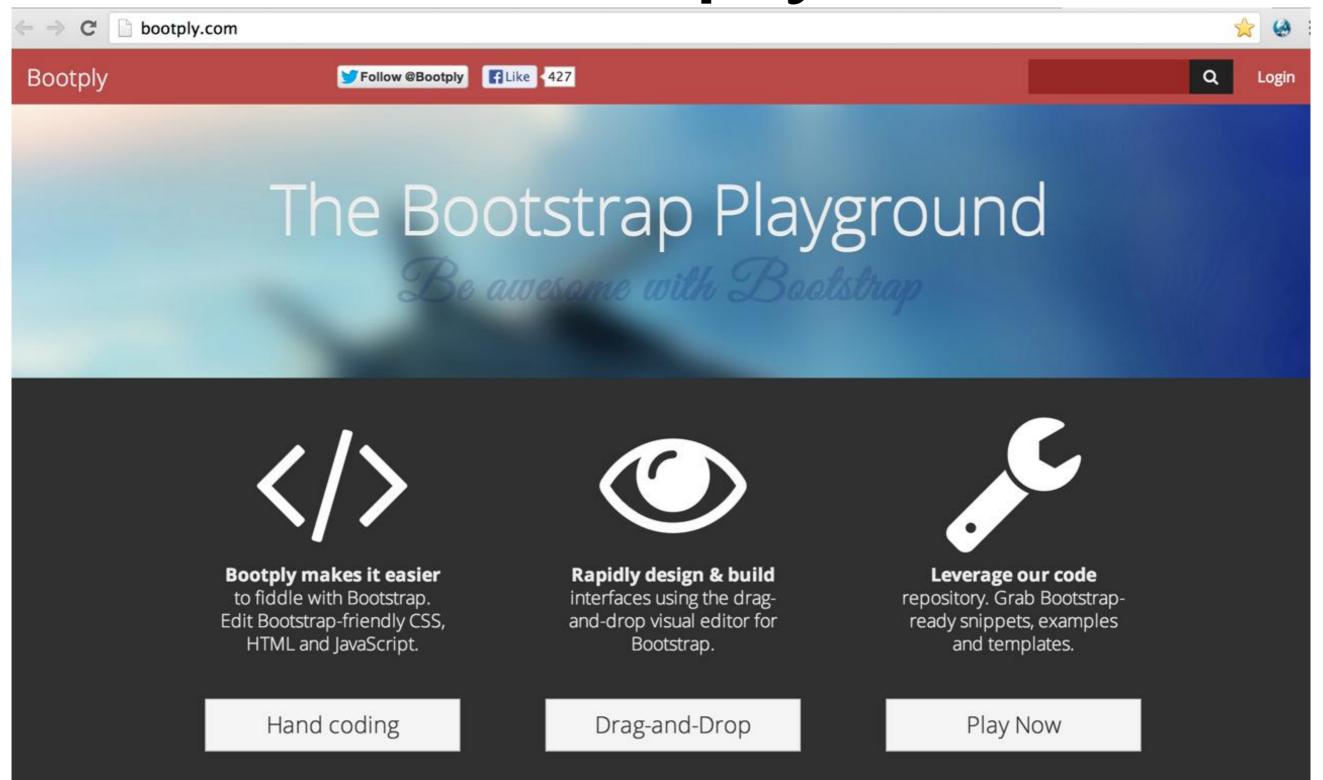
### customizing

- Overriding CSS
- Using custom builder
- Customizing LESS

# Background Media



# Bootply



### RWD is not sliver bullet

### CSS Media Query for Mobile is Fool's Gold

Jason Grigsby | August 3, 2010

Read the follow up article written August 21, 2013

Ethan Marcotte's article Res onsive Web Design has caught the imagination of web developers. Several subset tent articles have touted the CSS media query feature as a way to build mobile-or imized web sites.

### Responsive Web Design is Solid Gold



Jason Grigsby | August 21, 2013

A few years ago I wrote an article entitled CSS Media Query for Mobile is Fool's Gold. It garnered a lot of attention at the time, and I still see people reference it.

I've long wanted to write an update to that article, but never knew quite what to say until now. And because one inflammatory title deserves another, read on for why Responsive Web Design is Solid Gold.

### RWD issues

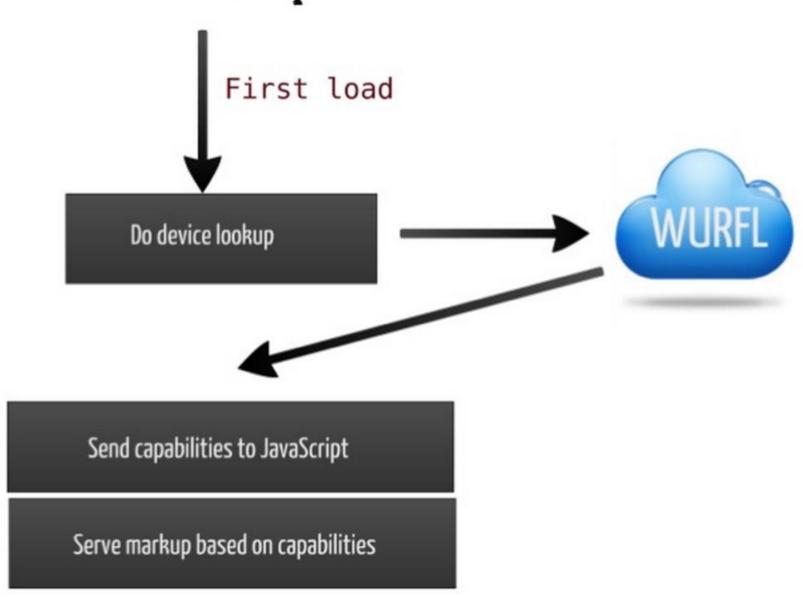
- Full Images
- Browser Resizing
- DOM download
- etc

# Server Side Approach

Browser sniffing

RESS

The RESS aproach:



### Terms

- Single-page application
  - SPA
- Web App

# Web is Application

- HTML5 as a platform
  - Multimedia
  - WebSocket
  - CSS3
- Browser as a platform
  - Ajax
  - Web DB
  - WebGL

# Web App Design

- Data format is JSON
  - Ajax + JSON
- suffix is '.html'
- Real Time Communication (RTC)

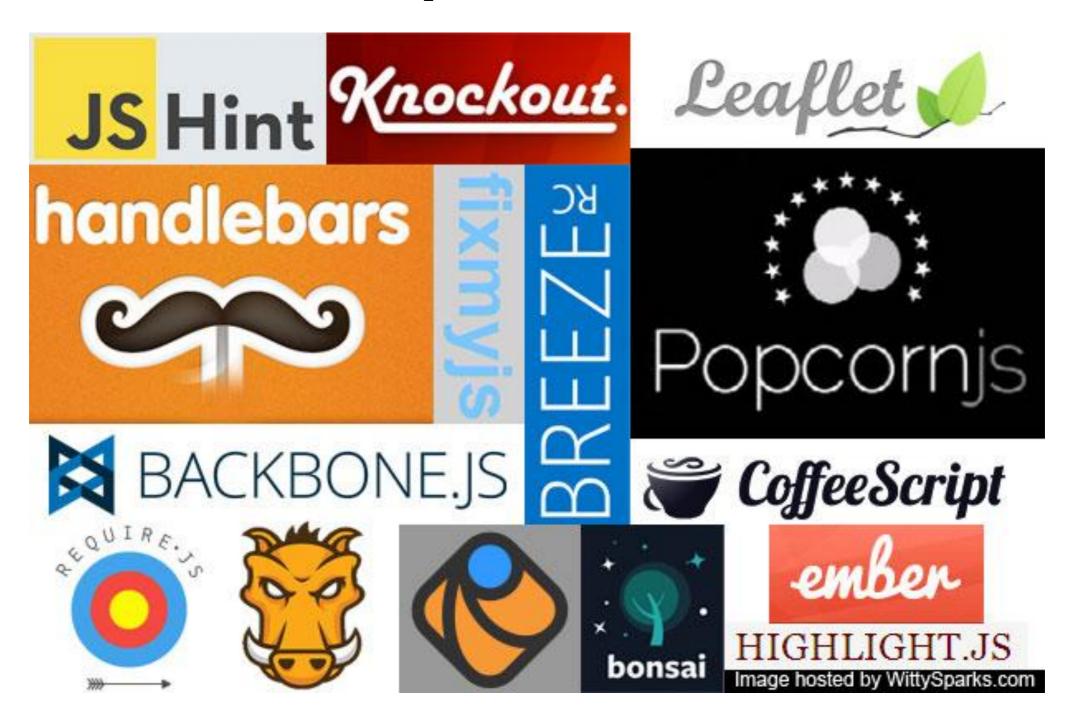
# Web App Server Side

- Support WebSocket or Socket.io
  - Node.js
  - Vert.x
  - Servlet 3.x
- RESTful
- JSON format

# Web App Client Side

- Dynamic HTML & Ajax
  - Templates
- Client Frameworks
  - Backbone.js
  - Angular.js

### JavaScript Frameworks



### SPA Frameworks

- Ember
- Backbone
- Knockout
- Angular
- Batman(CoffeeScript)
- (Sencha Touch)

# jQuery is not ...

jQuery was designed for augmentation and has grown incredibly from that simple premise.

But in AngularJS, you must start from the ground up with your architecture in mind. Instead of starting by thinking "I have this piece of the DOM and I want to make it do X", you have to start with what you want to accomplish, then go about designing your application, and then finally go about designing your view.

### Future of Web

Roll it!

