



Introduction to something useful...

by Aaron Saray

# Why trust this guy?

- Web right after y2k
- Programming 19 years
  - commodore64 - 8 years old
- Mobile phones since 16
  - broke 5 antennas
- End to End Programmer
  - Primarily PHP



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# What are we going to cover?

- How to test mobile
- What is jQuery Mobile
- Examples
- Make something useful

# How to test mobile

- Just a refresher - in case you forgot

# Windows Mobile 6

Microsoft Device Emulator 3.0: <http://saray.me/gfVTdB>

- Install 64bit if you have it

Windows Mobile 6 Images <http://saray.me/gKuNw2>

- Standard: regular/pocket pc
- Professional: touchscreen/smartphone
- Download the USA version of the msi



oh snap - You're out of date!

Quiet you...

# Windows Mobile 7

App Hub (MSDN) <http://saray.me/ecAnvz>

- Tutorial: <http://saray.me/gbUQKM>
- Quite an extensive download but well worth it

# Opera Mini

Use the Java Demo <http://saray.me/exF7Fr>

- Not great because it has to be a live website (wah wuh)



# Blackberry Emulator

Choose a model: <http://saray.me/eghlow>

- Here's a secret: they are almost all the same when it comes to browsers (they differ in other ways)
- Choose a version really:
  - 4.7
  - 5.0
  - 6.0

# Nokia

## OMG

- s60: <http://saray.me/eQmvin>
- s80: <http://saray.me/gSlgRO>
- generic: <http://saray.me/eDuxQl>
  - toolkit 4.1
  - browser 4.0
  - jre patch
  - not a secret: I don't test Nokia

# iPhone Emulator

Test iPhone website: <http://saray.me/e6UWkB>

- Uses your computer - java/flash on your comp

Adobe air app: <http://saray.me/dFdPsO>

If you have a mac: <http://saray.me/hgU3va>

- Closest emulator I've found

What emulators are doing:

- running Safari
- Sending iPhone user agent

# Android

Android SDK: <http://saray.me/fSrGaH>

- Amazing - best testing platform
- Persistent storage: install your own browsers.

# What is jQuery Mobile?

jQuery Mobile 1.0 Alpha 2 released

- uh Alpha software - careful
- But what is this thing?

<http://jquerymobile.com/>

- jQuery for Mobile
- hints of jQuery UI as well
  - not really - but sorta - hybrid
- Graded mobile browser support (like YUI)
- Truth is: its not fully jQuery or UI



Platform	Version	Native	Opera Mobile				Opera Mini		Fennec		Ozone	Netfront	Phonegap
			8.5	8.65	9.5	10.0	4.0	5.0	1.0	1.1	0.9	4.0	0.9
iOS	v2.2.1	A											A
	v3.1.3, v3.2	A						A					A
	v4.0	A						A					A
Symbian S60	v3.1, v3.2	C	C	C		B	C	B			C	C	
	v5.0	A	C	C		A	C	A					A
Symbian UIQ	v3.0, v3.1			C							C		
	v3.2				C						C		
Symbian Platform	3.0	A											
BlackBerry OS	v4.5	C					C	C					
	v4.6, v4.7	C					C	B					C
	v5.0	A					C	A					A
	v6.0	A						A					A
Android	v1.5, v1.6	A											A
	v2.1	A											A
	v2.2	A				A		C		A			A
Windows Mobile	v6.1	C	C	C	C	B	C	B				C	
	v6.5.1	C	C	C	C	A	C	A					
	v7.0	C				A	C	A					
webOS	1.4.1	A											A
bada	1.0	A											
Maemo	5.0	B				B			C	B			
MeeGo	1.1	A				A				A			

# jQuery Mobile Examples

jQuery Mobile Demos: <http://saray.me/gWinqT>



# jQuery Mobile Examples: con't

jQuery API browsable via mobile:

- <http://saray.me/ejiwbP>

jQuery Docs are in mobile format:

- <http://saray.me/gWinqT>

# Let's find out more

- Goal is to enhance clean, semantic HTML
- progressive enhancement techniques
  - unobtrusive
  - rich
- Accessible
  - WAI-ARIA <http://www.w3.org/WAI/>
- Built on jQuery
  - consistent interface
- 12K
- HTML5 markup-driven
- Mobile only events

# Quick Warning!

Alpha Alpha Alpha (not even beta)  
Jan 1'st release?...





# jQuery Mobile Features

Full list: <http://saray.me/gWinqT>

Here are some cool ones:

- **events:** mobileinit, tap, taphold, swipe, swipeleft, swiperight, orientationchange, scrollstart, scrollstop
- **mobile object:** \$.mobile
- **quick page loads:**
  - when supported / graceful fallback
  - Build scaffolding
  - ajax load content into data-role based items
  - FAST

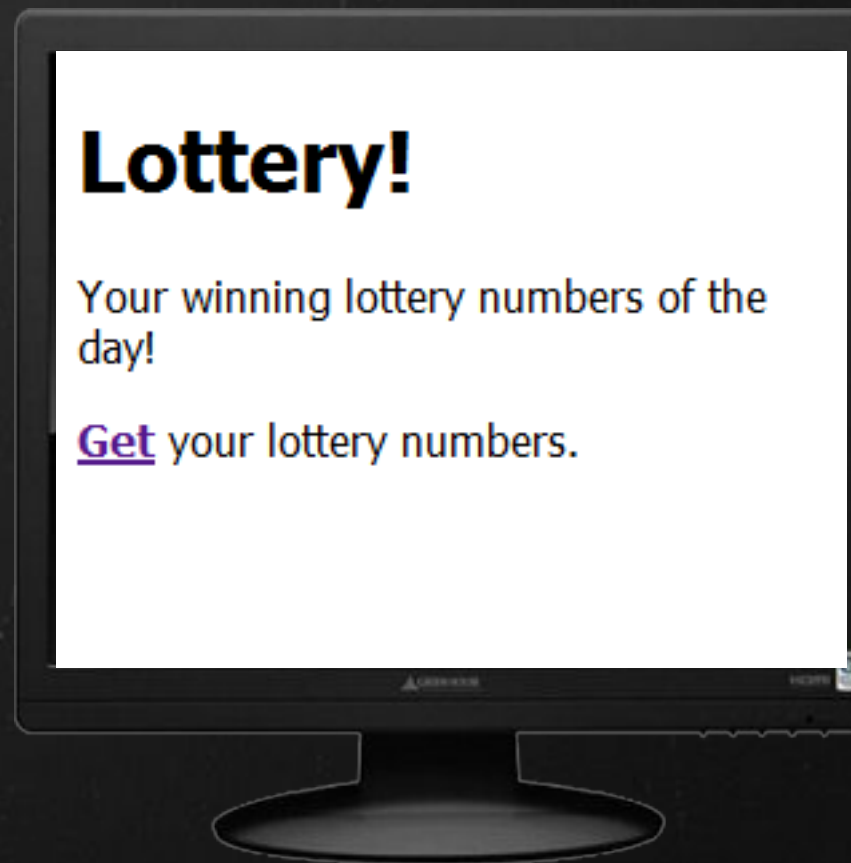
# jQuery Mobile Features Con't...

- Responsive layout
  - CSS: .portrait .landscape
- width breakpoints
  - viewport size / css
- Themes
  - two built in ones
  - easy to make more (css3)
  - fallback (use your testers to see)
- Components
  - heavily html5 based
  - sweet dude. sweet.

# The Example

1. Create HTML5 lottery website with AJAXie stuff
2. Make mobile version of it
3. ~ magic ~
4. Earn Profit

# Pre jQuery Mobile



# Index Page Code

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <script type="text/javascript"
      src="//ajax.googleapis.com/ajax/libs/jquery/1.4.4/jquery.min.js"></script>
    <style>
      body {font-family: tahoma, sans-serif;}
      a {font-weight: bold;}
    </style>
  </head>
  <body>
    <h1>Lottery!</h1>
    <p>Your winning lottery numbers of the day!</p>
    <p><a href="get.html">Get</a> your lottery numbers.</p>
  </body>
</html>
```



# Get Page

A black computer monitor with a silver stand is centered on a dark, textured background. The monitor's screen is white and displays the following text:

**Lottery!**

**Get your lottery  
numbers now!**

[Click to get them now.](#)

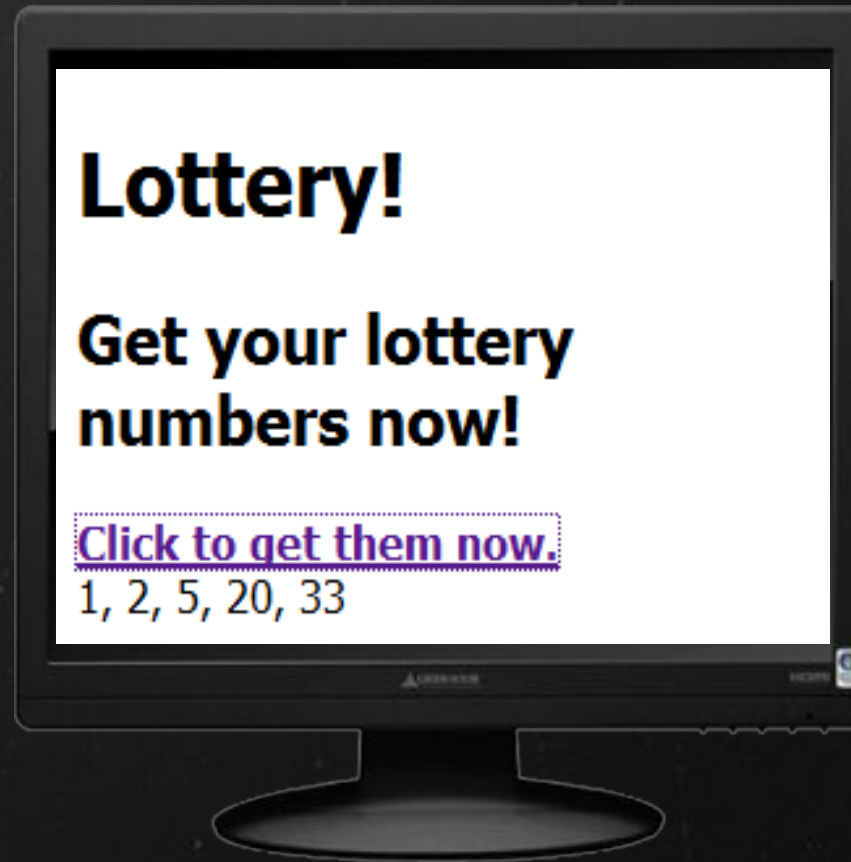
The monitor has a small logo on the bottom bezel and a small icon in the bottom right corner of the screen.

**Lottery!**

**Get your lottery  
numbers now!**

[Click to get them now.](#)

# Get Page - AJAXie result



# Get Page Code

<<SNIPPIE>>

```
<h2>Get your lottery numbers now!</h2>
<a href="#" id="getlotterynumbers">Click to get them now.</a>
<div id="lotterynumbers"></div>
<script type="text/javascript">
    $(function(){
        $("#getlotterynumbers").click(function(){
            $("#lotterynumbers").load("numbers.html");
            return false;
        });
    });
</script>
```

<<SNIPPIE>>

# Insert jQuery Mobile

Understand the following:

- The required JS/CSS

```
<link rel="stylesheet" href="http://code.jquery.com/mobile/1.0a2/jquery.mobile-1.0a2.min.css" />
```

```
<script type="text/javascript" src="http://code.jquery.com/mobile/1.0a2/jquery.mobile-1.0a2.min.js"></script>
```

- Scaffolding / Anatomy of a page  
<http://saray.me/gAGEEN>

# 3 Main Parts of a page

- Header / Content / Footer
  - sooo my HTML5 page could have used these :(
- Remember jQuery mobile is HTML5
- Our example:
  - use data-role
  - Enclose entire page
    - used for Ajax requests
  - Determine header, content pages



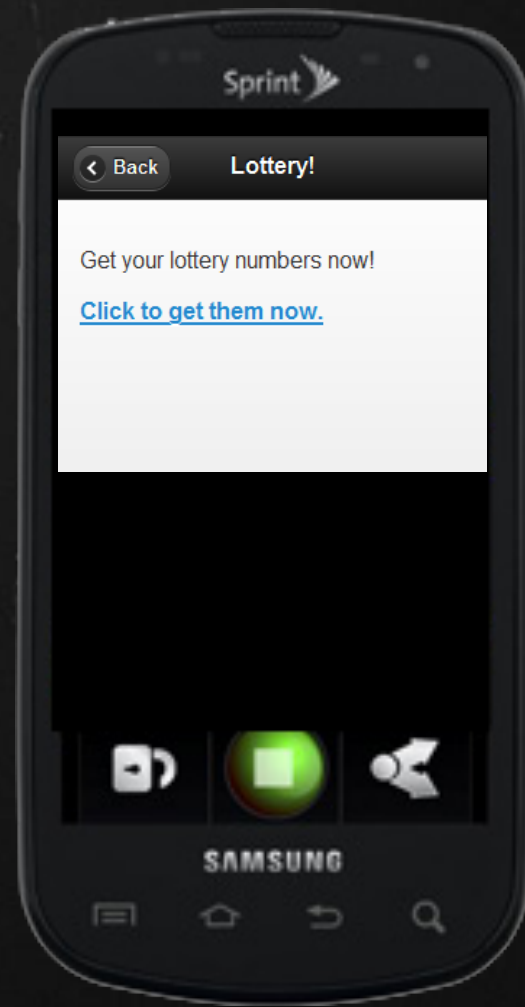
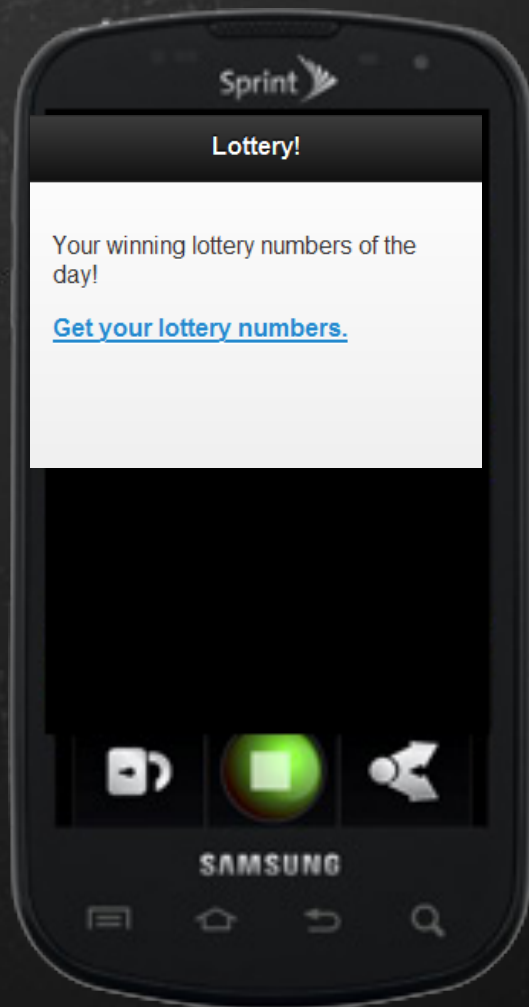
# Things to add to our page:

```
<div data-role="page" />
```

```
<div data-role="header" />
```

```
<div data-role="content" />
```

# What it looks like on the phone:



# The updated code:

<<SNIPPIE>>

</style>

<link rel="stylesheet"

href="http://code.jquery.com/mobile/1.0a2/jquery.mobile-1.0a2.min.css" />

<script type="text/javascript"

src="http://code.jquery.com/mobile/1.0a2/jquery.mobile-1.0a2.min.js"

>>/script>

<<SNIPPIE>>

# The updated code con't...

<<SNIPPIE>>

```
<body>
  <div data-role="page">
    <div data-role="header">
      <h1>Lottery!</h1>
    </div>
    <div data-role="content">
      <p>Your winning lottery numbers of the day!</p>
      <p><a href="get.html">Get your lottery numbers.</a></p>
    </div>
  </div>
</body>
```

<<SNIPPIE>>

# What happened?

It loaded dynamically

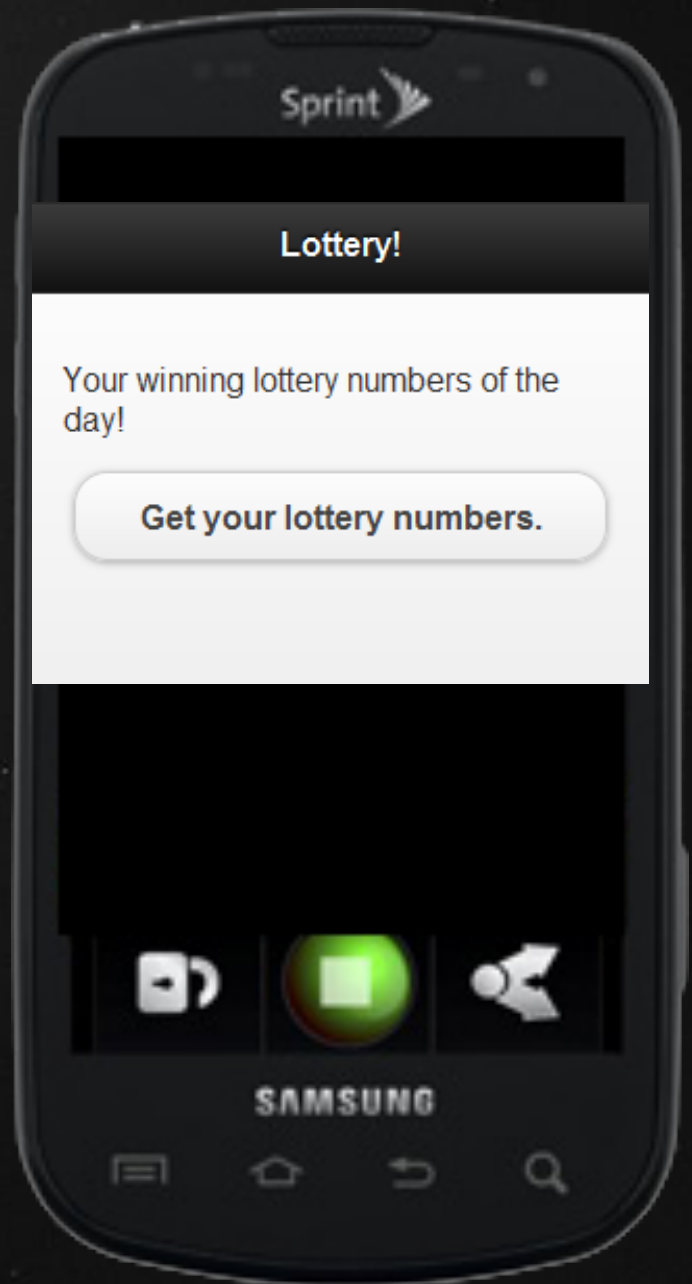
The AJAX works!

Soooo - that link is still hard to click...



# Enter the button

- `data-role="button"` on the `<a />` tag



# Things to remember

- jQuery Mobile: alpha2 release
- Jan 2011 release date
- A / B / C browser support
- Its unobtrusive

# Shamless Plug

- Listen to this first, then Q/A



Milwaukee PHP Users Group

2nd Tuesday of Every Month at Bucketworks

[mkepug.org](http://mkepug.org) / @mkepug

# Questions?

I'll try my best!