How to develop social book apps with PhoneGap & Wordpress

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BUT FIRST,
A BIT ABOUT ME

Professor of Design
Emily Carr University of Art + Design

Founder & Creative Director
Lift Studios - Interaction Design Agency

Studied
Architecture,
Jazz Performance
& Composition
Concepts covered in this workshop will include

- publications for mobile platforms
- a book as a social framework
- using open source tools to publish
- Native App vs. Web Technology
- Book with an API

- **Workshop I**: Introducing PhoneGap
- using open source tools to publish
- balancing reading with social

- **Workshop II**: prototyping with jQueryMobile
- Hybrid native/web apps
- gestural affordances

- **Workshop III**: JSON-API tunnel
Strategy

• publications for mobile platforms
• a book as a social framework
• using open source tools to publish
• **Workshop I:** Introducing PhoneGap

Technology

• Native App vs. Web Technology
• Hybrid native/web apps
• Book with an API
• **Workshop III:** JSON-API tunnel

Design

• balancing reading with social
• **Workshop II:** prototyping with jQueryMobile
• gestural affordances
This is a workshop but it is by way of an interesting story...
A Social Book
by Alexandra Samuel

A research project
at Emily Carr University of Art + Design
A Social Book

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A research project
at Emily Carr University of Art + Design

Can reading a book be a participatory and social experience?
Outcomes:

1. Create a **social e-book prototype** that establishes the potential of e-books to support a social, participatory reader experience.

2. Develop a participatory design methodology where **readers contribute to the structure**, design and/or content of the final outcome.
What are the issues when adding social functionality into an ebook format?
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Can we integrate a social component into a book without getting in the way of the original content?
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Can we integrate a social component into a book without getting in the way of the original content?

**How do we make a book ultimately dynamic?**
What are the issues when adding social functionality into an ebook format?

Can we integrate a social component into a book without getting in the way of the original content?

How do we make a book ultimately dynamic?

What tools should we use to manage the content, comments and membership registration?
The problem with most Social books:

1. Social usually means sharing quotes on Facebook & Twitter

2. Reader comments are private and marginalized

3. Comments are separated from the original text and usually read out of context
How does it work?

Wordpress (CMS) → HTML CSS & Javascript → JSON API → PHONEGAP → NATIVE APPLICATION
- A SOCIAL BOOK BY -
ALEXANDRA SAMUEL

50 YEARS OF LIFE ONLINE
In 1976 I was in kindergarten, and like any five-year-old looked forward to the high point of each day: the arrival of our latest ditto-ed handout. For those of you under 30, let me explain that a ditto (similar to a mimeo) was a purple-inked paper used to mass-produce in-class exercises, and in the over-12 set, used for church newsletters and other low-circulation, low-budget publications. As soon as the dittos were handed out, we held them up to our faces and inhaled deeply: the smell of happiness, and as it turns out, methanol.

You over-30s, take note of the fact that I had to explain this item from our collective archive. Over the past few years I’ve had a few thirtysomethings stare at me blankly when I made a passing reference to dittos. When I started school, the ditto and its ancestors had been captivating children for a full century: in fact, the mimeograph was invented by none other than Thomas Edison in 1876. But just ten years after I inhaled my first ditto in kindergarten, the ditto was more or less extinct (at least in North America), watch by both photostat and the computer printer. Today’s
Introducing **PhoneGap**

The only free open source framework for creating apps easily for 7 mobile platforms using standard HTML, CSS and Javascript

http://docs.phonegap.com/en/2.1.0/guide_getting-started_index.md.html
Easily create apps using the web technologies you know and love: HTML, CSS and JavaScript

PhoneGap is a free and open source framework that allows you to create mobile apps using standardized web APIs for the platforms you care about.
I: Install Xcode and PhoneGap

Apple's Xcode (http://developer.apple.com)

PhoneGap http://www.phonegap.com/download# version 1.9.0

Requirements

- Xcode 4.3+
- Xcode Command Line Tools
- Intel-based computer with Mac OS X Lion or greater (10.7+)
- Necessary for installing on device:
  - Apple iOS device (iPhone, iPad, iPod Touch)
  - iOS developer certificate ($100/year)
Choose options for your new project:

- **Product Name**: HelloWorld
- **Company Identifier**: org.apache.cordova
- **Bundle Identifier**: org.apache.cordova.HelloWorld

**Use Automatic Reference Counting**: No
ERROR: Start Page at 'www/index.html' was not found.
2013-01-25 14:30:56.101
2013-01-25 14:30:36.711
toceExampleOne[5985:13403] ERROR: Start Page at 'www/index.html'
was not found.
2013-01-25 14:30:59.111
toceExampleOne[5985:13403] Error: executing module function 'setInfo' in module 'cordova/
devices'.

Hey, it's Cordova!

Don't know how to get started? Check out our [Getting Started Guide](#).

1. Check your console log for any whitelisted rejection errors.

2. Add your allowed hosts in Cordova.plist/ExternalHosts (wildcards OK, don't enter the URL scheme)

Alert
Cordova is working

OK
II. Prototyping with jQuery Mobile

A unified user interface system that works seamlessly across all popular mobile device platforms, built on the rock-solid jQuery and jQuery UI foundation.

http://jquerymobile.com/test/docs/about/getting-started.html
<!DOCTYPE html>
<html>
<head>
    <title>My Page</title>
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <link rel="stylesheet" href="http://code.jquery.com/mobile/1.2.0/jquery.mobile-1.2.0.min.css"/>
    <script src="http://code.jquery.com/jquery-1.8.2.min.js"></script>
    <script src="http://code.jquery.com/mobile/1.2.0/jquery.mobile-1.2.0.min.js"></script>
</head>
<body>

<div data-role="page">

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

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

</div><!-- /page -->

</body>
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    </div><!-- --><!-- /content -->

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<script src="http://code.jquery.com/mobile/1.2.0/jquery.mobile-1.2.0.min.js"></script>
</head>
<body>
<div data-role="page">
  <div data-role="header">
    <h1>My Title</h1>
  </div>
  <div data-role="content">
    <p>Hello world</p>
    <ul data-role="listview" data-inset="true" data-filter="true">
      <li><a href="#">Acura</a></li>
      <li><a href="#">Audi</a></li>
      <li><a href="#">BMW</a></li>
      <li><a href="#">Mercedes Benz</a></li>
      <li><a href="#">Ferrari</a></li>
    </ul>
  </div>
</div>
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      <li><a href="#">BMW</a></li>
      <li><a href="#">Mercedes Benz</a></li>
      <li><a href="#">Ferrari</a></li>
    </ul>

    <form>
      <label for="slider-0">Input slider:</label>
      <input type="range" name="slider" id="slider-0" value="25" min="0" max="100" />
    </form>
  </div><!-- /content -->

</div><!-- /page -->
jQuery Mobile Multiple Screens

Page Anatomy
http://jquerymobile.com/test/docs/pages/page-anatomy.html

Multi Page Example
Gestural Affordances

How do we design interfaces to cue users about gestures?

Why are gestures becoming the new click?

Can we teach gestures without special onboarding instructions?
III. Introducing **JSON API**

Wordpress JSON API plugin

Javascript for API call
$(document).ready(function(){
    console.log("online");
    var status = $('#network-status');
    var output = $('#output');
    status.text("Online");
    $.ajax({
        url: 'http://book.hyko.org/api/get_page_index/",
        dataType: 'jsonp',
        timeout: 5000,
        success: function(data, status){
            localStorage.setItem('posts', JSON.stringify(data));
            displayContent(data);
        },
        error: function(){
            output.text('There was an error loading the data.');
        }
    });
});
var displayContent = function (data) {
    var output = $('output');
    $.each(data.pages, function(i, page){
        var section = '<h2>' + page.title + '</h2>
        +page.content+'<br>'
        for(var j = 0; j < page.children.length; ++j) {
            $.each(page.children, function(j, page) {
                var section = section+ '<h2>'+page.title+'</h2>
                +page.content+'<br>'
            });
        }
    output.append(section);
    });
};
We need a name...

please help us come up with a name for this open source social book project.
We need a name...

Corey Pressman suggests:

bookspiro
We need a name...

Corey Pressman suggests:

bookspiro

Tweet your name with hashtag: #socialbook
Thank you

harmen@ecuad.ca      @haigarmen

http://www.slideshare.net/haigarmen/