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# Building Great Mobile Sites Quickly Using jQuery Mobile

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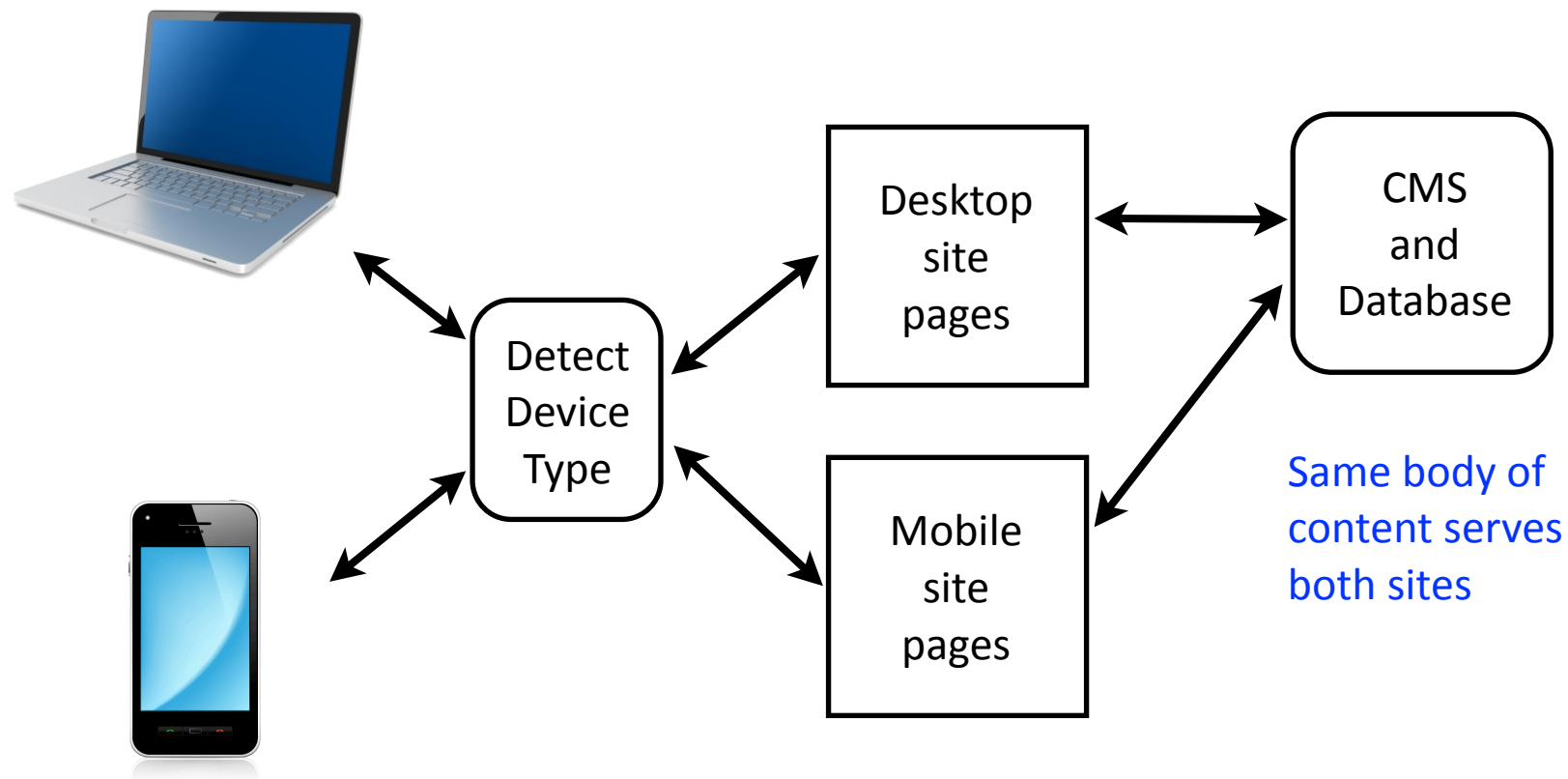sales@webvanta.com
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# Agenda

- Approaches to mobile web development
  - Responsive design
  - Separate mobile site
- Examples
- jQuery Mobile overview
- Let's build a site with jQuery Mobile!
- Using jQuery Mobile with Webvanta

# Responsive Design

- Scale to any screen size

- Single set of HTML

- Use CSS media queries and JavaScript to adapt to different screen sizes

- www.bostonglobe.com

- *Responsive Web Design* from A Book Apart

  – www.abookapart.com/products/responsive-web-design

# Same Content, Separate Pages

Desktop
site
pages

CMS
and
Database

Detect
Device
Type

Mobile
site
pages

Same body of
content serves
both sites

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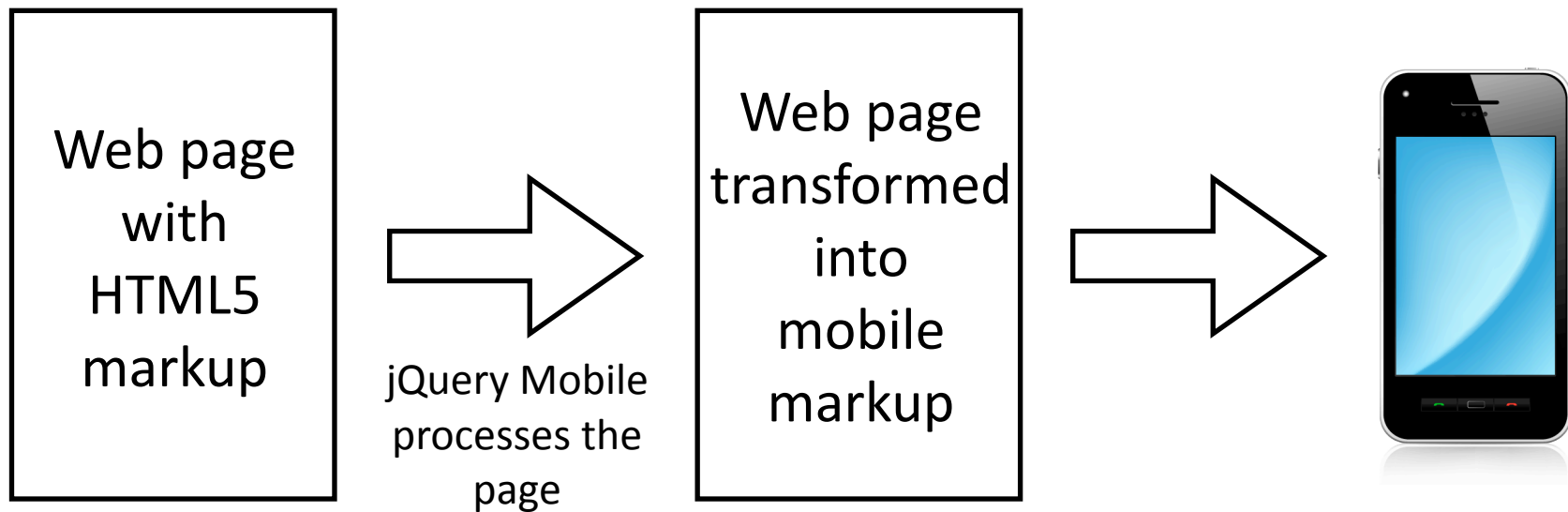# Sites with Separate Mobile Pages

- Standard HTML/CSS

  - www.wecomply.com

  - www.whaleheadclub.com

- jQuery Mobile

  - www.holeinthewallsebastopol.com

  - www.morgansourcing.com

# What is jQuery Mobile?

- Builds on top of regular jQuery library

- Not just interactive effects, but a complete framework including CSS

- Uses HTML5 data attributes to annotate markup

- JavaScript runs after HTML is loaded and transforms it into a mobile page
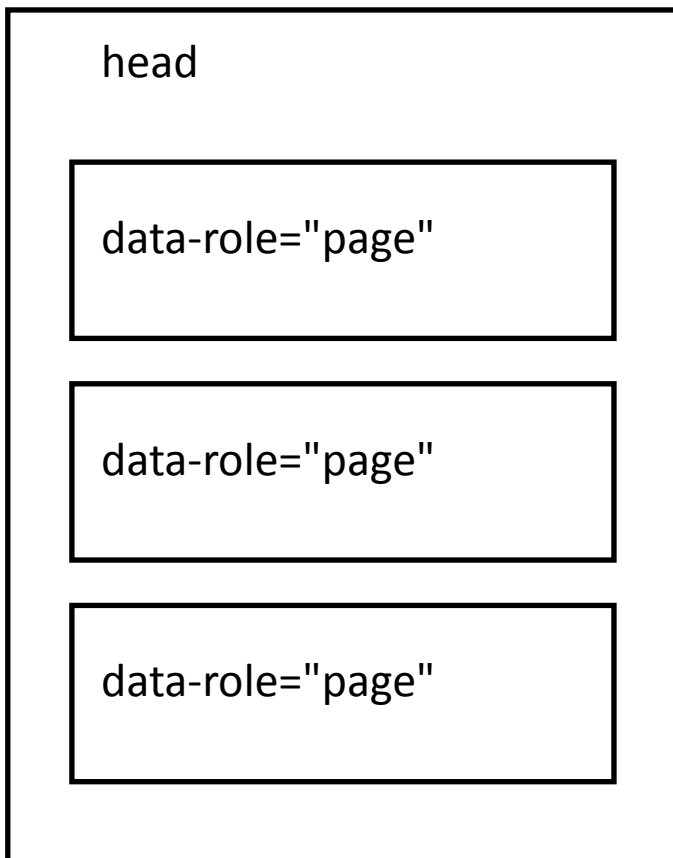
# Displaying a Page with JQM

Web page with HTML5 markup

➡

Web page transformed into mobile markup

➡

jQuery Mobile processes the page

jQuery core ➚

jQuery mobile ➚

jQuery Mobile CSS ➚

Theme CSS ➚

# A Page is Not Always a Page

HTML Page

head

data-role="page"

data-role="page"

data-role="page"

- One HTML document can include multiple conceptual pages

- A "page" is just an HTML element with data-role="page"

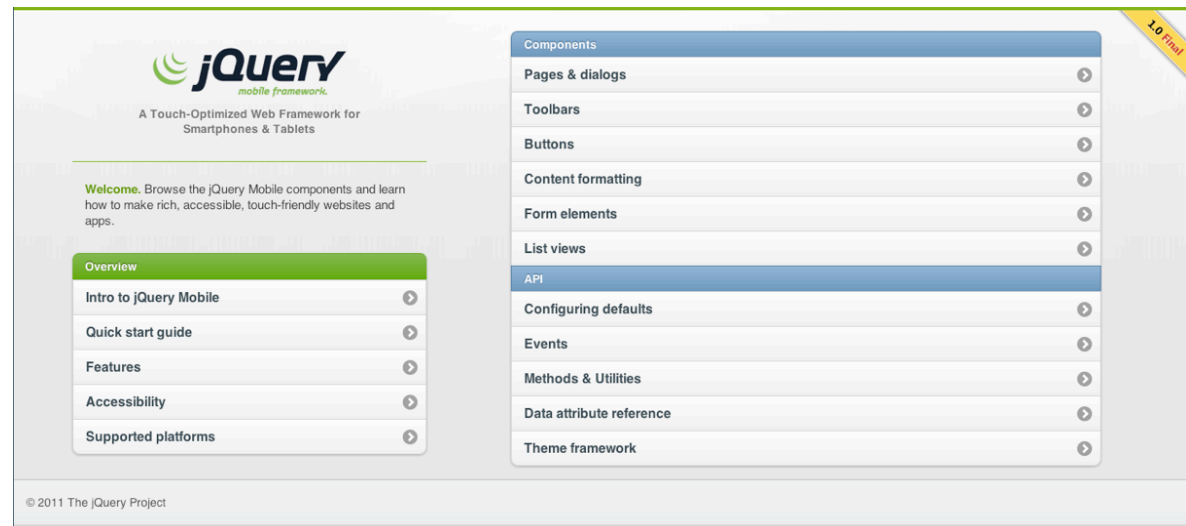- When a page link is followed, new page elements added to DOM

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# jQuery Mobile vs. HTML/CSS

- jQuery Mobile Advantages

  – Enables quick creation of polished sites

  – Interactions are mobile-optimized without additional effort

- jQuery Mobile Disadvantages

  – New paradigms take some getting used to

  – Hard to provide a completely customized visual design

  – Dependence on relatively immature library

# jQuery Mobile Docs
www.jquerymobile.com



- Books tend to be either out-of-date or not-yet-released

- Lots of tutorials on the web

- Our list of references
  - www.webvanta.com/jquery-mobile

# Let's Build Something!

- Start with the example code from JQM site's Quick Start Guide

  - http://jquerymobile.com/demos/1.0/docs/about/getting-started.html

- Explore header, footer, and button options

- Extend it to multiple pages

# Coding Basics

- ## Head section additions

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

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

<script type="text/javascript"
src="http://code.jquery.com/jquery-1.6.4.min.js">
</script>

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

# The Simplest Page

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

    <div data-role="header">
        <h1>My Title</h1>
    </div>

    <section data-role="content">
        <p>Hello world</p>
    </section>

</div>
```

# Live Coding, part 1

# Testing Techniques

- Phones are the ultimate test vehicles but are lousy for debugging

- Safari can be set to identify as a mobile browser

- Use /mobile to get to mobile pages in desktop browser; resize window to simulate phone

- Mac users can install XCode with iOS Simulator

- PC users can install Android dev tools with emulator (but it is slow and inaccurate)

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# Page-Fetching Behavior

- Can put all pages in one file (not recommended)

- Link to page with <a href="page"> will find first "page" element in linked page, add to DOM, and show

- Link to page with <a href="page" data-prefetch> will cause fetching of that page to occur before link activated

- If using multi-page pages, must link to them with `data-ajax`=`'false'`

- All pages end up in one DOM!

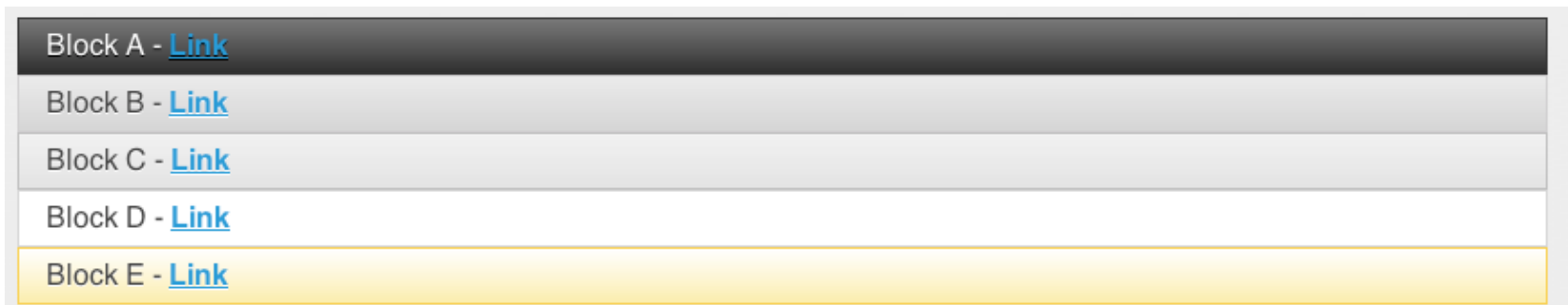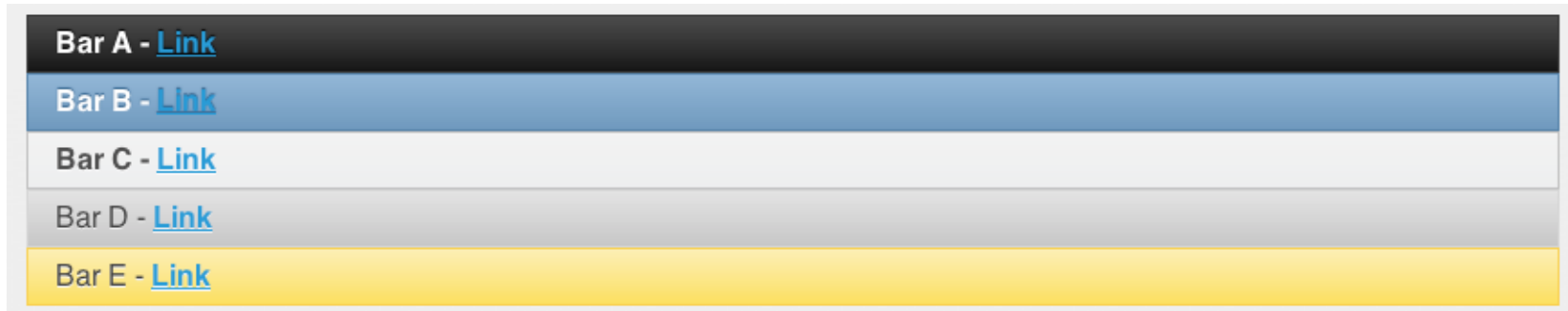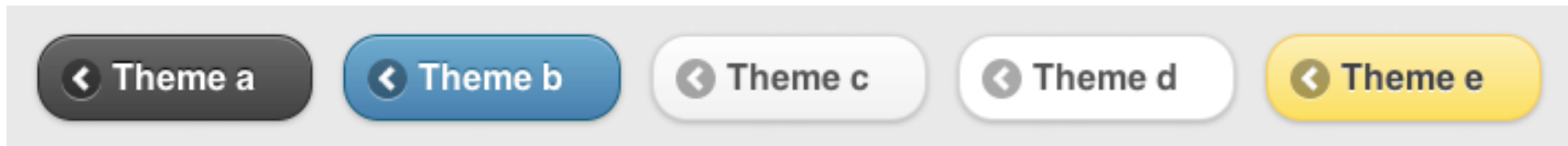  – IDs need to be unique across entire site

# Multiple Pages per Page and Fancy Lists

- Can have multiple "page" elements within an HTML page

  – Link from one to other like jumping to an anchor

- Listviews

  – Very powerful, flexible element type

  – Can automatically create multiple "pages" using nested lists

# Styling

- Try different swatches in standard theme

    - data-theme="x"

- Create a custom theme

    - http://jquerymobile.com/themeroller/

- Override styles

    - Your HTML may not be present when page is fully rendered!

    - Use Firebug etc. to find classes to style

# Standard Theme Swatches

< Theme a     < Theme b     < Theme c     < Theme d     < Theme e

Bar A - Link
Bar B - Link
Bar C - Link
Bar D - Link
Bar E - Link

Block A - Link
Block B - Link
Block C - Link
Block D - Link
Block E - Link

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# Live Coding, part 2

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# JavaScript Issues

- Any JS error will keep page from rendering at all

- JS in head section of page other than the home page will not be executed

  - "Page" is only what is within the element with data-role="page"

- Ajax and other JavaScript functions typically require modification to work with jQuery Mobile

# Page Load Events

- The usual approach doesn't work

```
$(document).ready(function(){
```

- – Will run only when a real HTML page is loaded

- In a jQuery Mobile site, "pages" are initialized all the time without loading an HTML page

```
$('#page-id').live('pageinit',function(event) {

    (stuff to run when this "page" is loaded)

});
```

# Building jQuery Mobile Sites with Webvanta

- Selected SmartThemes provide jQuery Mobile all set up and ready to go

- Just apply mobile template to a page and it is jQuery Mobile ready

- Use database and snippets to store content that is shared between desktop and mobile pages

- Automatic switching between desktop and mobile pages

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# Live Coding, part 3

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# Can We Help?

- You can use Webvanta's 30-day free trial for exploring jQuery Mobile

  – Choose a SmartTheme that says "jQuery Mobile"

- Our professional services team is available to help build your site

  – Add mobile to existing Webvanta site, starts at $500

  – Create new mobile site, starts at $1,000

- Free 30-minute consultation with our experts

  – Call Justin at 888.670.6793

# More Classes Coming Up

- In addition to our free webinars, we're now offering 4-week web-based classes for $99
    - HTML5 and CSS3, from the beginning
    - jQuery for designers
    - Designing for mobile, including mobile sites, web apps, and native apps, for phones and tablets
- See the detailed outlines and register today at:
    - www.webvanta.com/courses

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