jQueryMobile & PhoneGap

跨平台手機開發實務

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認識jQueryMobile+PhoneGap

- jQueryMobile (第1章~第7章)
 - HTML5+CSS+JavaScritpt
 - 提供適合手持裝置的UI Layout
- PhoneGap (第8章~第21章)
 - 提供統一的JavaScritpt來操控不同Mobile平台中的硬體設備
 - 可發佈在多個平台
 - 只要會JavaScript即可
 - 完全免費

認識jQueryMobile+PhoneGap

- 螢幕畫面尺寸、長寬比、解析度大不同
 - jQueryMobile藉由HTML、CSS自動調整畫面比例來配合各種尺寸的 Device
- 手機硬體無法由HTML操控
 - Phone Gap提供JavaScript程式庫

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為何jQueryMobile+PhoneGap

- 門檻低
- 成本低
- 快速開發
- 跨平台

開始jQuery Mobile i jQuery: logic, interaction jQuery Mobile: layout,創造符合手機的介面 下載課程資源檔: http://goo.gl/z3imAb 解壓縮後,將jQueryMobile目錄Copy到WebServer上 Mac環境中可複製到/Library/WebServer/Docudiants中 N動Web Server Ta要使用Mac環境中使用內建的Apache Server,開啟「終端機」輸入指令sudo apachect1 restart 使用開發工具撰寫jQueryMobile的網頁: DreamWeaver, Eclipse



jQuery Mobile基本頁面與對話框 Chapter 01

```
**Doctype html>
<html>
<html

<html>
<html

<html>
<html

<html>
<html

<html

<html>
<html

<html>
<html

<html
```

多頁結構 • Sample1- 3.html:注意這裡有兩個page <a h

Title on Ajax Navigation

Sample1-4.html(加上data-title)

```
<div data-role="page" id="home" data-title="Home Page">
...
</div>
<div data-role="page" id="detail" data-title="Detail Page">
...
</div>
```

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帶出下個Page

- Sample1-5.html中以3種方式來帶出Sample1-5-1.html
 - 預設方式: AJAX
 - 對話窗(可設定對話窗出現的方式)
 - 非 Ajax方式

• 若為外部網站的網頁,應為:

Go to Google Map

回到上一頁

• Sample1- 5-1.html中以2種方式來回到Sample1-5.html

```
<a href = "Sample1-5.html" data-role="button">Go Back</a> <a href = "#" data-role="button" data-rel="back">Go Back</a>
```

- 若data-transition用slide,要注意back的方向(
 - Sample1-6.html

 - Sample1-6-1.html

<a href="#" data-role="button" data-icon="back" data-rel="back"
data-transition="slide" data-direction="reverse">Go back

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發mail、打電話、傳簡訊

- Sample1-7.html加入下列button
-
 Mail to Admin
- <a href="mailto:admin@uuu.com.tw?
 cc=patty_tai@uuu.com.tw&subject=Test%20Mail&body=This%20is
 %20a%20test%20from%20HTML5" data-role='button'>Mail to Patty
 with Content
- Make Phone Call to UCOM
-
 Send MSG to Someone

Page Transition

- 10種Transition
 - fade(deault)
 - flip
 - pop
 - turn
 - flow

- slide
- slideup
- slidedown
- slidefade
- none
- Sample1- 8.html加入使用不同Tansition方式的button來帶出 Sample1- 8-1.html

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Page Transition

Sample1-8.html加入下列button

緩存頁面 • 在Smple1-9-1.html加上緩存頁面的設定 -div data-role="page" data-dom-cache="true"> • 小心效能問題



Toolbar

- jQuery Mobile有兩種標準Toolbar
 - Header
 - Footer

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可以調整Toolbar的位置

• Sample2-1.html

















```
數字排序清單

- Sample6-2.html

- Adiv data-role="content">
- Adiv data-role="listview">
- Adiv data-role="l
```



```
搜尋過濾

    Sample6-4.html

       <div data-role="content">
         data-role="listview" data-filter="true" data-filter-placeholder="Keyword">
           <a href="#">jQuery</a>
           data-filtertext="client"><a href="#">HTML5</a>
           data-filtertext="client server"><a href="#">JAVA</a>
           data-filtertext="client server"><a href="#">JavaScript</a>
           data-filtertext="server"><a href="#">PHP</a>
           data-filtertext="client server"><a href="#">SQL</a>
           <a href="#">ColdFusion</a>
           data-filtertext="server"><a href="#">Ruby</a>
           data-filtertext="client server"><a href="#">Objective-C</a>
           data-filtertext="client"><a href="#">CSS</a>
         </⊔/>
       </div>
```

```
搜尋過濾(續)

    Sample6-5.html

       <div data-role="content">
        data-role="listview" data-filter="true" data-filter-placeholder="Keyword">
          data-role="list-divider">Client
            <a href="#">jQuery</a>
            <a href="#">HTML5</a>
            <a href="#">JAVA</a>
            <a href="#">JavaScript</a>
            <a href="#">CSS</a>
          data-role="list-divider">Server
            <a href="#">JAVA</a>
            <a href="#">PHP</a>
            <a href="#">SQL</a>
            <a href="#">ColdFusion</a>
            <a href="#">Ruby</a>
            <a href="#">Objective-C</a>
         </div>
                    ul data-role="listview" data-filter="true" data-filter-placeholder="Keyword" data-autodiv
```

```
Text Formatting & counts

• Sample6-7.html

| div data-role="content">
| ul data-role="listview">
| ul data-role="listview">
| ul><a href="#">Inbox<span class="ui-li-count">5</span></a>
| ul><a href="#">Outbox<span class="ui-li-count">99</span></a>
| ul><a href="#">Drafts<span class="ui-li-count">0</span></a>
| ul><a href="#">Sent<span class="ui-li-count">123</span></a>
| ul><a href="#">Trash<span class="ui-li-count">35</span></a>
| ul><a href="#">Trash<span class="ui-li-count">35</span></a>
| ul><a href="#">Trash<span class="ui-li-count">35</span></a></a>
| div></a>
```





```
Split button lists

Sample6-10.html

| Coliv data-role="content">
| Coliv data-role="content">
| Coliv data-role="istview" data-split-icon="delete">
| Coliv data-role="listview" data-split-icon="delete">
| Coliv data-role="listview
```



撰寫jQueryMobile的事件

- 可以override jQueryMobile的事件
 - 注意要撰寫jQueryMobile的mobileinit事件時,<script>的位置:

```
<script src="jquery.js"></script>
<script scr="自己的Javascript.js"></script>
<script src="jquery.mobile.js"></script>
```

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jQueryMobile自動初始化(續)

- mobileinit事件
- Sample7-1.html

```
IoadingMessage

• Sample7-2.html

<script>
$(document).on("mobileinit", mobileinitHandler);
function mobileinitHandler (){
$.mobile.pageLoadErrorMessage="系統忙碌中, 請稍候再試!";
$.mobile.pageLoadErrorMessageTheme = 'a';
}

function showHandler(){
    //$.mobile.showPageLoadingMsg(); //1.4已不支援此method

$.mobile.loading("show",
    {text: "載入中..., 稍候...", textVisible: true, html: "<b>載入中..., 請稍候...</b>")
    );
}

function hideHandler(){
    //$.mobile.hidePageLoadingMsg(); //1.4已不支援此method
    $.mobile.loading("hide");
}
</script>
```

主用事件 • Sample7-3.html <script> \$(document).on("mobileinit", mobileinitHandler); \$(document).on("click", "#backButton", backButtonHandler); function mobileinitHandler (){ alert("mobileinit"); } function backButtonHandler (){ \$.mobile.changePage("#home"); } </script>

```
Sample7-6.html

<script>
$(document).on("mobileinit", mobileinitHandler);
function mobileinitHandler (){
$.mobile.ns = "ucom-";
}
</script>
<!-- 省略程式碼-->

<a href="NoPage.html" data-ucom-role="button" data-ucom-icon="arrow-r" data-ucom-iconpos="right">External Next</a>
<!-- 省略程式碼-->
```

Swipe事件 swipeleft wiperight w

```
swipe
• Sample7-8.html

<script>
$(document).on("mobileinit", mobileinitHandler);
function mobileinitHandler (){
    $.mobile.defaultPageTransition = "slide";
    $(document).on("pageinit", "#home", homeInitHandler);
}

function homeInitHandler(){
    $(".swipe").bind("swipeleft", function(){
        alert("SWIPE LEFT");
    $.mobile.changePage("#right");
});

$(document).on("swiperight", ".swipe", function(){
        alert("SWIPE RIGHT");
        $.mobile.changePage("#left", {reverse:true});
});
}

$(document).on("swiperight", ".swipe", function(){
        alert("SWIPE RIGHT");
        $.mobile.changePage("#left", {reverse:true});
});
}
```

```
$.mobile.loadPage

• Sample7-10.html

<script>
$(document).on("mobileinit", mobileinitHandler);
function mobileinitHandler(){
    $(document).on("pageinit", "#home",homeInitHandler);
}
function homeInitHandler(){
    $(document).on("click", "#detailButton", detailHandler);
    $.getScript("Detail.js");
}
function detailHandler(){
    $.mobile.changePage("Detail.html", {transition:"slide"});
}
</script>

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```

```
$.mobile.silentScroll

• Sample7-12.html

<script>
$(document).on("mobileinit", mobileinitHandler);
function mobileinitHandler (){
    $(document).on("pageinit", "#home", pageInitHandler);
}

function pageInitHandler(){
    $("#scrollButton").bind("click", function(){
    $.mobile.silentScroll(150);
    });
}
</script>
```

```
mobile.path.isRelativeUrl

• Sample7-14.html

<script>
$(document).on("mobileinit", mobileinitHandler);
function mobileinitHandler (){
    $(document).on("pageinit", "#home", homeInitHandler);
}

function homeInitHandler(){
    $("#checkRelativeButton").bind("click", checkRelativeHandler);
}

function checkRelativeHandler(){
    var url = "../result.png";
    var url = "#anchor";
    var url = "#anchor";
    var resultURL = $.mobile.path.isRelativeUrl(url);
    alert(resultURL);
}

*/script>
```



安裝PhoneGap

- 下載PhoneGap
 - http://phonegap.com/
 - 解壓縮至~/Desktop/app/ 路徑中(解壓縮前請先清空~/Desktop/app/ 的 內容)
- 下載課程練習資源Template
 - http://goo.gl/IPbrNa
 - 解壓縮至 ~/Desktop/app/ 路徑中

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建立iOS專案

- 找到PhoneGap/lib/ios
- 開啟「終端機」,並切換路徑至PhoneGap/lib/ios/bin
- 執行建立專案的指令:

./create ~/Desktop/app/HelloWorld_iOS com.test.HelloWorld HelloWorld

• 用Xcode打開專案並執行之

- 找到PhoneGap/lib/android
- 開啟「Eclipse」確定已安裝Android SDK,並找出其安裝路徑
- 開啟「終端機」,並切換路徑至PhoneGap/lib/android/bin
- 執行下列export PATH指令

export PATH=\${PATH}:/Applications/eclipse/android-sdk-macosx/platform-tools: /Applications/eclipse/android-sdk-macosx/tools

• 執行建立專案的指令:

./create ~/Desktop/app/HelloWorld_android com.test.HelloWorld HelloWorld

• 從「Eclipse」建立新專案對應到剛才建立之專案並測試執行

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在Windows上建立Android專案

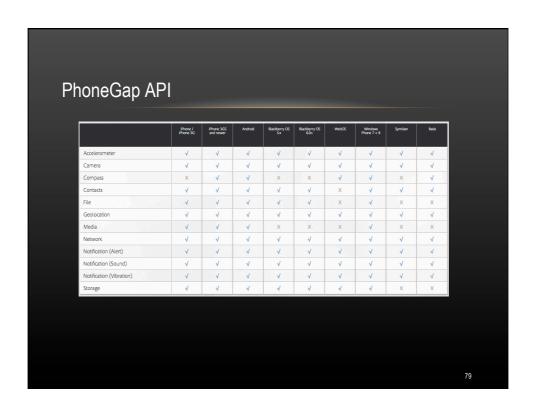
- 找到/PhoneGap/lib/android
- 開啟「Eclipse」確定其中已安裝Android SDK,並找出安裝路徑
- 在PATH環境變數中加入:

...;/Android SDK/platform-tools;/Android SDK/tools;/XXX/ant.bat;

- 執行「cmd」,並切換路徑至/PhoneGap/lib/android/bin
- 執行建立專案的指令:

 $./create \hspace{0.2cm} \verb|~~/Desktop/app/HelloWorld_and roid| \hspace{0.2cm} com.test. HelloWorld| \hspace{0.2cm} HelloWorld| \hspace{0.$

• 從「Eclipse」建立新專案對應到剛才建立的專案並測試執行





Notification

- notification.alert
- notification.confirm
- notification.beep
- notification.vibrate

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初始化事件

- mobileinit
- pageinit
- deviceready

建立iOS專案

- 找到PhoneGap/lib/ios
- 開啟「終端機」,並切換路徑至PhoneGap/lib/los/bir
- 執行建立專案的指令:

./create ~/Desktop/app/Notification_iOS com.test.Notification Notification

- 將HTML5_APP_Template/PhoneGap/Notification/*.*複製到iOS專案的www路徑中
- 用Xcode打開專案,開啟並修改www/index.html

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加上程式(1)

• 開啟專案(/assets)/www/index.html

```
function devicereadyHandler(){
    $("#alertButton"),on("click", function(){
        //alert("Hello");
        navigator.notification.alert("歡迎來到PhoneGap的世界!",
        alertDismissHandler, "Question", "確定");
});

$("#confirmButton").on("click", confirmHandler);

$("#beepButton").on("click", function(){
        navigator.notification.beep(5); //iOS中次數設定無作用
});

$("#vibrateButton").on("click", function(){
        navigator.notification.vibrate(5000);
});
}
```

- 找到PhoneGap/lib/android
- 開啟「終端機」,並切換路徑至PhoneGap/lib/android/bin
- 執行下列export PATH指令

export PATH=\${PATH}:/Applications/eclipse/android-sdk-macosx/platform-tools: /Applications/eclipse/android-sdk-macosx/tools

• 執行建立專案的指令:

./create ~/Desktop/app/Notification_android com.test.Notification Notification

- 將HTML5_APP_Template/PhoneGap/Notification/*.*複製到此專案的assets/ www路徑中
- 將iOS改好的index.html複製到此專案的assets/www路徑中
- 從「Eclipse」建立新專案對應到剛才建立之專案並測試執行



Device

- device.mode
- device.cordova
- device.platform
- device.uuid
- device.version

建立iOS專案

- 找到PhoneGap/lib/ios
- 開啟「終端機」,並切換路徑至PhoneGap/lib/los/bir
- 執行建立專案的指令:

```
./create ~/Desktop/app/Device_iOS com.test.Device Device
```

- 將HTML5_APP_Template/PhoneGap/Device/*.*複製到iOS專案 的www路徑中
- 用Xcode打開專案,開啟並修改www/index.html

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加上程式

• 開啟專案(/assets)/www/index.html

```
$(document).ready(function(e) {
    $(document).on("deviceready", deviceReadyHandler);
});

function deviceReadyHandler(){
    var info = "Name: " + device.model + "<br>";
    info += "Cordova: " + device.cordova + "<br>";
    info += "Platform: " + device.platform + "<br>";
    info += "Version: " + device.version + "<br>";
    info += "UUID: " + device.uuid;
    $("#status").html(info);
}
```

- 找到PhoneGap/lib/android
- 開啟「終端機」,並切換路徑至PhoneGap/lib/android/bin
- 執行下列export PATH指令

export PATH=\${PATH}:/Applications/eclipse/android-sdk-macosx/platform-tools: /Applications/eclipse/android-sdk-macosx/tools

• 執行建立專案的指令:

./create ~/Desktop/app/Device_android com.test.Device Device

- 將HTML5_APP_Template/PhoneGap/Device/*.*複製到此專案的assets/www 路徑中
- 將iOS改好的index.html複製到此專案的assets/www路徑中
- 從「Eclipse」建立新專案對應到剛才建立之專案並測試執行

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PhoneGap Event API

第十一章

事件類型

- deviceready
- pause
- resume
- online
- offline
- batterycritical
- batterylow
- batterystatus

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建立iOS專案

- 找到PhoneGap/lib/ios
- 開啟「終端機」,並切換路徑至PhoneGap/lib/ios/bin
- 執行建立專案的指令:

./create ~/Desktop/app/Event_iOS com.test.Event Event

- 將HTML5_APP_Template/PhoneGap/Event/*.*複製到iOS專案的 www路徑中
- 用Xcode打開專案,開啟並修改www/index.html

```
加上程式(1)

• 開啟專案(/assets)/www/index.html

$(document).ready(function(e) {
    $(document).on("deviceready", deviceReadyHandler);

$(document).on("pause", function(){$("#log").append("Pause!");});

$(document).on("resume", function(){$("#log").append("Resume!");});

$(document).on("online", function(){
    $("#log").append("On Line!");
    $("#log").append("OnLine Type: " + navigator.connection.type + "");
});

$(document).on("offline", function(){
    $("#log").append("Off Line!");
});

// 後面還有...
});
```

```
加上程式(2)

$(document).ready(function(e) {
    //前面省略....
$(document).on("batterycritical", function(info){
        $("#log").append("Battery Critical: " + info.level +"%
    });

$(document).on("batterylow", function(info){
        $("#log").append("Battery Low: " + info.level +"%
    });

$(document).on("batterystatus", function(info){
        $("#log").append("Battery Status: " + info.level +"%
    });

});
```

- 找到PhoneGap/lib/android
- 開啟「終端機」,並切換路徑至PhoneGap/lib/android/bin
- 執行下列export PATH指令

export PATH=\${PATH}:/Applications/eclipse/android-sdk-macosx/platform-tools: /Applications/eclipse/android-sdk-macosx/tools

• 執行建立專案的指令:

./create ~/Desktop/app/Event_android com.test.Event Event

- 將HTML5_APP_Template/PhoneGap/Event/*.*複製到此專案的assets/www路
 徑中
- 將iOS改好的index.html複製到此專案的assets/www路徑中
- 從「Eclipse」建立新專案對應到剛才建立之專案並測試執行

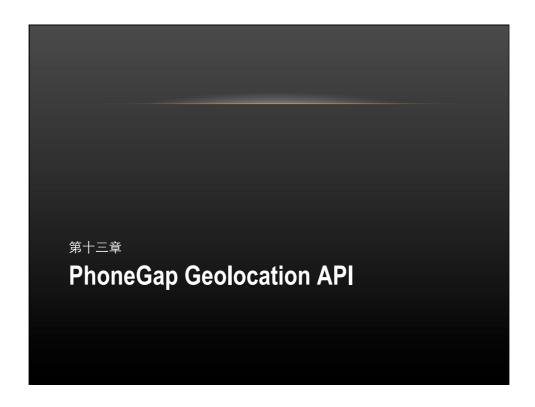
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第十二章

PhoneGap Connection API

```
    connection.type(直接用11章的練習)
    $(document).on("deviceready", function (){
        alert('Connection type: ' + checkConnection());
});
    function checkConnection() {
        var networkState = navigator.connection.type;

        var states = {};
        states[Connection.UNKNOWN] = 'Unknown connection';
        states[Connection.ETHERNET] = 'Ethernet connection';
        states[Connection.WIFI] = 'WiFi connection';
        states[Connection.CELL_2G] = 'Cell 2G connection';
        states[Connection.CELL_3G] = 'Cell 3G connection';
        states[Connection.CELL_4G] = 'Cell 4G connection';
        states[Connection.NONE] = 'No network connection';
        return states[networkState];
    }
```



Geolocation

- geolocation.getCurrentPosition
- geolocation.watchPosition
- geolocation.clearWatch

建立iOS專案

- 找到PhoneGap/lib/ios
- 開啟「終端機」,並切換路徑至PhoneGap/lib/los/bin
- 執行建立專案的指令:

./create ~/Desktop/app/Geolocation_ios com.test.Geolocation Geolocation

- 將HTML5_APP_Template/PhoneGap/Geolocation/*.*複製到iOS 專案的www路徑中
- 用Xcode打開專案,開啟並修改www/index.html

```
geolocation程式(3)

function stopButtonHandler() {
    if(navigator.geolocation){
        navigator.geolocation.clearWatch(watchID);
    }
    $("#info").html("停止定位服務");
    times=0;
}
```

- 找到PhoneGap/lib/android
- 開啟「終端機」,並切換路徑至PhoneGap/lib/android/bin
- 執行下列export PATH指令

export PATH=\${PATH}:/Applications/eclipse/android-sdk-macosx/platform-tools: /Applications/eclipse/android-sdk-macosx/tools

• 執行建立專案的指令:

/create ~/Desktop/app/Geolocation_android com.test.Geolocation Geolocation

- 將HTML5_APP_Template/PhoneGap/Geolocation/*.*複製到此專案的assets/ www路徑中
- 將iOS改好的index.html複製到此專案的assets/www路徑中
- 從「Eclipse」建立新專案對應到剛才建立之專案並測試執行

^{第14章} PhoneGap Compass API

Compass

- compass.getCurrentHeading
- compass.watchHeading
- compass.clearWatch

建立iOS專案

- 找到PhoneGap/lib/ios
- 開啟「終端機」,並切換路徑至<mark>PhoneGap/lib/los/bir</mark>
- 執行建立專案的指令:

```
./create ~/Desktop/app/Compass_ios com.test.Compass Compass
```

- 將HTML5_APP_Template/PhoneGap/Compass/*.*複製到iOS專 案的www路徑中
- 用Xcode打開專案,開啟並修改www/index.html

Compass

```
function devicereadyHandler() {
    navigator.compass.watchHeading(successHandler, errorHandler, {frequency:100});
}

function successHandler(e){
    var headingInfo = parseInt(e.magneticHeading);
    $("#degree").text(headingInfo);
}

function errorHandler(){
    navigator.notification.alert("Compass service is not avaiable!", null, "ERROR", "OK");
}
```

- 找到PhoneGap/lib/android
- 開啟「終端機」,並切換路徑至PhoneGap/lib/android/bin
- 執行下列export PATH指令

export PATH=\${PATH}:/Applications/eclipse/android-sdk-macosx/platform-tools: /Applications/eclipse/android-sdk-macosx/tools

• 執行建立專案的指令:

./create ~/Desktop/app/Compass_android com.test.Compass Compass

- 將HTML5_APP_Template/PhoneGap/Compass/*.*複製到此專案的assets/ www路徑中
- 將iOS改好的index.html複製到此專案的assets/www路徑中
- 從「Eclipse」建立新專案對應到剛才建立之專案並測試執行

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第15章 PhoneGap Acceleration API

Acceleration

- accelerometer.getCurrentAcceleration()
- accelerometer.watchAcceleration()
- accelerometer.clearWatch ()

建立iOS專案

- 找到PhoneGap/lib/ios
- 開啟「終端機」,並切換路徑至PhoneGap/lib/los/bin
- 執行建立專案的指令:

./create ~/Desktop/app/Accelerometer_ios com.test.Accelerometer Accelerometer

- 將HTML5_APP_Template/PhoneGap/Accelerometer/*.*複製到 iOS專案的www路徑中
- 用Xcode打開專案,開啟並修改www/index.html

- 找到PhoneGap/lib/android
- 開啟「終端機」,並切換路徑至PhoneGap/lib/android/bin
- 執行下列export PATH指令

export PATH=\${PATH}:/Applications/eclipse/android-sdk-macosx/platform-tools: /Applications/eclipse/android-sdk-macosx/tools

• 執行建立專案的指令:

./create ~/Desktop/app/Accelerometer_android com.test.Accelerometer Accelerometer

- 將HTML5_APP_Template/PhoneGap/Accelerometer/*.*複製到此專案的 assets/www路徑中
- 將iOS改好的index.html複製到此專案的assets/www路徑中
- 從「Eclipse」建立新專案對應到剛才建立之專案並測試執行

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第16章 PhoneGap Camera API

Camera

- camera.getPicture(successHandler, errorHandler,
- {options,...})
- options:
 - sourceType
 - destinationType
 - allowEdit
 - quality
 - encodingType

建立iOS專案

- 找到PhoneGap/lib/ios
- 開啟「終端機」,並切換路徑至PhoneGap/lib/ios/bin
- 執行建立專案的指令:

./create ~/Desktop/app/Camera_ios com.test.Camera Camera

- 將HTML5_APP_Template/PhoneGap/Camera/*.*複製到iOS專案的www路徑中
- 用Xcode打開專案,開啟並修改www/index.html

```
function pageInitHandler(){
    $("#shootButoon").on("click", function(){
    /*
    navigator.camera.getPicture(successHandler, errorHandler,
    { "sourceType":Camera.PictureSourceType.PHOTOLIBRARY,
        "destinationType":Camera.DestinationType.DATA_URL}); //FILE_URI
    */

    navigator.camera.getPicture(successHandler, errorHandler, {
        "sourceType":Camera.PictureSourceType.CAMERA,
        "destinationType":Camera.DestinationType.DATA_URL,
        "allowEdit":false, "quality":50,"encodingType":Camera.EncodingType.JPEG});
}

function successHandler(imageData){
    //$("#photo").get(0).src=imageData; //FILE_URI
    $("#photo").get(0).src="data:image/jpeg;base64," + imageData; //DATA_URL
}
```

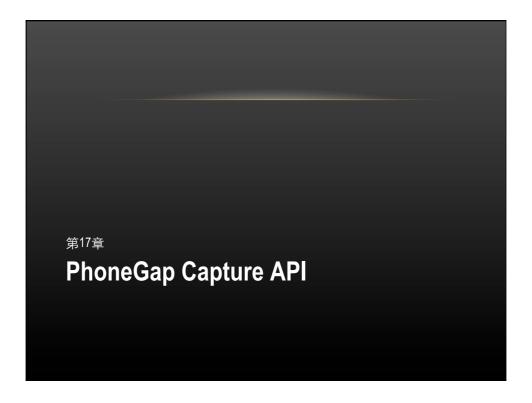
- 找到PhoneGap/lib/android
- 開啟「終端機」,並切換路徑至PhoneGap/lib/android/bin
- 執行下列export PATH指令

export PATH=\${PATH}:/Applications/eclipse/android-sdk-macosx/platform-tools: /Applications/eclipse/android-sdk-macosx/tools

執行建立專案的指令:

./create ~/Desktop/app/Camera_android com.test.Camera Camera

- 將HTML5_APP_Template/PhoneGap/Camera/*.*複製到此專案的assets/www 路徑中
- 將iOS改好的index.html複製到此專案的assets/www路徑中
- 從「Eclipse」建立新專案對應到剛才建立之專案並測試執行



Capture

- capture.captureAudio
- capture.captureImage
- capture.captureVideo

建立iOS專案

- 找到PhoneGap/lib/ios
- 開啟「終端機」,並切換路徑至<mark>PhoneGap/lib/ios/bin</mark>
- 執行建立專案的指令:

```
./create ~/Desktop/app/Capture_ios com.test.Capture Capture
```

- 將HTML5_APP_Template/PhoneGap/Capture/*.*複製到iOS專案 的www路徑中
- 用Xcode打開專案,開啟並修改www/index.html

Capture

- 找到PhoneGap/lib/android
- 開啟「終端機」,並切換路徑至PhoneGap/lib/android/bin
- 執行下列export PATH指令

export PATH=\${PATH}:/Applications/eclipse/android-sdk-macosx/platform-tools: /Applications/eclipse/android-sdk-macosx/tools

• 執行建立專案的指令:

./create ~/Desktop/app/Capture_android com.test.Capture Capture

- 將HTML5_APP_Template/PhoneGap/Capture/*.*複製到此專案的assets/www 路徑中
- 將iOS改好的index.html複製到此專案的assets/www路徑中
- 從「Eclipse」建立新專案對應到剛才建立之專案並測試執行

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第18章 PhoneGap Media API

Media

- media.getCurrentPosition
- media.getDuration
- media.play
- media.pause
- media.release
- media.seekTo
- media.startRecord
- media.stopRecord
- media.stop

建立iOS專案

- 找到PhoneGap/lib/ios
- 開啟「終端機」,並切換路徑至PhoneGap/lib/los/bin
- 執行建立專案的指令:

/create ~/Desktop/app/Media_ios com.test.Media Media

- 將HTML5_APP_Template/PhoneGap/Media/*.*複製到iOS專案 的www路徑中
- 用Xcode打開專案,開啟並修改www/index.html

```
Media 鉅何(2)

function pauseButtonHandler(){
    if(media){
        media.pause();
    }
}

function stopButtonHandler(){
    if(media){
        media.stop();
        media.release();
        media = undefined;
    }
}
```

- 找到PhoneGap/lib/android
- 開啟「終端機」,並切換路徑至PhoneGap/lib/android/bin
- 執行下列export PATH指令

export PATH=\${PATH}:/Applications/eclipse/android-sdk-macosx/platform-tools: /Applications/eclipse/android-sdk-macosx/tools

• 執行建立專案的指令:

./create ~/Desktop/app/Media_android com.test.Media Media

- 將HTML5_APP_Template/PhoneGap/Media/*.*複製到此專案的assets/www 路徑中
- 將iOS改好的index.html複製到此專案的assets/www路徑中
- 從「Eclipse」建立新專案對應到剛才建立之專案並測試執行

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第19章

WebService in Phonegap

使用jQuery來傳送ajax請求 * \$.ajax({...}) * url: urlStr, * type:"POST", * dataType: "xml", * contentType: "text/xml; charset=utf-8", * data: soapMessage, * beforeSend: function(xhr){...} * xhr.setRequestHeader("header", "value"); * success: processSuccessHandler, * error: processErrorHandler, * complete: processCompleteHandler

處理xml

- window.XMLSerializer
 - 或用xhr.xml來取得xml
- \$.parseXML(xml

建立iOS專案

- 找到PhoneGap/lib/ios
- 開啟「終端機」,並切換路徑至PhoneGap/lib/los/bin
- 執行建立專案的指令:

```
./create ~/Desktop/app/WebService_ios com.test.WebService WebService
```

- 將HTML5_APP_Template/PhoneGap/WebService/*.*複製到iOS 專案的www路徑中
- 用Xcode打開專案,開啟並修改www/index.html

程式示範(1)

```
function convertHandler (){
    //前面省略...請看上一頁
    //這裡要呼叫ajax...
    try{
        $.ajax({
            uf: "http://www.webserviceX.NET/CurrencyConvertor.asmx",
            type:"POST",
            dataType: "xml",
            contentType: "text/xml; charset=utf-8",
            data: soapMessage,
            beforeSend: function(xhr){
                 xhr.setRequestHeader("SOAPAction", "http://www.webserviceX.NET/ConversionRate");
        },
        success: processSuccessHandler,
        error: processErrorHandler,
        complete: processCompleteHandler
    });
    $.mobile.loading("show");
    /catch(err){
        alert("error." + err);
    }
}
```

```
function processSuccessHandler(xmlHttpRequest, status){
    var xml;
    if (window.XMLSerializer!=undefined) {
        xml = (new window.XMLSerializer()).serializeToString(xmlHttpRequest);
        //alert("XMLSerializer:" + xml);
    }else if(xmlHttpRequest.xml!=undefined) {
        xml = xmlHttpRequest.xml! + xmlHttpRequest.xml);
    }
    var xmlDoc = $.parseXML(xml),
    $xml = $(xmlDoc),
    $title = $xml.find( "ConversionRateResult");
    $("#result").val($title.text());
}
```

```
function processErrorHandler(xhr, status, error){
    var errMsg;
    if(status=="error"){
        errMsg = "無法取得服務,請更正或稍候再試!"; //"status:"+ status + ", error:" + error;
    }else{
        errMsg = "無法取得服務,請稍候再試! ";
    }
    if(navigator.notification){
        navigator.notification.alert(errMsg);
    }else{
        alert(errMsg);
    }
}

function processCompleteHandler(xmlHttpRequest, status){
    //alert("complete: " + xmlHttpRequest + ", status:" + status);
    $.mobile.loading("hide");
}
```

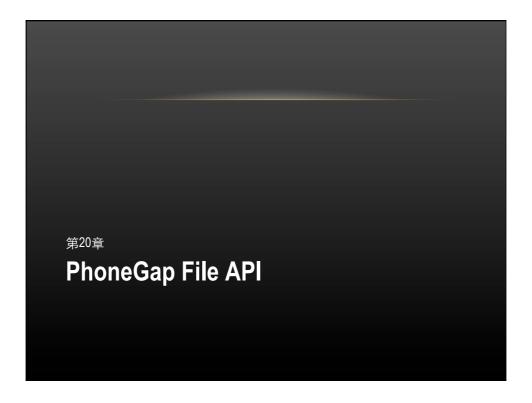
- 找到PhoneGap/lib/android
- 開啟「終端機」,並切換路徑至PhoneGap/lib/android/bin
- 執行下列export PATH指令

export PATH=\${PATH}:/Applications/eclipse/android-sdk-macosx/platform-tools: /Applications/eclipse/android-sdk-macosx/tools

執行建立專案的指令:

./create ~/Desktop/app/WebService_android com.test.WebService WebService

- 將HTML5_APP_Template/PhoneGap/WebService/*.*複製到此專案的assets/ www路徑中
- 將iOS改好的index.html複製到此專案的assets/www路徑中
- 從「Eclipse」建立新專案對應到剛才建立之專案並測試執行



File • File Entry • Directory Entry

建立iOS專案

- 找到PhoneGap/lib/ios
- 開啟「終端機」,並切換路徑至<mark>PhoneGap/lib/los/bir</mark>
- 執行建立專案的指令:

```
./create ~/Desktop/app/File_ios com.test.File File
```

- 將HTML5_APP_Template/PhoneGap/File/*.*複製到iOS專案的 www路徑中
- 用Xcode打開專案,開啟並修改www/index.html

File範例(1) 取得FileSystem

```
function deviceHandler(){
    $(document).on("click", "#createDirButton", createHandler);
    $(document).on("click", "#istDirButton", listHandler);
    $(document).on("click", "#removeDirButton", removeHandler);
    $(document).on("click", "#removeDirButton", removeHandler);
    $(document).on("click", "#writeFileButton", writeFileHandler);
    $(document).on("click", "#removeFileButton", removeFileHandler);
}

function createHandler(){
    fs.root.getDirectory("newDir", {create:true}, createDirSuccessHandler, errorHandler);
}

function createDirSuccessHandler(dirEntry){
    newDir = dirEntry;
    logData("getDirectory Success!");
}
```

```
File範例(3) List

function listHandler(){
   var docReader = fs.root.createReader();
   docReader.readEntries(listDirSuccessHandler, errorHandler);
}

function listDirSuccessHandler(entries){
   logData("You found" + entries.length + " entries:");
   for(var i=0;i<entries.length;i++){
      logData(entries[i].name);
   }
}
```

```
File範句(4) remove Dir

function removeHandler(){
    if(newDir){
        newDir.remove(removeDirSuccessHandler, errorHandler);
    }else{
        errorHandler();
    }
}

function removeDirSuccessHandler(){
    logData("Remove dir success.");
}
```

```
File 範 何(6) Write File

function writeFileHandler(){
    if(sampleFile){
        sampleFile.createWriter(fileWriterHandler, errorHandler); //取得檔案的fileWriter
    }else{
        errorHandler("");
    }
}

function fileWriterHandler(writer){
    //writer.onload = fileWriterCompleteHandler;
    writer.onwriteend = fileWriterCompleteHandler;
    writer.write($("#editor").val());
}

function fileWriterCompleteHandler(){
    alert("write File!");
    logData("Write Complete!");
}
```

```
File範例(7) remove File

function removeHandler(){
    if(sampleFile){
        sampleFile.remove(removeFileSuccessHandler, errorHandler);
    }else{
        errorHandler();
    }
}

function removeFileSuccessHandler (){
    logData("Remove File Success.");
}
```

在Mac OS建立Android專案

- 找到PhoneGap/lib/android
- 開啟「終端機」,並切換路徑至PhoneGap/lib/android/bin
- 執行下列export PATH指令

export PATH=\${PATH}:/Applications/eclipse/android-sdk-macosx/platform-tools: /Applications/eclipse/android-sdk-macosx/tools

• 執行建立專案的指令:

./create ~/Desktop/app/File_android com.test.File File

- 將HTML5_APP_Template/PhoneGap/File/*.*複製到此專案的assets/www路 徑中
- 將iOS改好的index.html複製到此專案的assets/www路徑中
- 從「Eclipse」建立新專案對應到剛才建立之專案並測試執行

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第21章 PhoneGap Storage API

Storage

- window.openDatabase
- Database
 - transaction
 - changeVersion
- SQLTransaction
 - executeSql
- SQLResultSet

建立iOS專案

- 找到PhoneGap/lib/ios
- 開啟「終端機」,並切換路徑至PhoneGap/lib/ios/bin
- 執行建立專案的指令:

./create ~/Desktop/app/Storage_ios com.test.Storage Storage

- 將HTML5_APP_Template/PhoneGap/Storage/*.*複製到iOS專案 的www路徑中
- 用Xcode打開專案並修改專案

```
Storage 節何- CreateTable

function createDBTransactionSuccessHandler(sqlTransaction){//執行Transaction成功
//alert("sqlTransaction");
sqlTransaction.executeSql("DROP TABLE IF EXISTS demo")
var sqlValue = "CREATE TABLE demo (id INTEGER PRIMARY KEY AUTOINCREMENT, name
TEXT)";
sqlTransaction.executeSql(sqlValue);
}

function createDbSQLSuccessHandler(){//執行SQL成功
$("#log").append("<|>Create DB Table Success.")
}

function errorHandler(){//執行Transaction失敗
navigator.notification.alert("SQLite has some problem!", null, "Error", "OK");
}
```

```
function insertDBTransactionSuccessHandler(sqlTransaction){//執行Transaction成功 //alert("insertDBTransactionSuccessHandler");
var nameValue = $("#nameInput").val();
var sqlValue = "INSERT INTO demo (name) VALUES("" + nameValue + "")";
sqlTransaction.executeSql(sqlValue);
$("#log").append("<ii>"+sqlValue+"</ii>");
}

function insertDBSQLSuccessHandler(){//執行SQL成功
$("#log").append("<ii>INSERT DB Table Success.</ii>");
}
```

在Mac OS建立Android專案

- 找到PhoneGap/lib/android
- 開啟「終端機」,並切換路徑至PhoneGap/lib/android/bin
- 執行下列export PATH指令

export PATH=\${PATH}:/Applications/eclipse/android-sdk-macosx/platform-tools: /Applications/eclipse/android-sdk-macosx/tools

• 執行建立專案的指令:

./create ~/Desktop/app/Storage_android com.test.Storage Storage

- 將HTML5_APP_Template/PhoneGap/Storage/*.*複製到此專案的assets/www 路徑中
- 將iOS改好的index.html複製到此專案的assets/www路徑中
- 從「Eclipse」建立新專案對應到剛才建立之專案並測試執行

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第22章 PhoneGap Contacts API

Contacts

- contacts
 - create
 - find
- Contact
 - remove
 - save

建立iOS專案

- 找到PhoneGap/lib/ios
- 開啟「終端機」,並切換路徑至PhoneGap/lib/los/bin
- 執行建立專案的指令:

./create ~/Desktop/app/Contacts_ios com.test.Contacts Contacts

- 將HTML5_APP_Template/PhoneGap/Contacts/*.*複製到iOS專 案的www路徑中
- 用Xcode打開專案,開啟並修改www/index.html

```
Contacts章行 (1) find Contacts

function pageInitHandler(){
    $("#searchButton").on("click", function(){
    var keyword = $("#keyword").val();
    var option = new ContactFindOptions();
    option.filter = keyword;
    option.multiple = true;
    navigator.contacts.find(fields, findSuccessHandler, errorHandler, option);
});

$("#addButton").on("click", addContactHandler);
}
```

```
Contacts 氧色 (为) (2) find Contacts

function findSuccessHandler(contacts){
    console.log(contacts);
    s("#count").text(contacts.length);
    $("#isit").html(""); //清空清單

    for(var i=0; i<contacts.length; i++){
        console.log(contacts[i]).name.familyName==null ? "" :
        contacts[i].name.familyName);
        name+=((contacts[i]).name.givenName)==null ? "" : contacts[i].name.givenName);
        console.log(name);

    $("#list").append("<|i>" + name + "</|i>");
    }
}
```

Contacts範例(3) Add Contacts

```
function addContactHandler(){
  var familyName = $("#keyword").val();
  alert(familyName);
  var contact = navigator.contacts.create();
  contact.name = {"familyName":familyName};
  contact.save();
  navigator.notificaton.alert("Add Contact success!", null, "Contact", "OK");
  }
  function errorHandler(){
   navigator.notificaton.alert("Find contacts failed!", null, "ERROR", "OK");
}
```

在Mac OS建立Android專案

- 找到PhoneGap/lib/android
- ▶ 開啟「終端機」,並切換路徑至PhoneGap/lib/android/bin
- 執行下列export PATH指令

export PATH=\${PATH}:/Applications/eclipse/android-sdk-macosx/platform-tools: /Applications/eclipse/android-sdk-macosx/tools

• 執行建立專案的指令:

./create ~/Desktop/app/Contacts_android com.test.Contacts Contacts

- 將HTML5_APP_Template/PhoneGap/ontacts/*.*複製到此專案的assets/www 路徑中
- 將iOS改好的index.html複製到此專案的assets/www路徑中
- 從「Eclipse」建立新專案對應到剛才建立之專案並測試執行

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