

## Fundamentos de Android



#### Android

Sistema Operativo

Google

Dispositivos móviles

Kernel de Linux

Open Source.















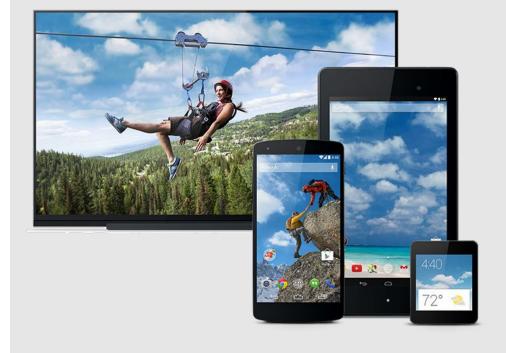




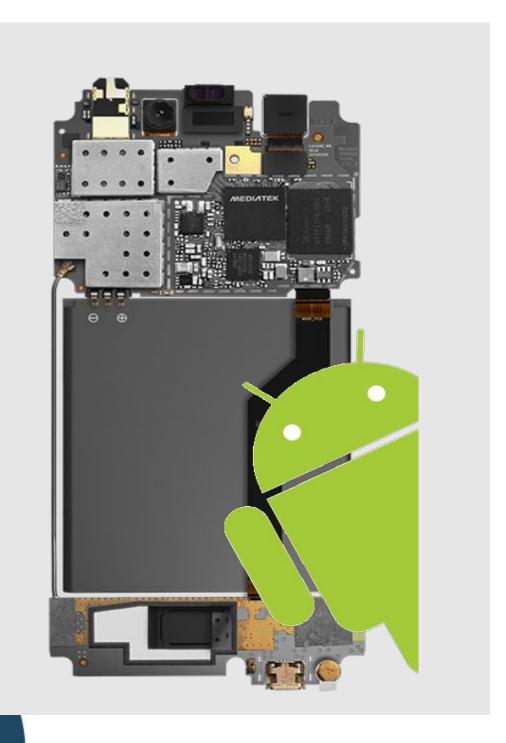




Compatibilidad con el dispositivo



Compatibilidad con la aplicación



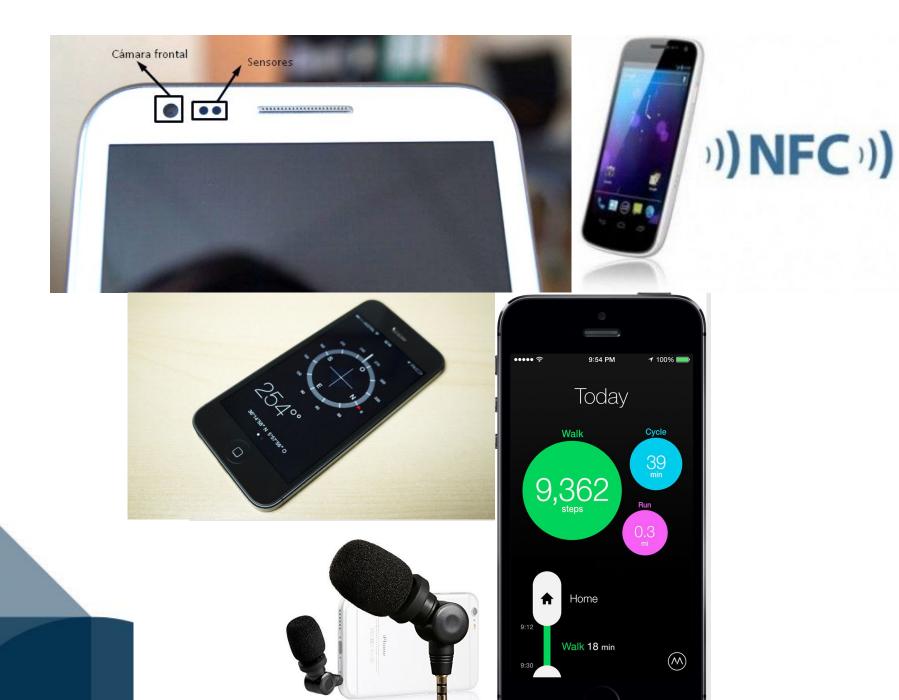
#### android



#### Características de Hardware

Versión de Android

Configuración de Pantalla



#### FEATURE\_CAMERA\_FRONT

FEATURE\_NFC

FEATURE\_SENSOR\_STEP\_COUNTER

FEATURE\_MICROPHONE

## minSdkVersion

## targetSdkVersion

# minSdkVersion 15 targetSdkVersion 26

#### Características de Hardware

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Los servicios de Google Play le dan la libertad de utilizar las API más recientes para los servicios populares de Google sin preocuparse por el soporte del dispositivo. Las actualizaciones de los servicios de Google Play se distribuyen automáticamente por Google Play Store y las nuevas versiones de la biblioteca del cliente se entregan a través del Administrador de Android SDK. Esto le facilita concentrarse en lo que es importante: la experiencia de sus usuarios.

### Broadcast

#### Broadcast Transmisiones

### Broadcast Receivers Receptor de Transmisiones

Código fuente



# Android Device Manifest Código fuente



Bateria baja

Llamada entrante

Mensaje entrante

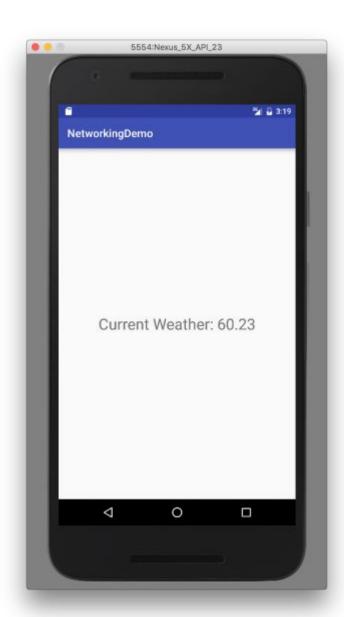
Wifi disponible

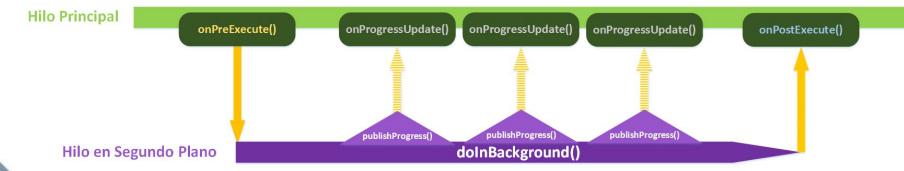
Carga conectada

```
public class AlarmReceiver extends BroadcastReceiver {
 @Override
 public void onReceive(Context context, Intent intent) {
  Toast.makeText(context,
   "AlarmReceiver.onReceive()",
   Toast.LENGTH_LONG).show();
```

```
<manifest xmlns:android="http://schemas.android.com/apk/res/android"</pre>
    package="com.example.androidalarm"
    android:versionCode="1"
    android:versionName="1.0" >
    <uses-sdk
        android:minSdkVersion="8"
        android:targetSdkVersion="22" />
    <application
        android:allowBackup="true"
        android:icon="@drawable/ic launcher"
        android:label="@string/app name"
        android:theme="@style/AppTheme" >
        <activity
            android:name=".MainActivity"
            android:label="@string/app name" >
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />
                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
        <receiver android:name=".AlarmReceiver" android:process=":remote" />
    </application>
```

## Asynctask





```
private class DownloadFilesTask extends AsyncTask<URL, Integer, Long> {
    protected Long doInBackground(URL... urls) {
        int count = urls.length;
        long totalSize = 0;
        for (int i = 0; i < count; i++) {
            totalSize += Downloader.downloadFile(urls[i]):
            publishProgress((int) ((i / (float) count) * 100));
            // Escape early if cancel() is called
            if (isCancelled()) break;
        return totalSize;
    }
    protected void onProgressUpdate(Integer... progress) {
        setProgressPercent(progress[0]);
    protected void onPostExecute(Long result) {
        showDialog("Downloaded " + result + " bytes");
    }
```

```
new DownloadFilesTask().execute(url1, url2, url3);
```



## Bases Técnicas de Android



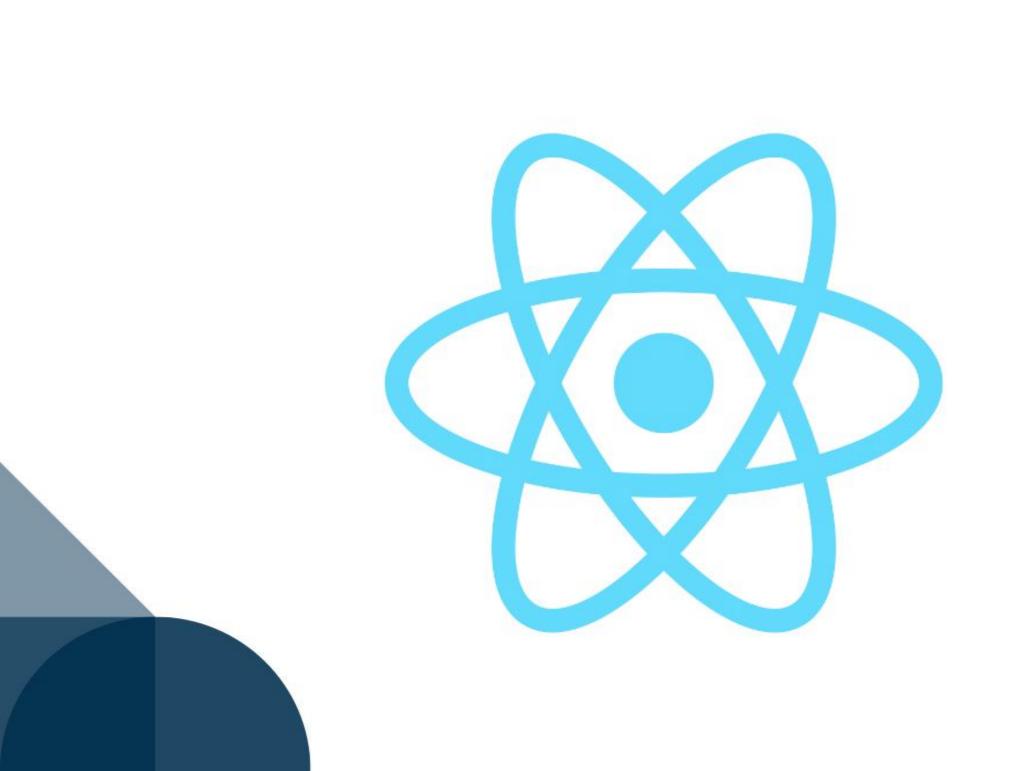


Lenguajes para programar con Andorid



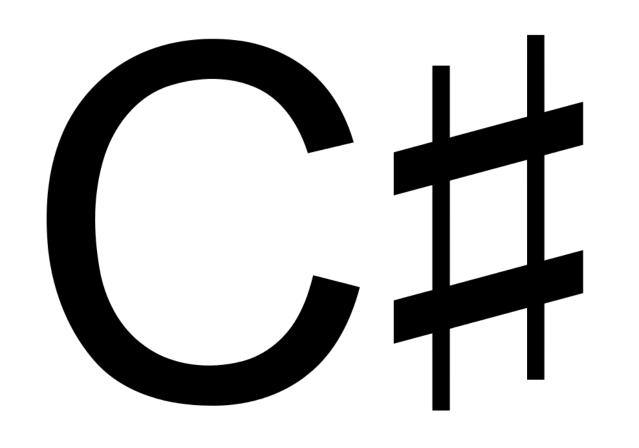












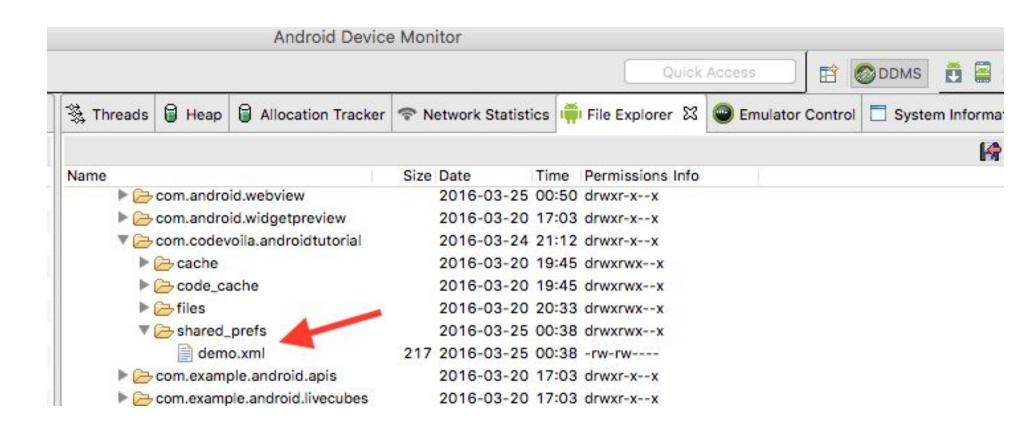
## File

# Clase File java/kotlin

```
private File getTempFile(Context context, String url) {
    File file;
    try {
        String fileName = Uri.parse(url).getLastPathSegment();
        file = File.createTempFile(fileName, null, context.getCacheDir());
    } catch (IOException e) {
        // Error while creating file
    }
    return file;
}
```

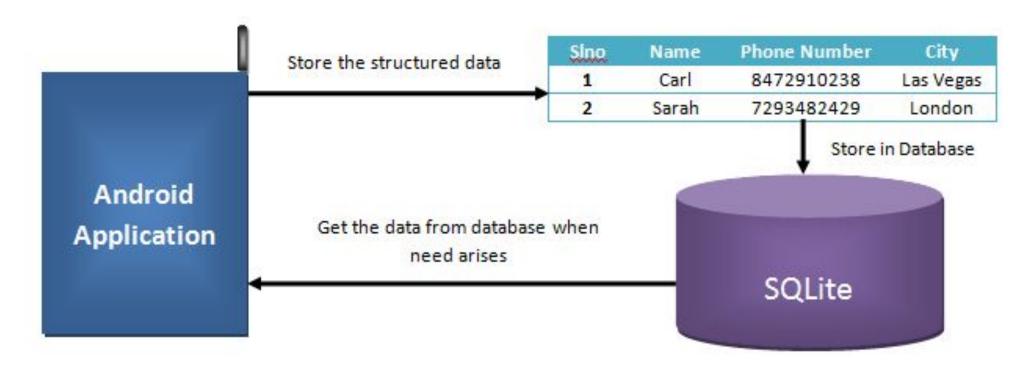
#### SharedPreferences

# XML file



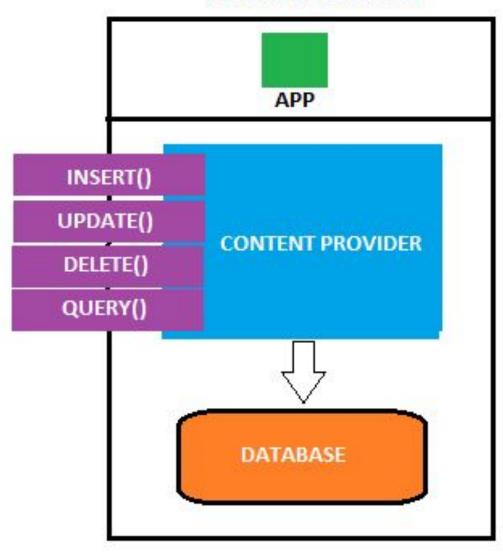
#### Bases de Datos





#### **Content Providers**

#### **Content Provider**



### Network

