**Step 1:**

D:\projects\Phonegap\Example> cordova plugin rm org.apache.cordova.console --save

add the --save so that it removes the plugin from the config.xml file.

**Step 2:**

To generate a release build for Android, we first need to make a small change to the AndroidManifest.xml file found in platforms/android. Edit the file and change the line:

<application android:debuggable="true" android:hardwareAccelerated="true" android:icon="@drawable/icon" android:label="@string/app\_name">

and change android:debuggable to "false":

<application android:debuggable="false" android:hardwareAccelerated="true" android:icon="@drawable/icon" android:label="@string/app\_name">

As of cordova 6.2.0 remove the android:debuggable tag completely. Here is the explanation from cordova:

Explanation for issues of type "HardcodedDebugMode": It's best to leave out the android:debuggable attribute from the manifest. If you do, then the tools will automatically insert android:debuggable=true when building an APK to debug on an emulator or device. And when you perform a release build, such as Exporting APK, it will automatically set it to false.

If on the other hand you specify a specific value in the manifest file, then the tools will always use it. This can lead to accidentally publishing your app with debug information.

**Step 3:**

Now we can tell cordova to generate our release build:

D:\projects\Phonegap\Example> cordova build --release android

Then, we can find our unsigned APK file in platforms/android/ant-build. In our example, the file was platforms/android/ant-build/Example-release-unsigned.apk

**Step 4:**

Note : We have our keystore 'keystoreNAME-mobileapps.keystore' in this Git Repo, if you want to create another, please proceed with the following steps.

**Key Generation:**

**Syntax:**

keytool -genkey -v -keystore <keystoreName>.keystore -alias <Keystore AliasName> -keyalg <Key algorithm> -keysize <Key size> -validity <Key Validity in Days>

**Egs:**

**C:\xampp\htdocs\saf\platforms\android\build\outputs\apk>"C:\Arquivos de Programas\java\jdk1.8.0\_101\bin\keytool.exe" -genkey -v -keystore financeiro.keystore -alias financeiro -keyalg RSA -keysize 2048 -validity 10000**

keytool -genkey -v -keystore NAME-mobileapps.keystore -alias NAMEmobileapps -keyalg RSA -keysize 2048 -validity 10000

keystore password? : xxxxxxx

What is your first and last name? : xxxxxx

What is the name of your organizational unit? : xxxxxxxx

What is the name of your organization? : xxxxxxxxx

What is the name of your City or Locality? : xxxxxxx

What is the name of your State or Province? : xxxxx

What is the two-letter country code for this unit? : xxx

Then the Key store has been generated with name as NAME-mobileapps.keystore

**Step 5:**

Place the generated keystore in

old version cordova D:\projects\Phonegap\Example\platforms\android\ant-build

New version cordova D:\projects\Phonegap\Example\platforms\android\build\outputs\apk

To sign the unsigned APK, run the jarsigner tool which is also included in the JDK:

**Syntax:**

jarsigner -verbose -sigalg SHA1withRSA -digestalg SHA1 -keystore <keystorename <Unsigned APK file> <Keystore Alias name>

**Egs:**

**C:\xampp\htdocs\saf\platforms\android\build\outputs\apk>"C:\Arquivos de Programas\java\jdk1.8.0\_101\bin\jarsigner.exe" -verbose -sigalg SHA1withRSA -digestalg SHA1 -keystore financeiro.keystore android-release-unsigned.apk financeiro**

D:\projects\Phonegap\Example\platforms\android\ant-build> jarsigner -verbose -sigalg SHA1withRSA -digestalg SHA1 -keystore NAME-mobileapps.keystore Example-release-unsigned.apk xxxxxmobileapps

OR D:\projects\Phonegap\Example\platforms\android\build\outputs\apk> jarsigner -verbose -sigalg SHA1withRSA -digestalg SHA1 -keystore NAME-mobileapps.keystore Example-release-unsigned.apk xxxxxmobileapps

Enter KeyPhrase as 'xxxxxxxx'

This signs the apk in place.

**Step 6:**

Finally, we need to run the zip align tool to optimize the APK:

D:\projects\Phonegap\Example\platforms\android\ant-build> zipalign -v 4 Example-release-unsigned.apk Example.apk

OR

D:\projects\Phonegap\Example\platforms\android\ant-build> C:\Phonegap\adt-bundle-windows-x86\_64-20140624\sdk\build-tools\android-4.4W\zipalign -v 4 Example-release-unsigned.apk Example.apk

OR

D:\projects\Phonegap\Example\platforms\android\build\outputs\apk> C:\Phonegap\adt-bundle-windows-x86\_64-20140624\sdk\build-tools\android-4.4W\zipalign -v 4 Example-release-unsigned.apk Example.apk

**C:\xampp\htdocs\saf\platforms\android\build\outputs\apk>"C:\Users\Antenor\AppData\Local\Android\sdk\build-tools\24.0.2\zipalign.exe" -v 4 android-release-unsigned.apk financeiro.apk**

Now we have our final release binary called example.apk and we can release this on the Google Play Store.