

HTML5 手機APP 開發 (使用 PhoneGap) PhoneGap 專案建置

Matis Hsiao

學習目標

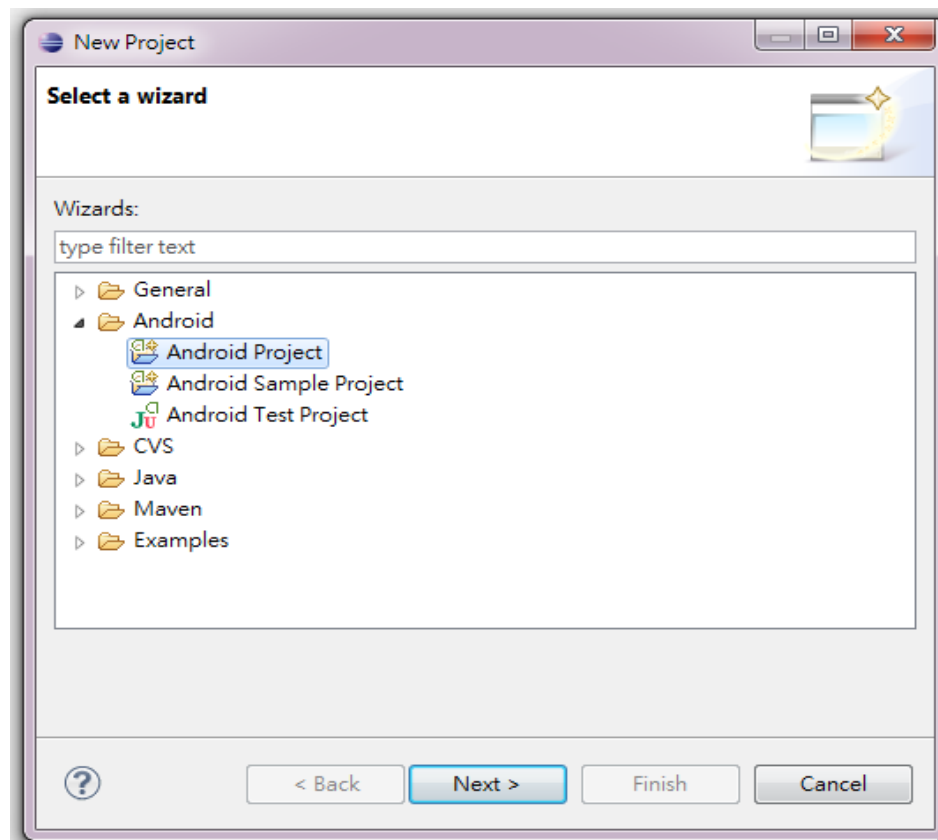
□ 學習建立PhoneGap專案

課程大綱

- 設定PhoneGap SDK
- Hello World實作
- 使用Android模擬器測試

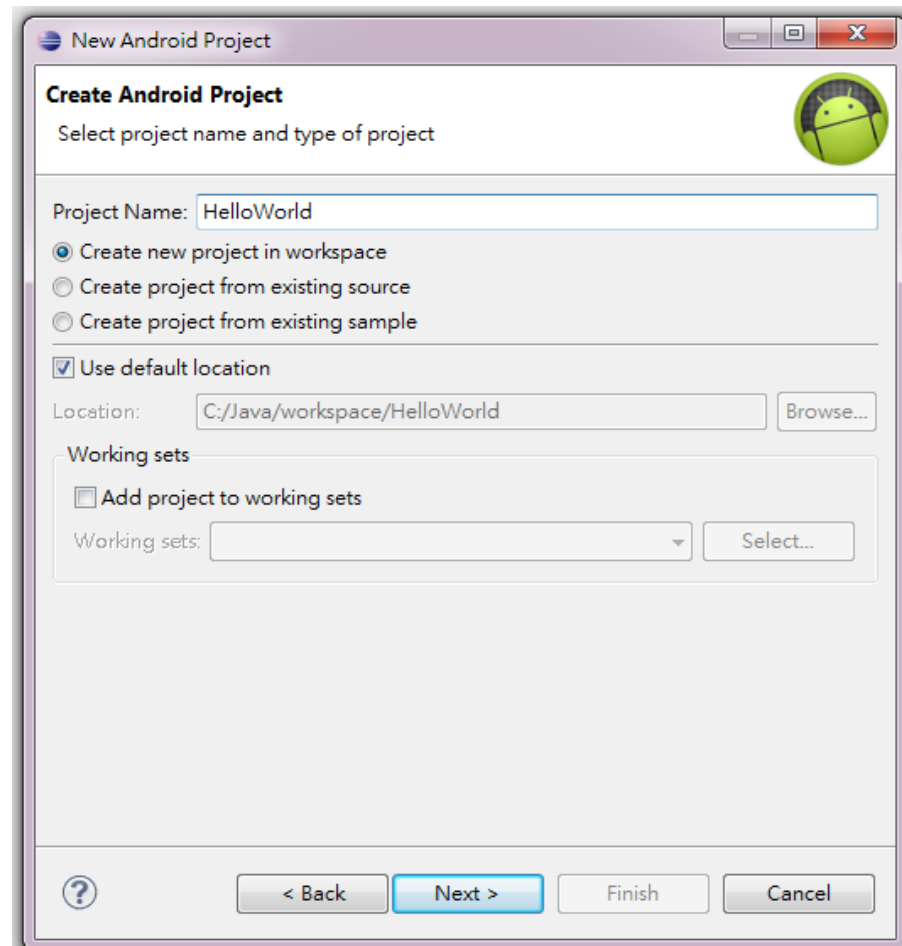
PhoneGap專案建立

- 1.選擇Eclipse工具列
- 2.File分頁-> New分頁 -> Project按鈕
- 3.開啟以下畫面並選擇Android Project



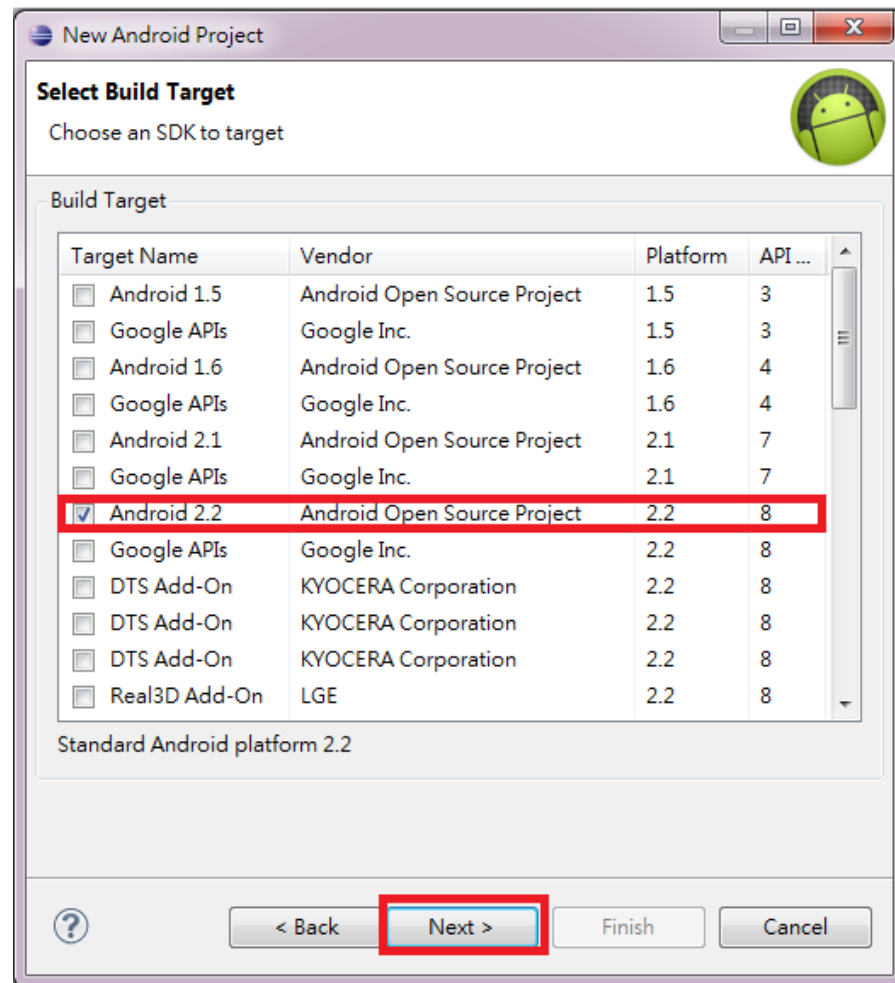
PhoneGap專案建立

1. 在Project Name輸入專案名稱



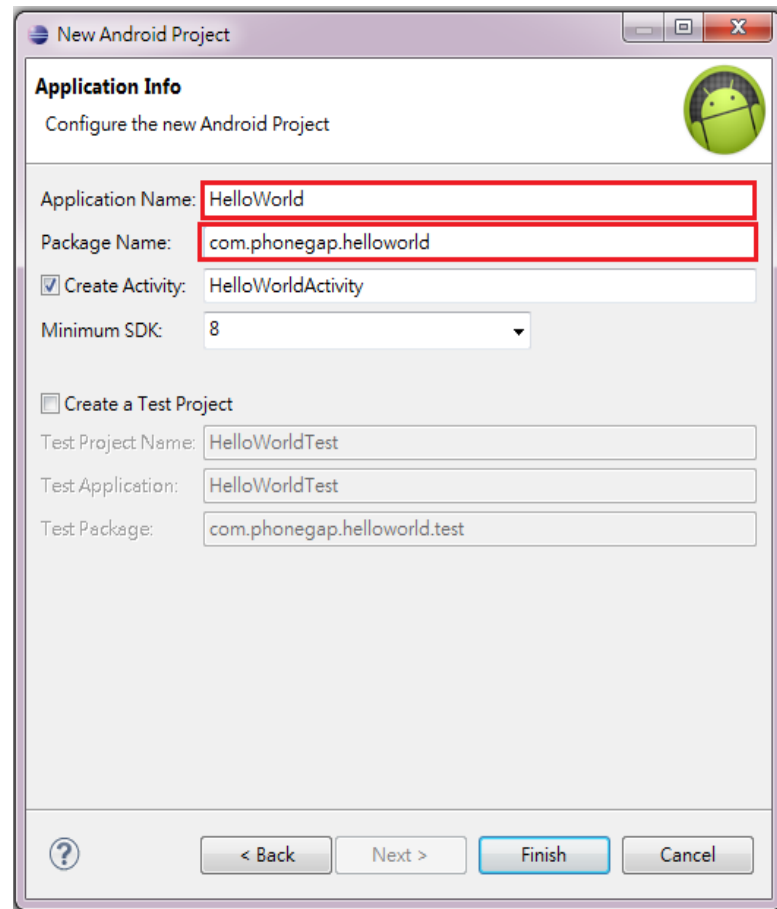
選擇Android OS版本

□ 請選擇Android 2.2並點擊Next按鈕



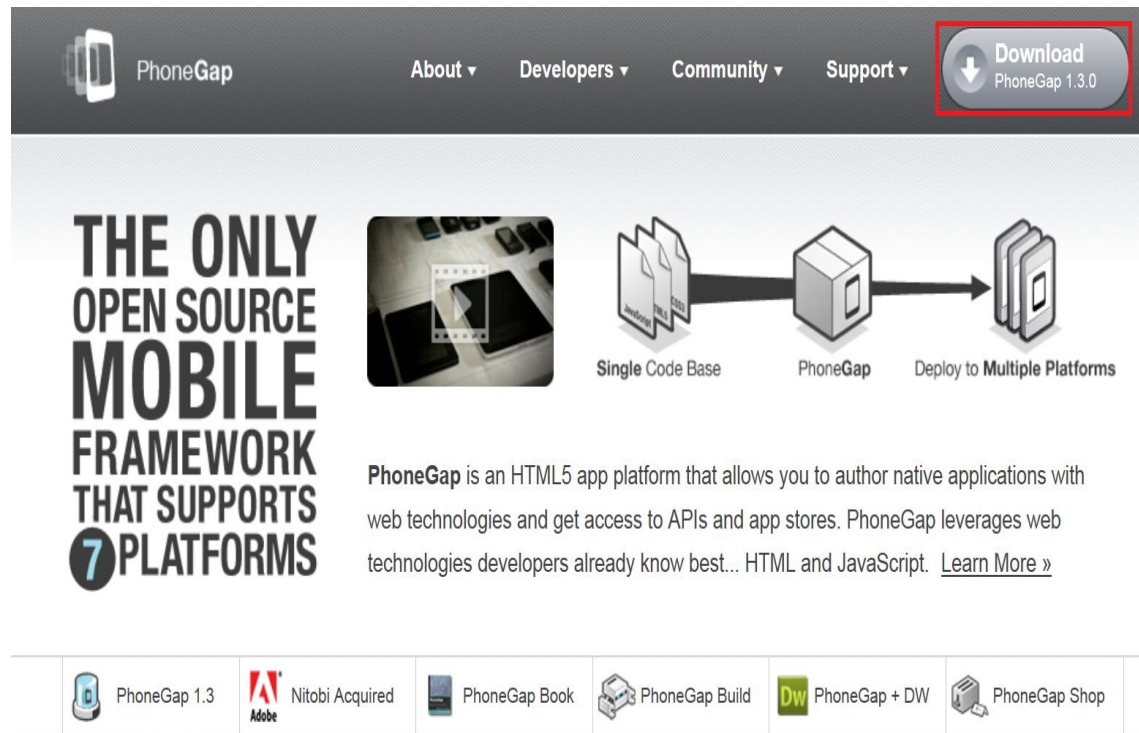
設定專案資訊

- ▣ 1.Application Name:應用程式名稱
- ▣ 2.Package Name:類別名稱
- ▣ 3.點擊Finish按鈕完成專案建立



下載 PhoneGap

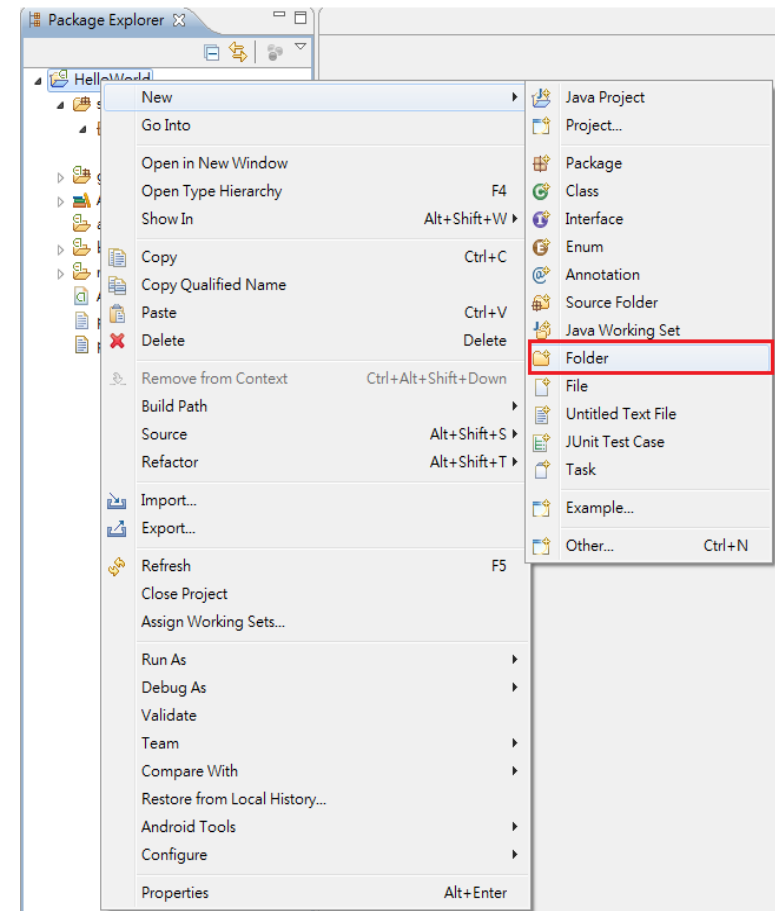
- 點擊 Download Phonegap 按鈕下載
- 網址 <http://phonegap.com/download-thankyou>



The screenshot shows the PhoneGap website. At the top, there is a navigation bar with links: About, Developers, Community, Support, and a prominent 'Download PhoneGap 1.3.0' button highlighted with a red box. Below the navigation bar, the main content area features the text 'THE ONLY OPEN SOURCE MOBILE FRAMEWORK THAT SUPPORTS 7 PLATFORMS' on the left. In the center, there is a diagram illustrating the workflow: 'Single Code Base' (represented by a folder icon) leads to 'PhoneGap' (represented by a cube icon), which then leads to 'Deploy to Multiple Platforms' (represented by three overlapping mobile device icons). Below this diagram, a paragraph describes PhoneGap as an HTML5 app platform that allows authors to create native applications using web technologies and APIs. It mentions that PhoneGap leverages web technologies developers already know, such as HTML and JavaScript, and includes a 'Learn More »' link. At the bottom of the page, there is a footer section with several links: PhoneGap 1.3, Nitobi Acquired (with Adobe logo), PhoneGap Book, PhoneGap Build, PhoneGap + DW (with DW logo), and PhoneGap Shop.

建立PhoneGap所需目錄

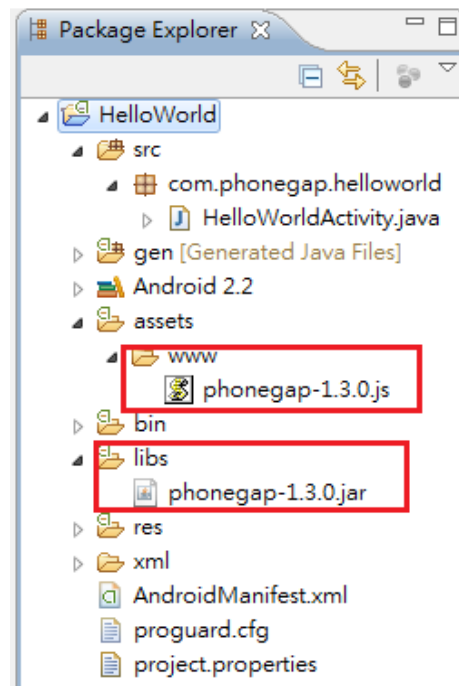
- 1. 在Package Explorer選擇
- 剛建立的專案點擊右鍵
- 2. 選擇New->Folder建立
- 下列目錄：
 - ❖ 1. 專案根目錄/libs
 - ❖ 2. 專案根目錄/assets/www



設定PhoneGap函式庫及網頁根目錄

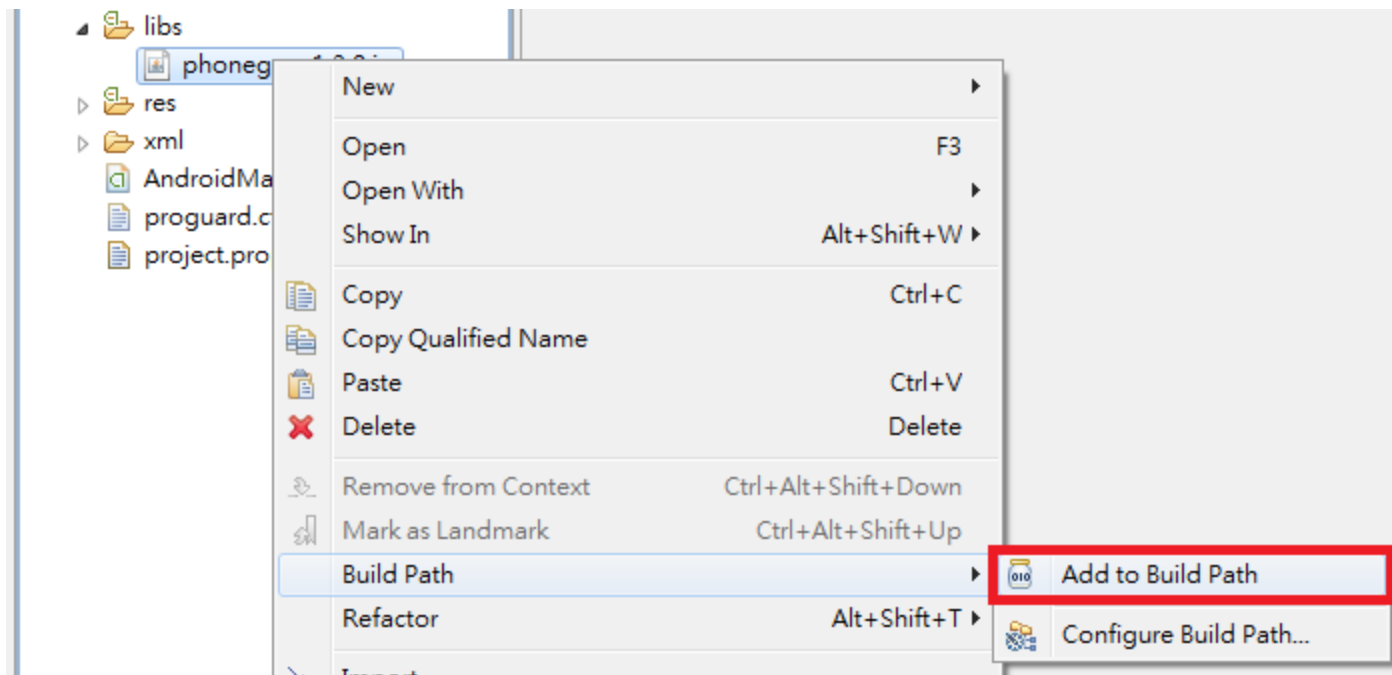
□ 1. 解開PhoneGap函式庫壓縮檔，選擇Android目錄，並做以下複製動作

- ❖ 1. 將phonegap.js複製到/assets/www/下
原檔名可能為phonegap.x.x.x.js, 請把它改名為phonegap.js
- ❖ 2. 將phonegap.jar複製到/libs/下
- ❖ 3. 複製xml目錄到專案根目錄/res/



匯入PhoneGap函式庫

- 1. 點選專案目錄右鍵Refresh更新專案目錄
- 2. 右鍵點選libs/phonegap.jar，選擇[Build Path] -> [Add to Build Path]匯入函式庫



設定專案使用 PhoneGap 為主要開發

- ▣ 1. 開啟 android 專案內的 src/ 專案 package/app.java 檔案
- ▣ 2. 在程式碼上方加入 `import com.phonegap.*;`
`// 匯入 phoneGap 函式庫`
- ▣ 3. 將程式碼第 7 行 `Class extends` 名稱從 `Activity` 改成 `DroidGap`
- ▣ 4. 將程式碼第 12 行 `setContentView(R.layout.main);` 改成 `super.loadUrl("file:///android_asset/www/index.html");`

App.java程式碼

```
package com.phonegap.helloworld;

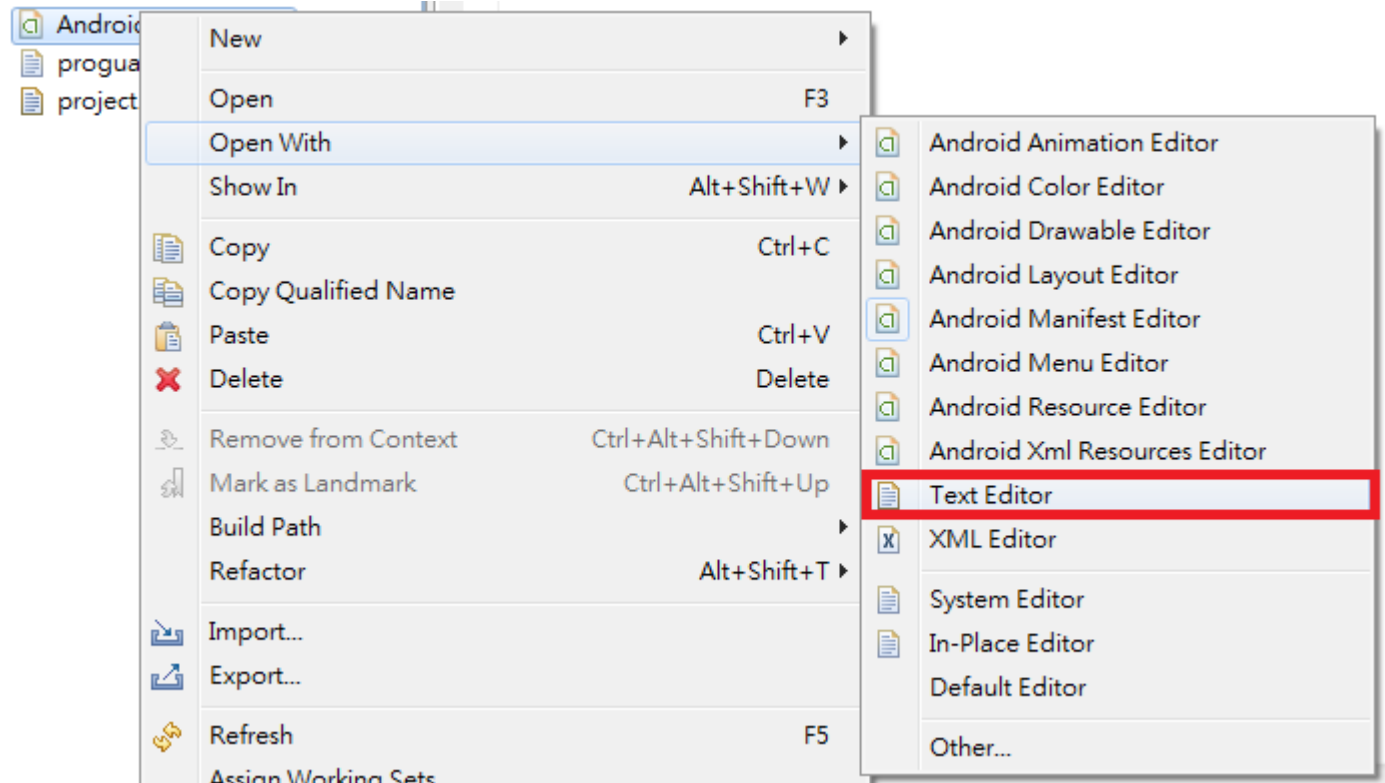
import android.os.Bundle;
import com.phonegap.*;

public class HelloWorldActivity extends DroidGap {
    /** Called when the activity is first created. */
    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);

        super.loadUrl("file:///android_asset/www/index.html");
    }
}
```

設定AndroidManifest.xml檔

- 右鍵點選專案中的AndroidManifest.xml，並選擇Open With -> Text Editor



XML設定

將以下的XML參數複製到<manifest xmlns:android="http://schemas.android.com/apk/res/android" android:versionName="1.0">之後

```
<supports-screens
    android:largeScreens="true"
    android:normalScreens="true"
    android:smallScreens="true"
    android:resizeable="true"
    android:anyDensity="true"
/>
<uses-permission android:name="android.permission.CAMERA" />
<uses-permission android:name="android.permission.VIBRATE" />
<uses-permission android:name="android.permission.ACCESS_COARSE_LOCATION" />
<uses-permission android:name="android.permission.ACCESS_FINE_LOCATION" />
<uses-permission
android:name="android.permission.ACCESS_LOCATION_EXTRA_COMMANDS" />
<uses-permission android:name="android.permission.READ_PHONE_STATE" />
<uses-permission android:name="android.permission.INTERNET" />
<uses-permission android:name="android.permission.RECEIVE_SMS" />
<uses-permission android:name="android.permission.RECORD_AUDIO" />
<uses-permission android:name="android.permission.MODIFY_AUDIO_SETTINGS" />
<uses-permission android:name="android.permission.READ_CONTACTS" />
<uses-permission android:name="android.permission.WRITE_CONTACTS" />
<uses-permission android:name="android.permission.WRITE_EXTERNAL_STORAGE" />
<uses-permission android:name="android.permission.ACCESS_NETWORK_STATE" />
```

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.phonegap.helloworld"
    android:versionCode="1"
    android:versionName="1.0" >
    <supports-screens
        android:largeScreens="true"
        android:normalScreens="true"
        android:smallScreens="true"
        android:resizeable="true"
        android:anyDensity="true"
    />
    <uses-permission android:name="android.permission.CAMERA" />
    <uses-permission android:name="android.permission.VIBRATE" />
    <uses-permission android:name="android.permission.ACCESS_COARSE_LOCATION" />
    <uses-permission android:name="android.permission.ACCESS_FINE_LOCATION" />
    <uses-permission android:name="android.permission.ACCESS_LOCATION_EXTRA_COMMANDS" />
    <uses-permission android:name="android.permission.READ_PHONE_STATE" />
    <uses-permission android:name="android.permission.INTERNET" />
    <uses-permission android:name="android.permission.RECEIVE_SMS" />
    <uses-permission android:name="android.permission.RECORD_AUDIO" />
    <uses-permission android:name="android.permission.MODIFY_AUDIO_SETTINGS" />
    <uses-permission android:name="android.permission.READ_CONTACTS" />
    <uses-permission android:name="android.permission.WRITE_CONTACTS" />
    <uses-permission android:name="android.permission.WRITE_EXTERNAL_STORAGE" />
    <uses-permission android:name="android.permission.ACCESS_NETWORK_STATE" />
    <uses-sdk android:minSdkVersion="8" />

    <application
        android:icon="@drawable/ic_launcher"
        android:label="@string/app_name" >
        <activity
            android:name=".HelloWorldActivity"
            android:label="@string/app_name" >
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>
```




將

android:configChanges="orientation|keyboardHidden"加到activity屬性內的

android:label="@string/app_name"的後面



android:configChanges="orientation|keyboardHidden"

如以下xml設定

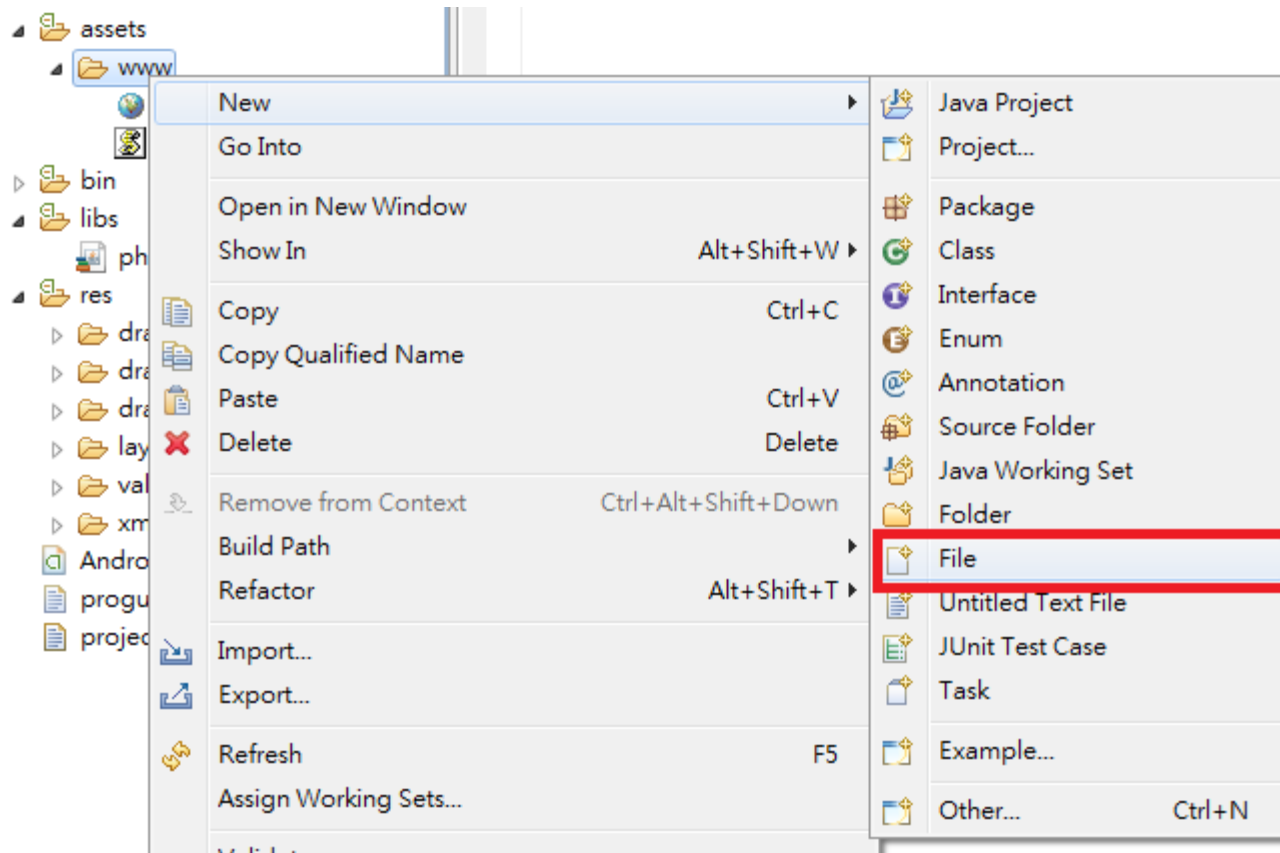
```
<application
    android:icon="@drawable/ic_launcher"
    android:label="@string/app_name" >
    <activity
        android:name=".HelloWorldActivity"
        android:label="@string/app_name"
        android:configChanges="orientation|keyboardHidden" |>
        <intent-filter>
            <action android:name="android.intent.action.MAIN" />

            <category android:name="android.intent.category.LAUNCHER" />
        </intent-filter>
    </activity>
</application>

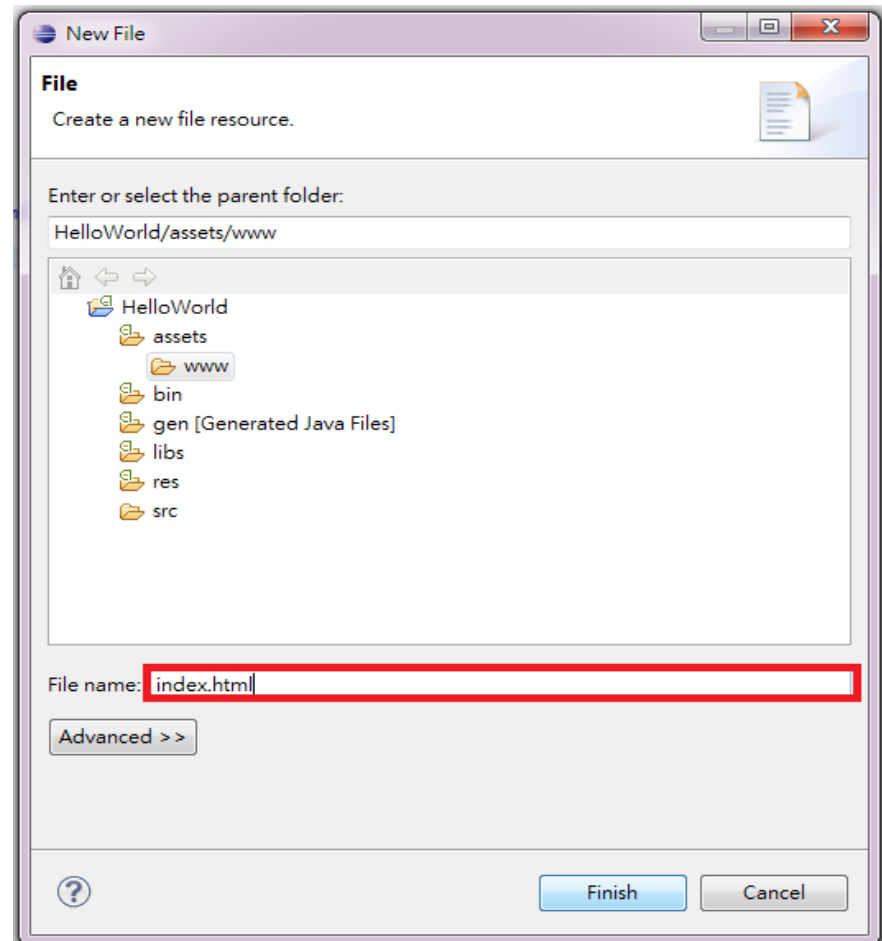
</manifest>
```

建立Hello World 網頁

1. 選擇www目錄點擊右鍵選擇New->File建立index.html檔案



1. 在File name輸入檔名index.html建立檔案
2. 在Package Editor選擇index.html檔案點擊右鍵
open with->text editor
3. 輸入HTML5程式碼

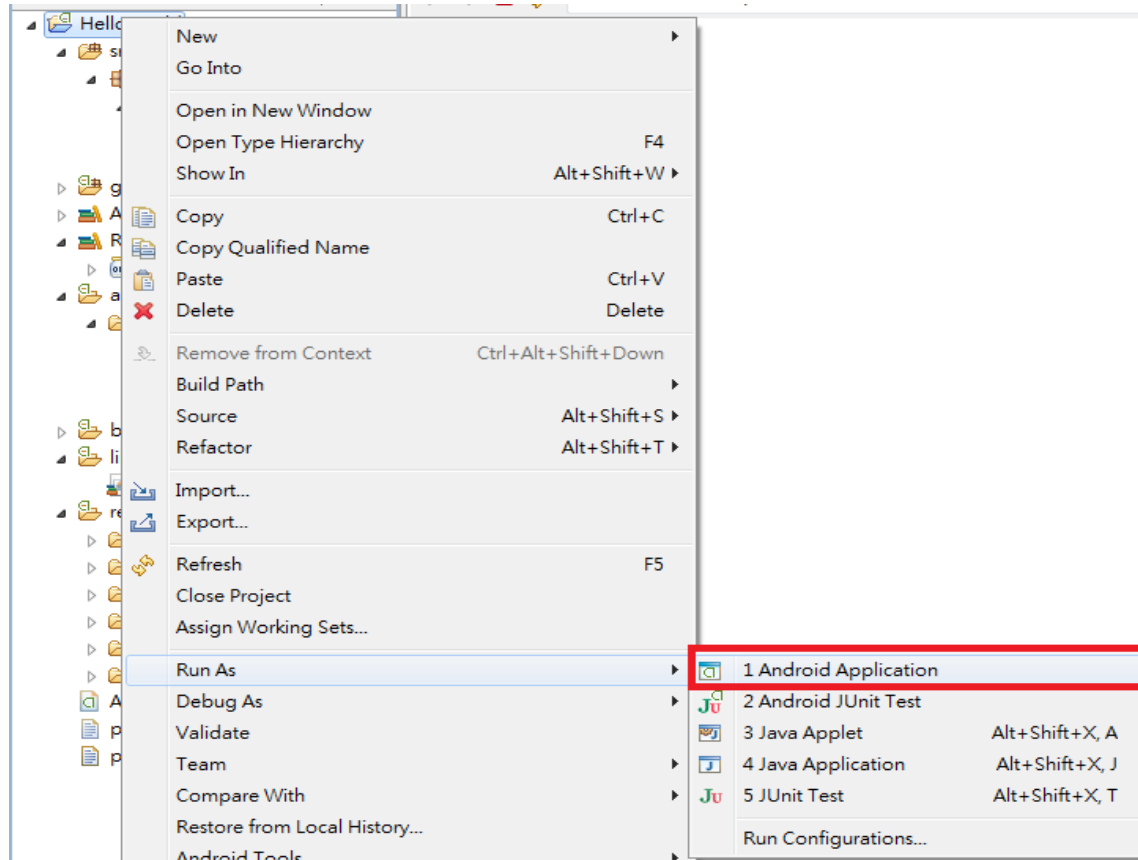


Index.html 程式碼

```
<!DOCTYPE HTML>
<html>
<head>
<title>Hello Inside</title>
<script type="text/javascript" charset="utf-8"
src="phonegap.js"></script>
</head>
<body>
<h1>Hello World</h1>
</body>
</html>
```

測試Hello World專案

▣ 右鍵點選專案選擇Run As ->Android Application



測試結果

