Every Android App must have an AndroidManifest.xml file in the root directory of your app project. And it’s automatically created with the Eclipse new project option. But what it does? Why is so Important? With the AndroidManifest.xml you will give the android package of your app, the name of the activity, the theme you will use, the minimum API your app will support… Also with Eclipse the manifest will allow you to compile the .apk just with a couple of clicks.

Work with the Manifest in Eclipse

The Structure of the manifest in Eclipse is distributed in different tabs like: Manifest, Application, Permissions till AndroidManifest.xml. For now we will start with the AndroidManifest.xml section.

Structure

The App manifest that Eclipse provides you is made to work with your sample activity, but you can improve how your app works. So we will analyze how is the manifest made as default and understand what it means.

In the picture we see the <xml> declaration, and we will not change it… Then we find the declaration of the manifest inside this xml, after declaring the source of this manifest, we declare the package we will use and the version code/name. The name of the package must be the folder where the activity is located. Then we find the android:versionCode and android:versionName. The versionName will be used by the user to know what version is he/she using and the versionCode will be used by Play Store to upgrade the app.

In this second picture we are declaring the API or SDK version for our app. In this case we design our app for API 17, but we offer compatibility with API 8 or above.

In this third picture we are declaring the application resources as the icon, the App Name or the App Theme. We are always getting the values from the res/drawable or res/values folder.

In this picture we start declaring the values of the activity. Inside the Package we already declared we will establish the name of our Activity and the Name that we will give to the Android OS. Also with these intent-filters we are saying to Android that the application should appear in the App list and also we are telling to Android what Activity should it open when calling to the app.

Finally we will close all the components we have opened like a normal xml file.

With these basics you should understand what does the Manifest but what happens if we would like to access to internet, to get the GPS location… We should use Permissions. More information of permissions will be added to this tutorial as soon as possible!