

Open Source Android Development Tools

Manfred Moser

simpligility.com

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- Android application developer

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- Twitter @simpligility , G+ Manfred Moser

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Android Proper

as found on your device

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Android Development Toolkit ADT

Eclipse plugin for Android development

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- patched components, custom drivers and different applications from manufacturer and provider

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- source released in drops, sometimes late or not yet

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- very powerful also with help of further Eclipse plugins (e.g. Mylyn, egit. . .)
- well architected so that most components work outside Eclipse too

Other IDE's

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- Emacs** <http://gitorious.org/emacs-android-minor-mode>
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Android RIndirect <https://github.com/akquinet/android-rindirect>

help with component reuse



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Rake/Ruboto/Maven for JRuby Android applications

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- more

Other Development Tools

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Android2PO <https://github.com/miracle2k/android2po>
Converter for Android strings to gettext

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social and contact related libraries

AndroidAsync <https://bitbucket.org/hal/android-async/>

alternate implementation for asynchronous tasks



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barcode scanning library and application

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Example RoboGuice

```
@Inject myObj;  
@InjectResource(R.string.name)  
@InjectView(R.id.editName)  
@Singleton stateHolder;  
and so on instead of  
MyObject myObj = new MyObject();  
getResources().getString(R.string.name)  
findViewById(R.id.editName)  
and lots more
```



UI Libraries and Widgets

GreenDroid <https://github.com/cyrilmottier/GreenDroid>

application framework and UI widget collection

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OpenGL ES framework for Android, Win32, WinCE

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lightweight 3d library/framework for Android using Java with OpenGL ES

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cross-platform 2D and 3D game development framework for Java/C/C++.

AndEngine <http://www.andengine.org/>

Java based 2D OpenGL Game Engine for Android

forget3D <http://code.google.com/p/forget3d/>

OpenGL ES framework for Android, Win32, WinCE

min3d <http://code.google.com/p/min3d/>

lightweight 3d library/framework for Android using Java with OpenGL ES

Angle <http://code.google.com/p/angle/>

game library for 2D games using OpenGL ES

Android Testing Tools

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Android Mock <http://code.google.com/p/android-mock/>

object mocking library



Others of interest

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collection of reusable components and applications

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crash report library

Android Error Reporter <https://github.com/tomquist/Android-Error-Reporter>

error report library



Other Languages

Java is the main language for development and API but also possible are

- C/C++ (via NDK first class)
- JRuby
- Scala
- Coljure
- JavaScript (e.g. via PhoneGap)
- Processing <http://wiki.processing.org/w/Android>
- C#

Example - Scala libraries

- Baitha <https://github.com/sattvik/baitha>
- Positronic Net https://github.com/rst/positronic_net
- Borachio mocking library <http://borachio.com/>

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- No - binary blobs for drivers and other parts

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- Yes - lots of JVM related aspects as well e.g. Scala, JRuby, Processing, Groovy...

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- Yes - move towards Maker community with ADK

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- Android touches a lot of other communities and brings them together
- Android is a great chance to collaborate and learn

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- Contribute and cooperate yourself!