Social Media Apps Programming

Create Hybrid Apps with Phonegap

Min-Yuh Day, Ph.D.
Assistant Professor

Department of Information Management
Tamkang University

http://mail.tku.edu.tw/myday
## Course Schedule (1/3)

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Subject/Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2015/09/16</td>
<td>Course Orientation and Introduction to Social Media and Mobile Apps Programming</td>
</tr>
<tr>
<td>2</td>
<td>2015/09/23</td>
<td>Introduction to Android / iOS Apps Programming</td>
</tr>
<tr>
<td>3</td>
<td>2015/09/30</td>
<td>Developing Android Native Apps with Java (Android Studio) (MIT App Inventor)</td>
</tr>
<tr>
<td>4</td>
<td>2015/10/07</td>
<td>Developing iPhone / iPad Native Apps with Swift (XCode)</td>
</tr>
<tr>
<td>5</td>
<td>2015/10/14</td>
<td>Mobile Apps using HTML5/CSS3/JavaScript</td>
</tr>
<tr>
<td>6</td>
<td>2015/10/21</td>
<td>jQuery Mobile</td>
</tr>
<tr>
<td>Week</td>
<td>Date</td>
<td>Subject/Topics</td>
</tr>
<tr>
<td>------</td>
<td>------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>7</td>
<td>2015/10/28</td>
<td>Create Hybrid Apps with Phonegap</td>
</tr>
<tr>
<td>8</td>
<td>2015/11/04</td>
<td>jQuery Mobile/Phonegap</td>
</tr>
<tr>
<td>9</td>
<td>2015/11/11</td>
<td>jQuery Mobile/Phonegap</td>
</tr>
<tr>
<td>10</td>
<td>2015/11/18</td>
<td>Midterm Exam Week (Midterm Project Report)</td>
</tr>
<tr>
<td>11</td>
<td>2015/11/25</td>
<td>Case Study on Social Media Apps Programming and Marketing in Google Play and App Store</td>
</tr>
<tr>
<td>12</td>
<td>2015/12/02</td>
<td>Google Cloud Platform</td>
</tr>
</tbody>
</table>
## Course Schedule (3/3)

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Subject/Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>2015/12/09</td>
<td>Google App Engine</td>
</tr>
<tr>
<td>14</td>
<td>2015/12/16</td>
<td>Google Map API</td>
</tr>
<tr>
<td>15</td>
<td>2015/12/23</td>
<td>Facebook API (Facebook JavaScript SDK) (Integrate Facebook with iOS/Android Apps)</td>
</tr>
<tr>
<td>16</td>
<td>2015/12/30</td>
<td>Twitter API</td>
</tr>
<tr>
<td>17</td>
<td>2016/01/06</td>
<td>Final Project Presentation</td>
</tr>
<tr>
<td>18</td>
<td>2016/01/13</td>
<td>Final Exam Week (Final Project Presentation)</td>
</tr>
</tbody>
</table>
Outline

• PhoneGap
  – PhoneGap
  – PhoneGap Build
    • index.html, css, js
    • config.xml
  – PhoneGap, jQuery Mobile

• Demo
  – Create Hybrid Apps with PhoneGap
Android /iOS Apps Programming

Native Apps

Hybrid Apps

Mobile Web Apps
App Development Comparison

Native Apps
- Full Device Access
- Very Fast Speed
- Expensive Development Cost
- Available App Store
- Mandatory Approval Process

Hybrid Apps
- Full Device Access
- Native Speed as Necessary Speed
- Reasonable Development Cost
- Available App Store
- Low Overhead Approval Process

Web Apps
- Partial Device Access
- Fast Speed
- Reasonable Development Cost
- Not Available App Store
- None Approval Process


Mobile Web App

HTML

CSS

JavaScript

Templates

Phone Data

External Data

Mobile frameworks and Libraries

Source: Scott Preston, Learn HTML5 and JavaScript for iOS: Web Standards-based Apps for iPhone, iPad, and iPod touch, Apress, 2012
PhoneGap

- 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.

Source: [http://phonegap.com/](http://phonegap.com/)
PhoneGap Build

• Package mobile apps in the cloud
  – **PhoneGap Build** takes the pain out of compiling PhoneGap apps.
  – Get app-store ready apps without the headache of maintaining native SDKs.
  – **PhoneGap Build** service does the work for you by compiling in the cloud.

Source: [http://phonegap.com/](http://phonegap.com/)
PhoneGap Build

Source: https://build.phonegap.com/
Apps Created with PhoneGap

Source: http://phonegap.com/
Apps Created with PhoneGap
BBC Olympics

Source: http://phonegap.com/app/bbc-olympics/
Adobe® PhoneGap™

• Write a PhoneGap app once with HTML and JavaScript and deploy it to any mobile device without losing features of a native app.

• Adobe PhoneGap
  – standards-based, open-source development framework for building cross-platform mobile apps with HTML, CSS and JavaScript for iOS, Android™, Windows® Phone, webOS, BlackBerry® and more.

https://build.phonegap.com/
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.

[Install PhoneGap](http://phonegap.com/)

---

**Adobe PhoneGap Enterprise**

Enterprise mobile application development and management across channels and platforms

**The PhoneGap Developer App**

Develop locally then see the changes instantly on your mobile device with our cross-platform app

[http://phonegap.com/](http://phonegap.com/)
Adobe PhoneGap Enterprise
Enterprise mobile application development and management across channels and platforms

INTEGRATE CROSS CHANNEL MARKETING
MOBILE APPLICATION MANAGEMENT
ENTERPRISE SUPPORT & TRAINING

Get more info ➤

The PhoneGap Developer App
Develop locally then see the changes instantly on your mobile device with our cross-platform app

Get it now! ➤

http://phonegap.com/
PhoneGap

Package mobile apps in the cloud

PhoneGap Build takes the pain out of compiling PhoneGap apps. Get app-store ready apps without the headache of maintaining native SDKs. Our PhoneGap Build service does the work for you by compiling in the cloud.

Apps Created with PhoneGap

http://phonegap.com/
PhoneGap Build

https://build.phonegap.com/
PhoneGap Build

Adobe® PhoneGap™ Build
Package mobile apps in the cloud.

Get started!

Take the pain out of developing mobile apps.
Simply upload your HTML5, CSS, and JavaScript assets to the Adobe® PhoneGap™ Build cloud service and we do the work of compiling for you.

https://build.phonegap.com/plans
PhoneGap Build

Choose your plan

<table>
<thead>
<tr>
<th>Feature</th>
<th>Free Plan</th>
<th>Paid Plan</th>
<th>Adobe Creative Cloud Membership</th>
</tr>
</thead>
<tbody>
<tr>
<td>open source apps</td>
<td></td>
<td>unlimited</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>must be pulled from a public Github repo</td>
<td></td>
</tr>
<tr>
<td>private apps</td>
<td>1</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>max app size</td>
<td>50 MB</td>
<td>100 MB</td>
<td>1 GB</td>
</tr>
<tr>
<td>core cordova plugins</td>
<td>YES</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>(list of these plugins is here)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>third party plugins</td>
<td>YES</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>(includes plugins from npmjs.com as well as our own repository)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>upload plugins</td>
<td>NO</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>(includes plugins only you can use)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>collaborators</td>
<td>completely free</td>
<td>starting at $9.99/mo</td>
<td>sign in with your Adobe ID</td>
</tr>
</tbody>
</table>

https://build.phonegap.com/plans
Get started with PhoneGap Build

• Simply upload your web assets - a ZIP file of HTML, CSS and JavaScript, or a single index.html file - to PhoneGap Build
  – Git or SVN repository.

• PhoneGap Build undertake the compilation and packaging

• In minutes, you’ll receive the download URLs for all mobile platforms.

Source: https://build.phonegap.com/faq
PhoneGap Build vs. PhoneGap

• PhoneGap
  – a mobile application development framework, based upon the open source Apache Cordova project.
  – write an app once with HTML, CSS and JavaScript, and then deploy it to a wide range of mobile devices without losing the features of a native app.

• PhoneGap Build
  – a cloud-based service built on top of the PhoneGap framework.
  – easily build those same mobile apps in the cloud.

Source: https://build.phonegap.com/faq
Public Apps vs. Private Apps

• Public apps
  – source code hosted in a publicly accessible GitHub repository.

• Private apps
  – source code hosted in a private (non-publicly accessible) GitHub repository
  – uploads a ZIP file containing the source code and assets to the PhoneGap Build service.

Source: https://build.phonegap.com/faq
PhoneGap, jQuery Mobile, jQuery

- **jQuery Mobile** (User Interface)
- **jQuery** (Logic and Computing)
- **PhoneGap** (Hardware Interface)
PhoneGap App Architecture

HTML5/CSS3 Application

UI Framework (jQueryMobile)  PhoneGap API

Phone Gap Bridge

- Camera
- Microphone
- GPS
- SQLite
- File System
- Accelerometer
- Compass
- etc

Install PhoneGap

To Install, ensure that you have NodeJS installed, then open your command-line and run the following:

```
$ sudo npm install -g phonegap
```

Once installation completes, you can invoke `phonegap` on command line for further help.

Usage:

```
$ phonegap create my-app
$ cd my-app
$ phonegap run android
```

Learn more at docs.phonegap.com

Looking for an easier way to get started? Try the new PhoneGap Desktop App (in beta)!

PhoneGap 2.9.1
Released 05 Nov 2013

http://phonegap.com/install/
Node.js® is a JavaScript runtime built on Chrome's V8 JavaScript engine. Node.js uses an event-driven, non-blocking I/O model that makes it lightweight and efficient. Node.js' package ecosystem, npm, is the largest ecosystem of open source libraries in the world.

Current Version: v4.2.1
Long Term Support Release

Download for OS X (x64)

http://nodejs.org/
Install NodeJS

- node-v0.10.33.pkg
- 10.2 MB

Welcome to the Node Installer

This package will install node and npm into /usr/local/bin

The installation was completed successfully.

Node was installed at
/usr/local/bin/node
npm was installed at
/usr/local/bin/npm

Make sure that /usr/local/bin is in your PATH.
PhoneGap Documentation

Welcome to the new version of the PhoneGap Docs! We're working on putting together a comprehensive resource that covers all things PhoneGap and mobile app development, that is both in-depth and easy to follow.

We didn't want to keep you waiting for all the good stuff, so we've published some key resources to get you going. If you are new to PhoneGap, we recommend beginning by working through our Getting Started Guide. We've also put together a helpful tutorial on extending our "Hello World" example app. These should get you going, and keep your eyes peeled for new material to come soon.

http://docs.phonegap.com/
Plugin APIs

Core Plugins

The most current version of the Cordova Core Plugin APIs are found in their respective GitHub repositories linked to below:

- Battery Status
- Camera
- Contacts
- Device Info
- Device Motion (accelerometer)
- Device Orientation (compass)
- Dialogs (notification)
- File
- File Transfer
- Geolocation
- Globalization
- InAppBrowser
- Media Capture
- Network Information
- Splash Screen

http://docs.phonegap.com/plugin-apis/
PhoneGape Install

$ sudo npm install -g phonegap
PhoneGape Usage

$ phonegap create myapp
[phonegap] missing library phonegap/www/3.1.0
[phonegap] downloading https://github.com/phonegap/phonegap-app-hello-world/archive/3.1.0.tar.gz...
[phonegap] created project at /Users/imyday/Development/myapp

$ cd myapp

$ phonegap run android
[phonegap] detecting Android SDK environment...
[phonegap] using the remote environment
[phonegap] compressing the app...
[phonegap] uploading the app...
PhoneGap config.xml

```xml
<?xml version='1.0' encoding='utf-8'?>
<widget id='com.phonegap.helloworld' version='1.0.0' xmlns='http://www.w3.org/2000/xmlns' xmlns:gap='http://phonegap.com/ns/1.0'>
  <name>HelloWorld</name>
  <description>Hello World sample application that responds to the deviceready event.</description>
  <author email='support@phonegap.com' href='http://phonegap.com'>PhoneGap Team</author>
  <feature name='http://api.phonegap.com/1.0/device'/>
</widget>
```

<table>
<thead>
<tr>
<th>Name</th>
<th>config.xml</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kind</td>
<td>XML Document</td>
</tr>
<tr>
<td>Size</td>
<td>4 KB</td>
</tr>
</tbody>
</table>
<?xml version='1.0' encoding='utf-8'?>
<widget
    id="com.phonegap.helloworld"
    version="1.0.0"
    xmlns="http://www.w3.org/ns/widgets"
    xmlns:gap="http://phonegap.com/ns/1.0">
    <name>HelloWorld</name>
    <description>
        Hello World sample application
    </description>
    <author email="support@phonegap.com" href="http://phonegap.com">
        PhoneGap Team
    </author>
    <feature name="http://api.phonegap.com/1.0/device" />
    <preference name="permissions" value="none" />
    <icon src="icon.png" />
</widget>
<feature name="http://api.phonegap.com/1.0/device" />
<preference name="permissions" value="none" />
<preference name="orientation" value="default" />
<preference name="target-device" value="universal" />
<preference name="fullscreen" value="true" />
<preference name="webviewbounce" value="true" />
<preference name="prerendered-icon" value="true" />
<preference name="stay-in-webview" value="false" />
<preference name="ios-statusbarstyle" value="black-opaque" />
<preference name="detect-data-types" value="true" />
<preference name="exit-on-suspend" value="false" />
<preference name="show-splash-screen-spinner" value="true" />
<preference name="auto-hide-splash-screen" value="true" />
<preference name="disable-cursor" value="false" />
<preference name="android-minSdkVersion" value="7" />
<preference name="android-installLocation" value="auto" />
<icon src="icon.png" />
<gap:splash gap:density="ldpi" gap:platform="android" src="res/screen/android/screen-ldpi-portrait.png" />
<gap:splash gap:density="mdpi" gap:platform="android" src="res/android/screen-mdpi-portrait.png" />
<gap:splash gap:density="hdpi" gap:platform="android" src="res/screen/android/screen-hdpi-portrait.png" />
<gap:splash gap:density="xhdpi" gap:platform="android" src="res/screen/android/screen-xhdpi-portrait.png" />
<gap:splash gap:platform="blackberry" src="res/screen/blackberry/screen-225.png" />
<gap:splash gap:platform="ios" height="480" src="res/screen/ios/screen-iphone-portrait.png" width="320" />
<gap:splash gap:platform="ios" height="960" src="res/screen/ios/screen-iphone-portrait-2x.png" width="640" />
<gap:splash gap:platform="ios" height="1024" src="res/screen/ios/screen-ipad-portrait.png" width="768" />
<gap:splash gap:platform="ios" height="768" src="res/screen/ios/screen-ipad-landscape.png" width="1024" />
<gap:splash gap:platform="winphone" src="res/screen/windows-phone/screen-portrait.jpg" />
<access origin="http://127.0.0.1*" />
icon.png
(128x128)

<icon src="icon.png" />
logo.png
(172x200)
<gap:splash gap:platform="ios" height="480" src="res/screen/ios/screen-iphone-portrait.png" width="320" />

screen-iphone-portrait.png
(320x480)
<gap:splash gap:density="mdpi" gap:platform="android" src="res/screen/android/screen-mdpi-portrait.png" />
Generate icon online

http://www.quirco.com/iPhoneIcon
phonegap-2.9.1/lib/ios/bin/templates/project/www/index.html
<html>
<head>
  <meta charset="utf-8" />
  <meta name="format-detection" content="telephone=no" />
  <meta name="viewport" content="user-scalable=no, initial-scale=1, maximum-scale=1, minimum-scale=1, width=device-width, height=device-height, target-densitydpi=device-dpi" />
  <link rel="stylesheet" type="text/css" href="css/index.css" />
  <title>Hello World</title>
</head>
<body>
  <div class="app">
    <h1>PhoneGap</h1>
    <div id="deviceready" class="blink">
      <p class="event listening">Connecting to Device</p>
      <p class="event received">Device is Ready</p>
    </div>
  </div>
  <script type="text/javascript" src="phonegap.js"></script>
  <script type="text/javascript" src="js/index.js"></script>
  <script type="text/javascript">
    app.initialize();
  </script>
</body>
</html>
Download Zip File: jquery.mobile-1.3.2.zip

(JavaScript, CSS, and images)

Download

CDN-Hosted JavaScript:
- Uncompressed: jquery.mobile-1.3.2.js (useful for debugging)
- Minified: jquery.mobile-1.3.2.min.js (full library, ready to deploy)

CDN-Hosted CSS:
- Uncompressed with Default theme: jquery.mobile-1.3.2.css (useful for debugging)
- Minified with Default theme: jquery.mobile-1.3.2.min.css (full library, ready to deploy)
- Uncompressed structure without a theme:jquery.mobile-1.3.2.css (useful for theme development)
- Minified structure without a theme:jquery.mobile-1.3.2.min.css (full library, ready to deploy)

Copy-and-Paste Snippet for CDN-hosted files (recommended):

```html
<link rel="stylesheet" href="http://code.jquery.com/mobile/1.3.2/jquery.mobile-1.3.2.min.css"/>
<script src="http://code.jquery.com/jquery-1.9.1.min.js"></script>
<script src="http://code.jquery.com/mobile/1.3.2/jquery.mobile-1.3.2.min.js"></script>
```

ZIP File:
If you want to host the files yourself you can download a zip of all the files:
- Zip File: jquery.mobile-1.3.2.zip (JavaScript, CSS, and images)

Microsoft CDN hosted jQuery Mobile files:
- http://www.asp.net/ajaxLibrary/CDN.ashx

Fork jQuery Mobile on GitHub
https://github.com/jquery/jquery-mobile

Change log

Popup
Popup: Cannot save position data through JavaScript/position handling

http://jquerymobile.com/blog/2013/07/19/announcing-jquery-mobile-1-3-2/#download
Demo

Create Hybrid Apps with PhoneGap

https://build.phonegap.com/
Myday Mobile App -> Hybrid App

http://mail.tku.edu.tw/myday/m  ➔  http://mail.tku.edu.tw/myday/app/
PhoneGap Build

Source: https://build.phonegap.com/
<?xml version='1.0' encoding='utf-8'?>
<widget id='com.imtku.smap.mydaymobileapp' version='1.0.0' xmlns='http://www.w3.org/ns/widgets' xmlns:gap='http://phonegap.com/ns/1.0'>
  <name>Myday Mobile App</name>
  <description>
    Myday Mobile App for Prof. Min-Yuh Day, Department of Information Management, Tamkang University
  </description>
  <author email='myday@mail.tku.edu.tw' href='http://mail.tku.edu.tw/myday'>Min-Yuh Day</author>
</widget>
Install PhoneGap

Install

To install, ensure that you have NodeJS installed, then open your command line and run the following:

```
$ sudo npm install -g phonegap
```

Once installation completes, you can invoke `phonegap` on command line for further help.

Usage

```
$ phonegap create my-app
$ cd my-app
$ phonegap run android
```

Learn more at docs.phonegap.com

PhoneGap 2.9.1

Released 05 Nov 2013

PhoneGap 2.9.0

Released 26 Jun 2013

PhoneGap 2.8.1

Released 12 Jun 2013

http://phonegap.com/install/
Node.js is a platform built on Chrome's JavaScript runtime for easily building fast, scalable network applications. Node.js uses an event-driven, non-blocking I/O model that makes it lightweight and efficient, perfect for data-intensive real-time applications that run across distributed devices.

Current Version: v0.10.33

Install

Download API Docs

Node.js on the Road

An Example: Webserver

This simple web server written in Node responds with "Hello World" for every request.

http://nodejs.org/
Install NodeJS

node-v0.10.33.pkg

10.2 MB

Welcome to the Node Installer

This package will install node and npm into /usr/local/bin

The installation was completed successfully.

Node was installed at
/usr/local/bin/node

npm was installed at
/usr/local/bin/npm

Make sure that /usr/local/bin is in your SPATH.
PhoneGape Install

```
$ sudo npm install -g phonegap
```
PhoneGape Install

$ sudo npm install -g phonegap
PhoneGap Usage

$ phonegap create myapp
[phonegap] missing library phonegap/www/3.1.0
[phonegap] downloading https://github.com/phonegap/phonegap-app-hello-world/archive/3.1.0.tar.gz...
[phonegap] created project at /Users/imyday/Development/myapp

$ cd myapp

$ phonegap run android
[phonegap] detecting Android SDK environment...
[phonegap] using the remote environment
[phonegap] compressing the app...
[phonegap] uploading the app...
PhoneGap Usage

```
pc248:desktop imyday$ phonegap create myapp
[phonegap] missing library com.phonegap.helloworld/www/3.6.0
[phonegap] downloading https://github.com/phonegap/phonegap-app-hello-world/archive/3.6.0.tar.gz...
[phonegap] create called with the options /Users/imyday/Desktop/myapp com.phonegap.helloworld HelloWorld
[phonegap] Customizing default config.xml file
[phonegap] created project at /Users/imyday/Desktop/myapp
pc248:desktop imyday$ cd myapp
pc248:myapp imyday$ phonegap run android
[phonegap] detecting Android SDK environment...
[phonegap] using the local environment
[phonegap] adding the Android platform...
```
myapp/

<table>
<thead>
<tr>
<th>Name</th>
<th>Size</th>
<th>Kind</th>
</tr>
</thead>
<tbody>
<tr>
<td>config.xml</td>
<td>5 KB</td>
<td>XML text</td>
</tr>
<tr>
<td>hooks</td>
<td>--</td>
<td>Folder</td>
</tr>
<tr>
<td>platforms</td>
<td>--</td>
<td>Folder</td>
</tr>
<tr>
<td>plugins</td>
<td>--</td>
<td>Folder</td>
</tr>
<tr>
<td>www</td>
<td>--</td>
<td>Folder</td>
</tr>
</tbody>
</table>

Macintosh HD > Users > imyday > Desktop > myapp
myapp/www/
myapp/www/
phonegap-2.9.1/lib/ios/bin/templates/project/www/index.html
<html>
<head>
    <meta charset="utf-8" />
    <meta name="format-detection" content="telephone=no" />
    <meta name="viewport" content="user-scalable=no, initial-scale=1, maximum-scale=1, minimum-scale=1, width=device-width, height=device-height, target-densitydpi=device-dpi" />
    <link rel="stylesheet" type="text/css" href="css/index.css" />
    <title>Hello World</title>
</head>
<body>
    <div class="app">
        <h1>PhoneGap</h1>
        <div id="deviceready" class="blink">
            <p class="event listening">Connecting to Device</p>
            <p class="event received">Device is Ready</p>
        </div>
    </div>
    <script type="text/javascript" src="phonegap.js"></script>
    <script type="text/javascript" src="js/index.js"></script>
    <script type="text/javascript">
        app.initialize();
    </script>
</body>
</html>
<!DOCTYPE html>
<html>
  <head>
    <title>Min-Yuh Day Mobile App</title>
    <meta charset=utf-8 />
    <meta name="viewport" content="width=device-width, initial-scale=1" />
    <script src="http://code.jquery.com/jquery-1.9.1.min.js"></script>
    <link type="text/css" href="http://code.jquery.com/mobile/latest/jquery.mobile.min.css" rel="stylesheet" />
    <script type="text/javascript" src="http://code.jquery.com/mobile/latest/jquery.mobile.min.js"></script>
    <!--PhoneGap-->
    <link rel="stylesheet" type="text/css" href="css/index.css" />
    <script type="text/javascript" src="phonegap.js"></script>
    <script type="text/javascript" src="js/index.js"></script>
    <!--/PhoneGap-->
    <script type="text/javascript">
      app.initialize();
    </script>
  </head>

  <body>
    <div data-role="page" id="MyHome" data-theme="b">
      <div data-role="header" data-theme="b">
        <h1>Min-Yuh Day</h1>
      </div><!-- /header -->

      <div data-role="content">
        <div style="text-align: center">
          <img style="width: 50%; height: 50%" src="http://mail.tku.edu.tw/myday/images/Myday_Photo.jpg">
        </div>
      </div>
    </div>
  </body>
</html>
<!DOCTYPE html>
<html>
  <head>
    <title>Min-Yuh Day Mobile App</title>
    <meta charset=utf-8 />
    <meta name="viewport" content="width=device-width, initial-scale=1" />
    <script src="http://code.jquery.com/jquery-1.9.1.min.js"></script>
    <link type="text/css" href="http://code.jquery.com/mobile/latest/jquery.mobile.min.css" rel="stylesheet" />
    <script type="text/javascript" src="http://code.jquery.com/mobile/latest/jquery.mobile.min.js"></script>
    <!--PhoneGap-->
    <link rel="stylesheet" type="text/css" href="css/index.css" />
    <script type="text/javascript" src="phonegap.js"></script>
    <script type="text/javascript" src="js/index.js"></script>
    <!--PhoneGap-->
    <script type="text/javascript">
      app.initialize();
    </script>
  </head>
</html>
js/index.js

```javascript
var app = {
  initialize: function() {
    this.bindEvents();
  },
  // Bind Event Listeners
  //
  // Bind any events that are required on startup. Common events are:
  // 'load', 'deviceready', 'offline', and 'online'.
  bindEvents: function() {
    document.addEventListener('deviceready', this.onDeviceReady, false);
  },
  // deviceready Event Handler
  //
  // The scope of 'this' is the event. In order to call the 'receivedEvent'
  // function, we must explicitly call 'app.receivedEvent(...);'
  onDeviceReady: function() {
    app.receivedEvent('deviceready');
  },
  // Update DOM on a Received Event
  receivedEvent: function(id) {
    var parentElement = document.getElementById(id);
    var listeningElement = parentElement.querySelector('.listening');
    var receivedElement = parentElement.querySelector('.received');

    listeningElement.setAttribute('style', 'display:none;');
    receivedElement.setAttribute('style', 'display:block;');

    console.log('Received Event: ' + id);
  }
};
```
Download Zip File: jquery.mobile-1.3.2.zip

Download

CDN-Hosted JavaScript:
- Uncompressed: jquery.mobile-1.3.2.js (useful for debugging)
- Minified: jquery.mobile-1.3.2.min.js (full library, ready to deploy)

CDN-Hosted CSS:
- Uncompressed with Default theme: jquery.mobile-1.3.2.css (useful for debugging)
- Minified with Default theme: jquery.mobile-1.3.2.min.css (full library, ready to deploy)
- Uncompressed structure without a theme: jquery.mobile-1.3.2.css (useful for theme development)
- Minified structure without a theme: jquery.mobile-1.3.2.min.css (full library, ready to deploy)

Copy-and-Paste Snippet for CDN-hosted files (recommended):

```html
<link rel="stylesheet" href="http://code.jquery.com/mobile/1.3.2/jquery.mobile-1.3.2.min.css" />
<script src="http://code.jquery.com/jquery-1.9.1.min.js"></script>
<script src="http://code.jquery.com/mobile/1.3.2/jquery.mobile-1.3.2.min.js"></script>
```

ZIP File:
If you want to host the files yourself you can download a zip of all the files:
- Zip File: jquery.mobile-1.3.2.zip (JavaScript, CSS, and images)

Microsoft CDN hosted jQuery Mobile files:
- http://www.asp.net/ajaxLibrary/CDN.asmx

Fork jQuery Mobile on GitHub
https://github.com/jquery/jquery-mobile

Change Log

Pepup
- Provide capabilities to send data through to parent/parent-like handling

http://jquerymobile.com/blog/2013/07/19/announcing-jquery-mobile-1-3-2/#download
<!DOCTYPE html>
<html>
<head>
  <title>Min-Yuh Day Mobile App</title>
  <meta charset=utf-8 />
  <meta name="viewport" content="width=device-width, initial-scale=1" />
  <script src="js/jquery.js"></script>
  <link type="text/css" href="css/jquery.mobile-1.3.2.min.css" rel="stylesheet" />
  <script type="text/javascript" src="js/jquery.mobile-1.3.2.min.js"></script>
  <!--PhoneGap-->
  <link rel="stylesheet" type="text/css" href="css/index.css" />
  <!--
  <script type="text/javascript" src="phonegap.js">
  -->
  <script type="text/javascript" src="js/index.js"></script>
  <!--/PhoneGap-->

  <script type="text/javascript">
    app.initialize();
  </script>

</head>

</html>
PhoneGap Build

Adobe® PhoneGap™ Build
Package mobile apps in the cloud.

Get started!

Take the pain out of developing mobile apps.

Simply upload your HTML5, CSS, and JavaScript assets to the Adobe® PhoneGap™ Build cloud service and we do the work of compiling for you.

https://build.phonegap.com/
PhoneGap Build

Complete your registration

1. Create your account

Sign In

Adobe ID (Email Address)

myday@gmail.com

Password

Create an Adobe ID

Stay signed in

Trouble signing in?

Paid Plan

25 private apps
unlimited open-source apps
unlimited collaborators
PhoneGap Build

Create your account

Choose how you would like to sign in to PhoneGap Build.

Adobe ID

Github

Free Plan

1 private apps
unlimited open-source apps
unlimited collaborators
PhoneGap Build
New source

Choose File app.zip

Please note this is a destructive action. We won't keep a copy of your old code.

Cancel  Upload
Install Myday Mobile App 1.0.0

Android

BlackBerry

Symbian

webOS

Windows Phone

https://build.phonegap.com/apps/573842/install
Myday Mobile App
Myday Mobile App for Prof. Min-Yuh Day, Department of Information Management, Tamkang University

Basic

Source code
Choose File: No file chosen

Settings
Enable debugging
Enable Hydration
Only approved collaborators (listed below) can download this app

https://build.phonegap.com/apps/573842/settings
Configuration

Your application's details are bound to the config.xml file in your application package. To edit these details, change that file and push it back up to us.

app title
Myday Mobile App

package
com.imtk.usmap.mydaymobileapp

version
1.0.0

description
Myday Mobile App for Prof. Min-Yuh Day, Department of Information Management, Tamkang University

https://build.phonegap.com/apps/573842/settings
app title
Myday Mobile App

package
com.imtku.smap.mydaymobileapp

version
1.0.0

Configuration
2.9.0

description
Myday Mobile App for Prof. Min-Yuh Day, Department of Information Management, Tamkang University

Danger Zone

https://build.phonegap.com/apps/573842/settings
Create Hybrid Apps with PhoneGap
Summary

• PhoneGap
  – PhoneGap
  – PhoneGap Build
    • index.html, css, js
    • config.xml
  – PhoneGap, jQuery Mobile

• Demo
  – Create Hybrid Apps with PhoneGap
References

• Learn HTML5 and JavaScript for iOS: Web Standards-based Apps for iPhone, iPad, and iPod touch, Scott Preston, Apress, 2012
• PhoneGap
  – http://phonegap.com/
• PhoneGap Build
  – https://build.phonegap.com/
• jQuery Mobile
  – http://jquerymobile.com/
• Introduction to PhoneGap Build