23.April 2014

Important Note:
A)Please remove previous versions before installing a new version.
B)Installation path containing “SPACE” char's do still not work.

What's new?

23.April 2014 (V0.9.0.25)
- updated installer to use/download the sdk android-sdk_r22.6.2.
- updated installer to use/download the ndk android-ndk-r9d-windows-x86.
- added Info-Form which will be displayed while the search for ndk/sdk stuff is running.

09.April 2014 (V0.9.0.24)
- simplified setup. In most cases only the JDK path must be setup manually.
- switched to latest laz4android 43585.
- removed folder <3rdParty>. It's all now in folder <downloads>.

08.March 2014
- removed Step 07: Copy of the files <arm-linux-androideabi*.*> from folder <{app}\3rdParty\ndk\toolchains\arm-linux-androideabi-4.6\prebuilt\windows\bin> into folder <{app}\3rdParty\laz4android\fpc\2.7.1\bin\i386-win32>
is now done by laztoapk. No manual user action is needed any more.

01.March 2014
- fixed wrong path in Step 02. (Thanks to Erkka)

21.Feb.2014
- I created now an installer which automatically downloads the needed packages NDK,SDK and laz4android.

Things to be improved: (help please...)
There are two manual tasks which I'd like to have integrated into the setup.

A) install of Lazarus package „CustomDrawn“ (→ and recompile of the IDE).

B) Correct grammar and spelling of this tutorial. (→ .odt version is available at sourceforge)

22.Nov. 2013
- I got this stuff working with JDK 1.7. (so no need to download the old 1.6 JDK)
- I got this stuff working with NDK 9. (not NDK 7 any more).
- „laztoapk“ has been improved. Now 1-Click Build&Install is possible.

Content

Lazarus and Android

To create Android Apps with Lazarus (on windows), you need to download and install the following packages. (Warning, this will take at least 4GByte of disk space)

Step 01: Download&Install JDK

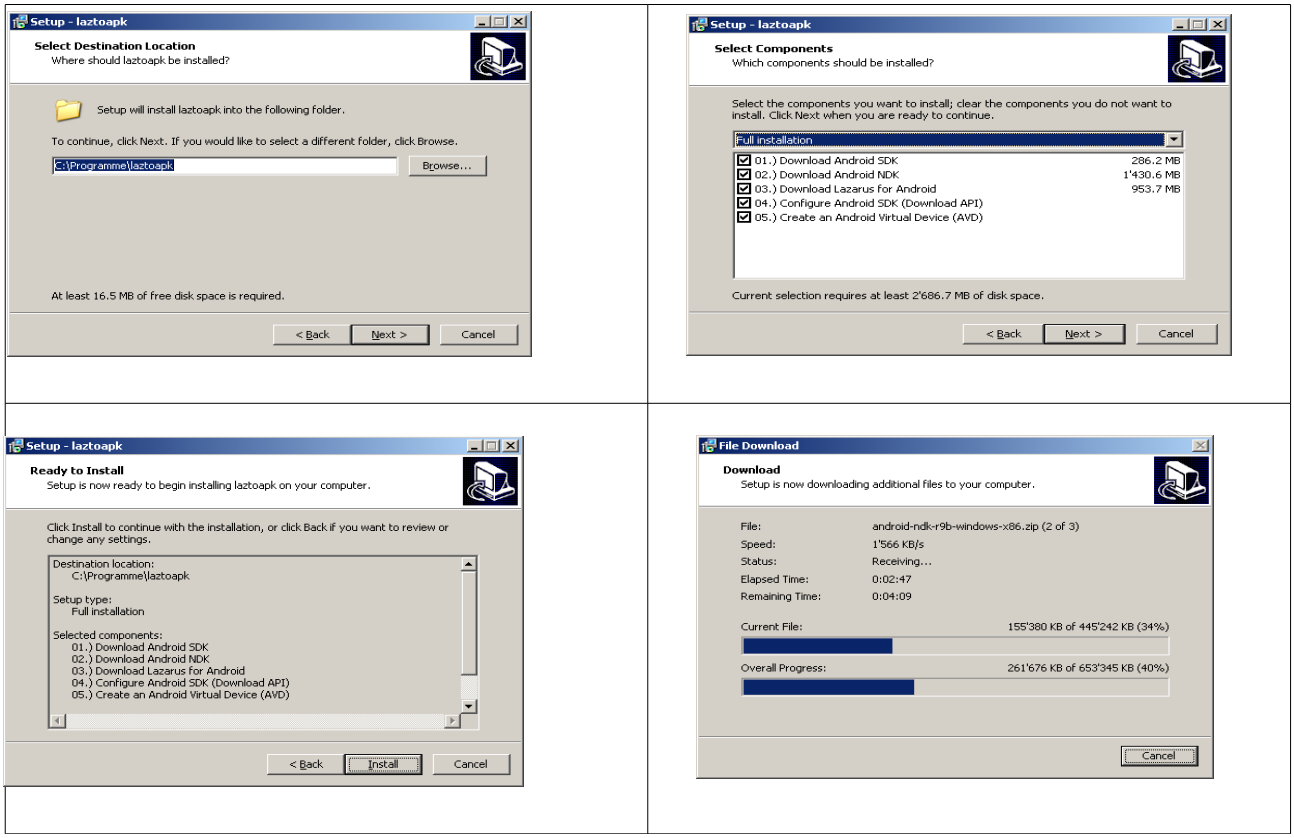
JDK 1.7u45 → Java JDK 7 (jdk-7u45-windows-i586.exe)
It will be installed in to <C:\Program Files\Java\>.

Step 02: Download&Install laztoapk

Laptop → Download the setup from here. (sourceforge.net)

Run the setup.
The setup will:

1.) download ndk.zip to *\laztoapk\downloads* and then unpack it to *\laztoapk\downloads\ndk*
2.) download sdk.zip to *\laztoapk\downloads* and then unpack it to *\laztoapk\downloads\sdk*
3.) download laz4android-43585-New.7z to *\laztoapk\downloads* and then unpack to *\laztoapk\downloads\laz4android*
4.) runs *\laztoapk\downloads\laz4android\build.bat* to recompile Lazarus.



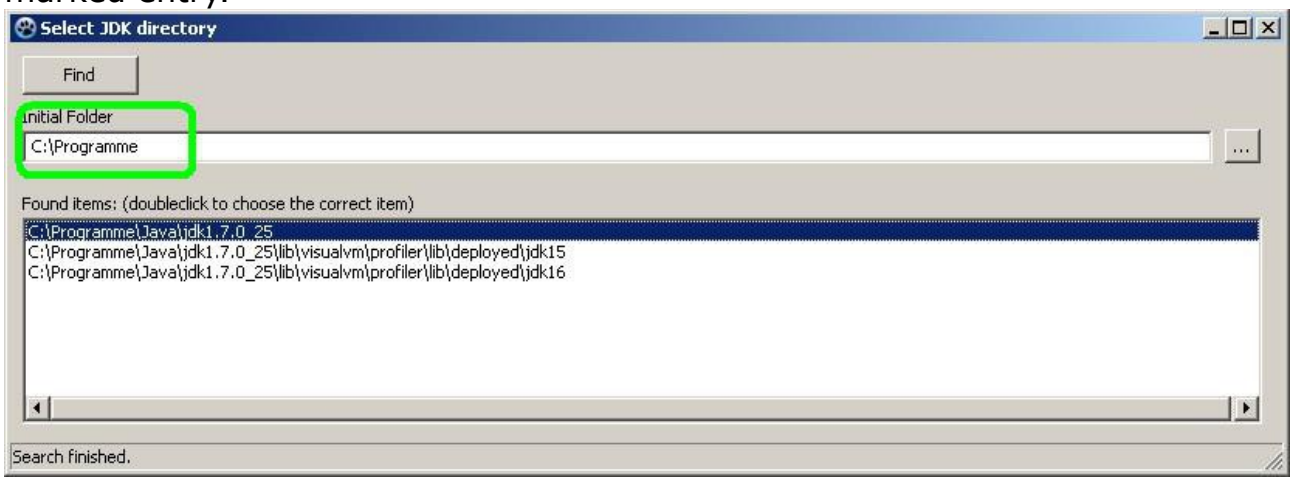
Step 03: Start&Configure LazToApk for the first time

Now the application laztoapk will be started.
Laztoapk will verify if the folder's for JDK,SDK,NDK and the tool lazbuild.exe are available. If not, then following path setup dialogs will show up and you must select the correct path manually.

On the first start of laztoapk, you will be asked to select the path to JDK.

Setup path to JDK:

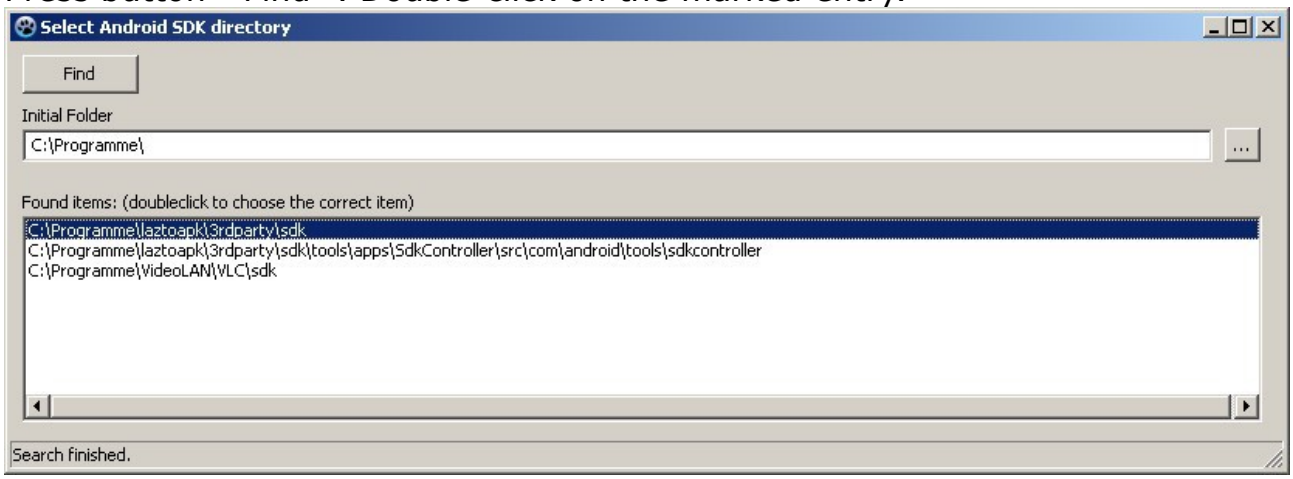
Set the <Initial Folder> and then press button <Find>. Double-click on the marked entry.



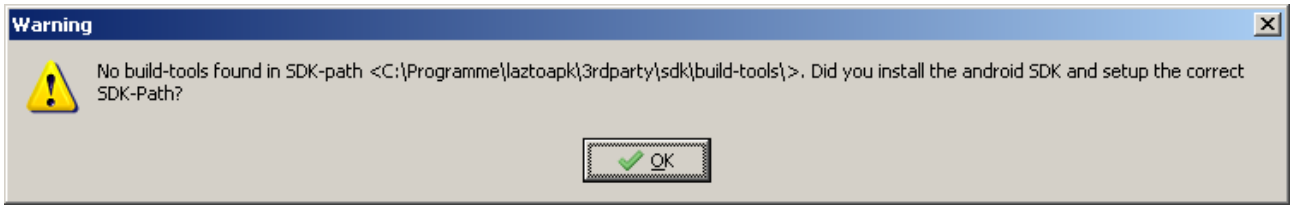
The following path's should be set automatically by laztoapk. So in most cases it's not needed to setup them manually.

Setup path to SDK:

Press button <Find>. Double-click on the marked entry.

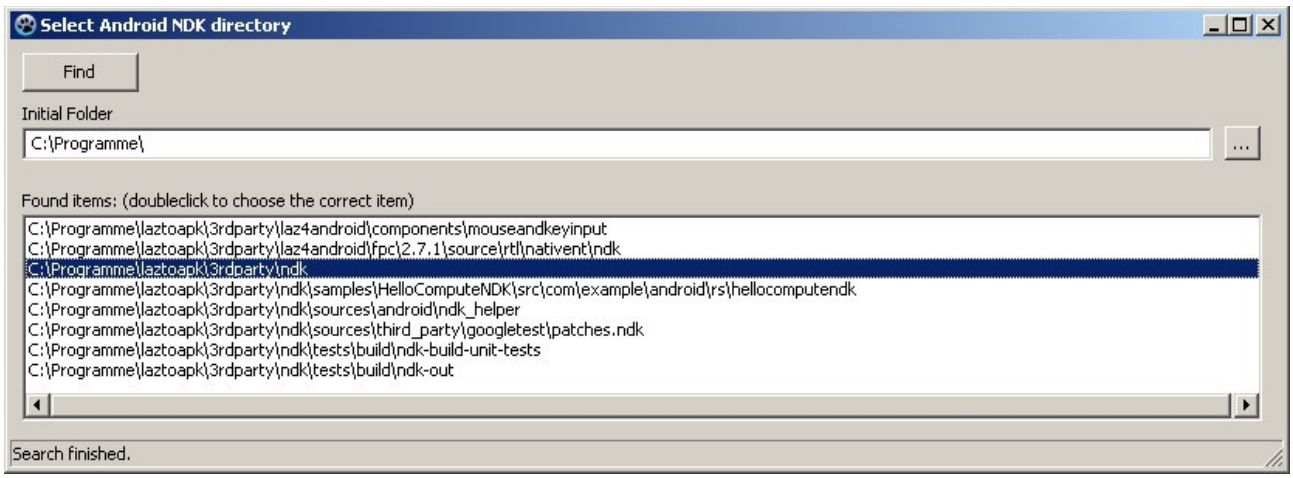


The following message will be shown. That's ok for the moment. Press button <OK>.



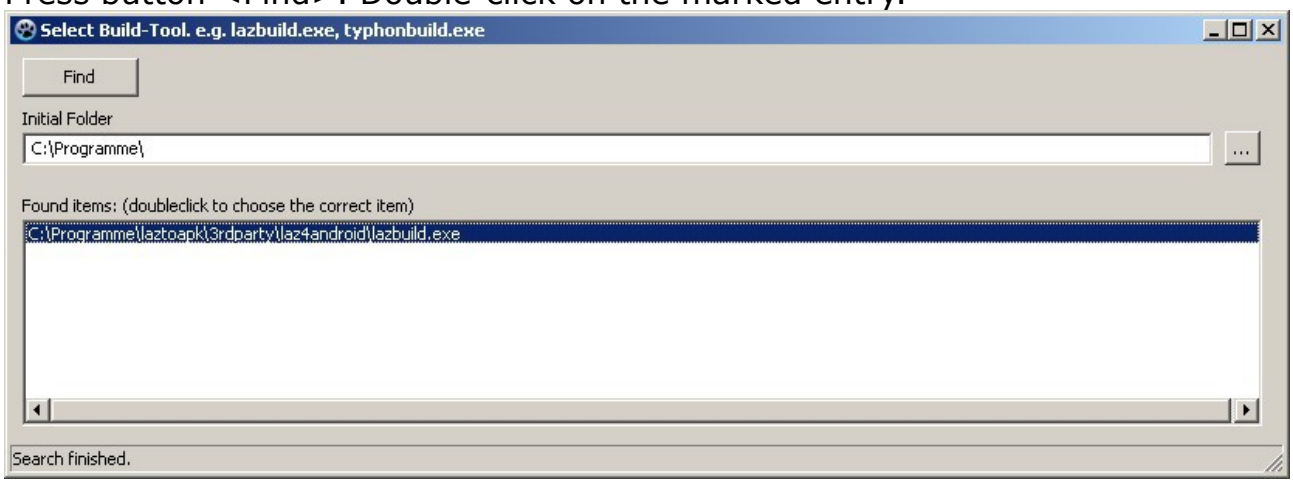
Setup NDK:

Press button <Find>. Double-click on the marked entry.



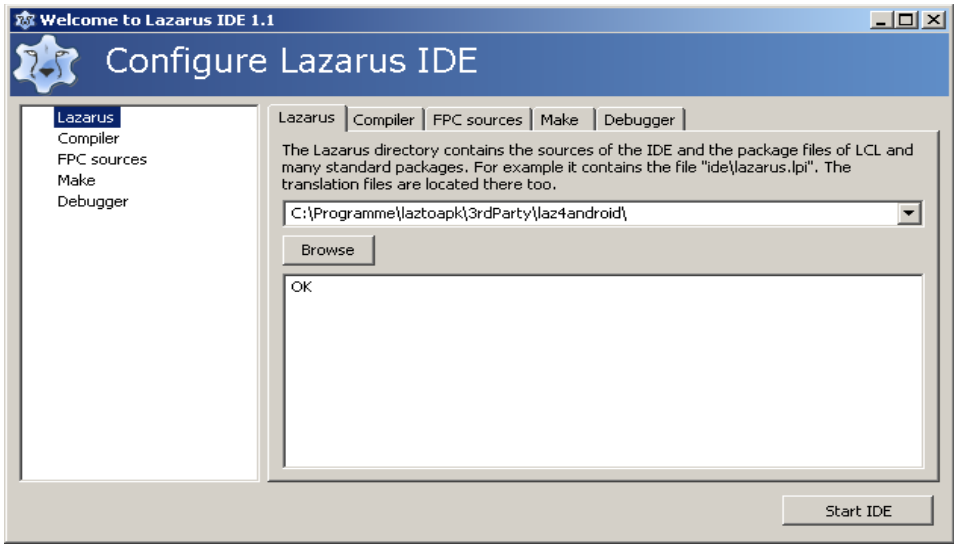
Setup buildtool.exe:

Press button <Find>. Double-click on the marked entry.

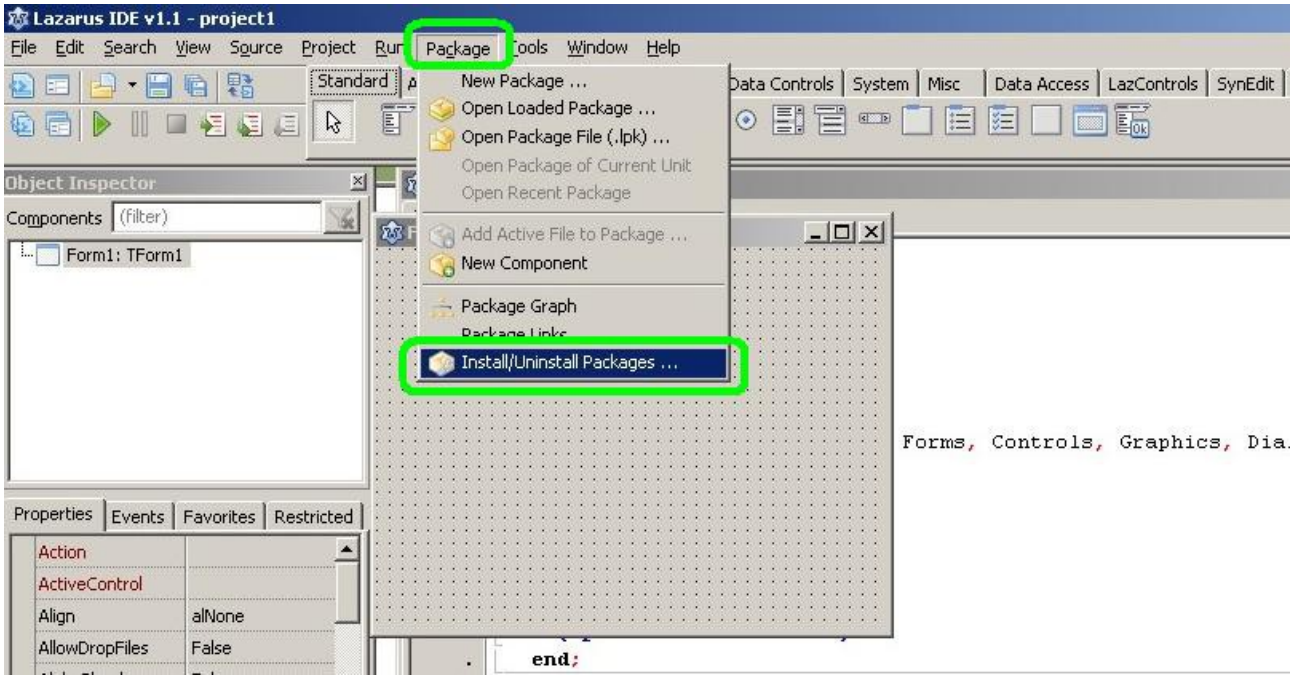


Step 04: Start Lazarus and install package „CustomDrawn“

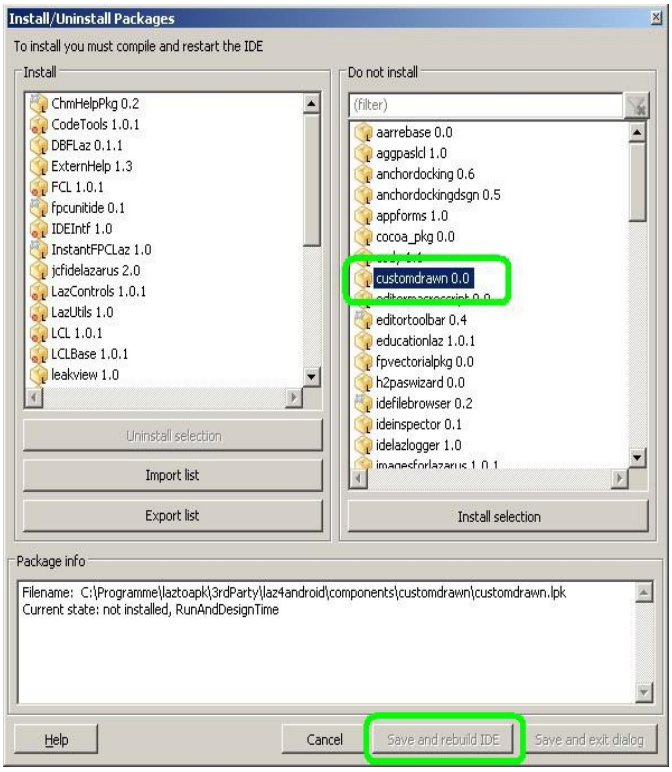
Press button <Start IDE>.



Now we need to install package „CustomDrawn". Select <Package> <Install/Uninstall Packages>.



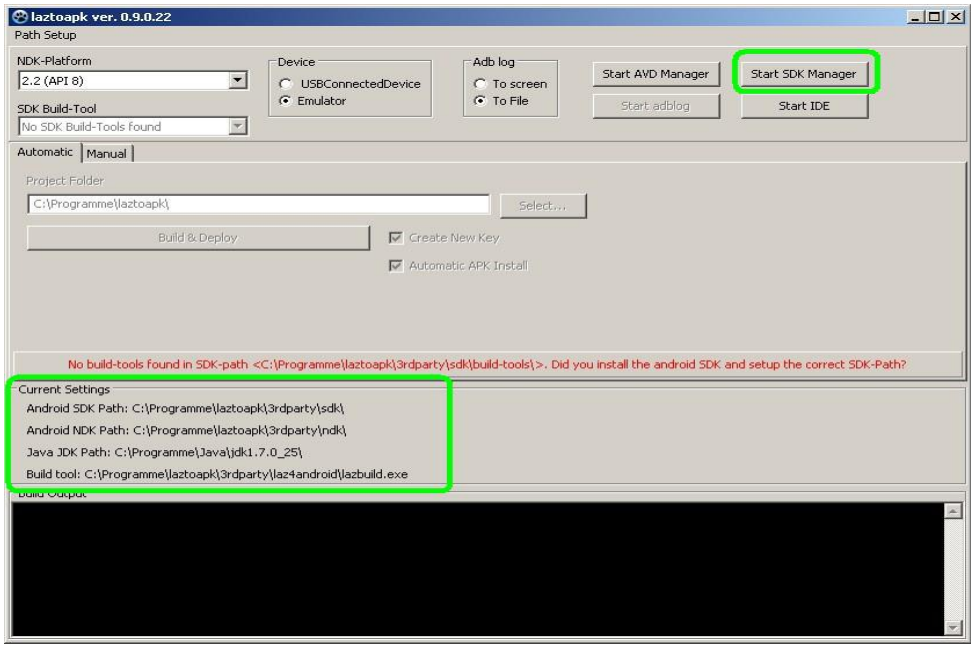
Double-Click on „CustomDrawn" Package and then button <Save and rebuild IDE>.



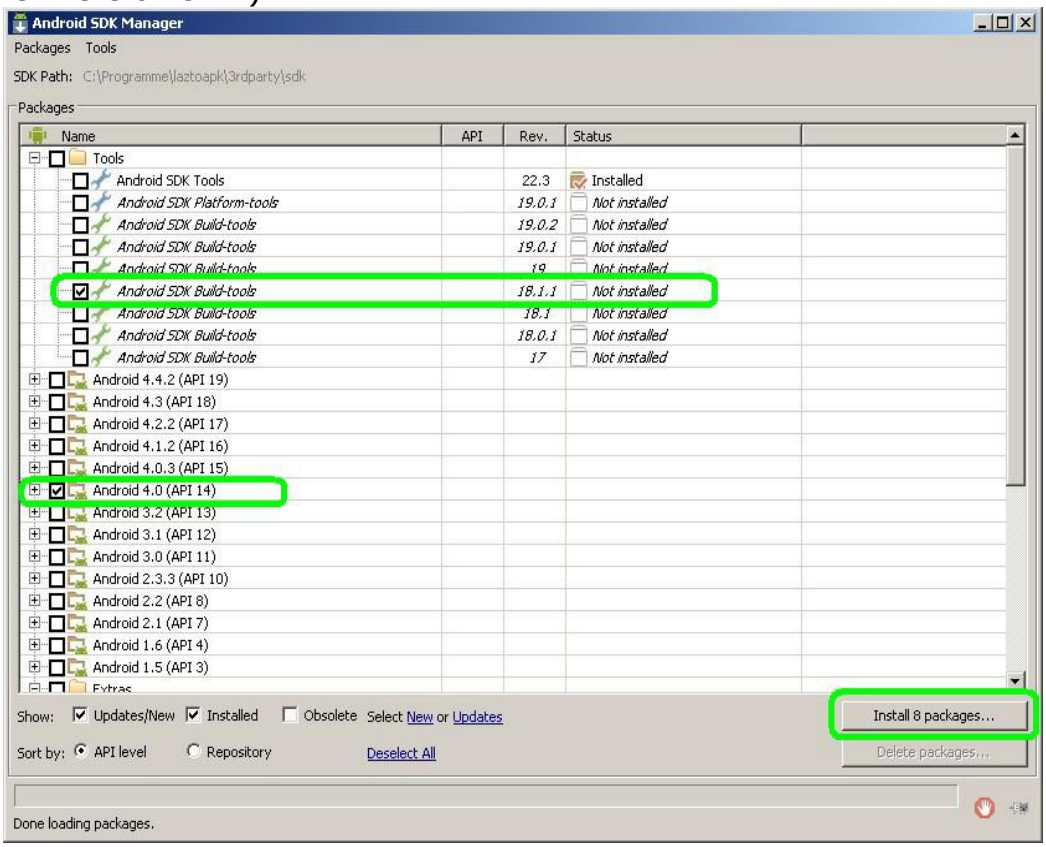
After the IDE has been rebuilt, you have to exit Lazarus.

Step 05: Start SDK-Manager and install API's

Now laztoapk will look like this. It's time to start the <SDK Manager>.



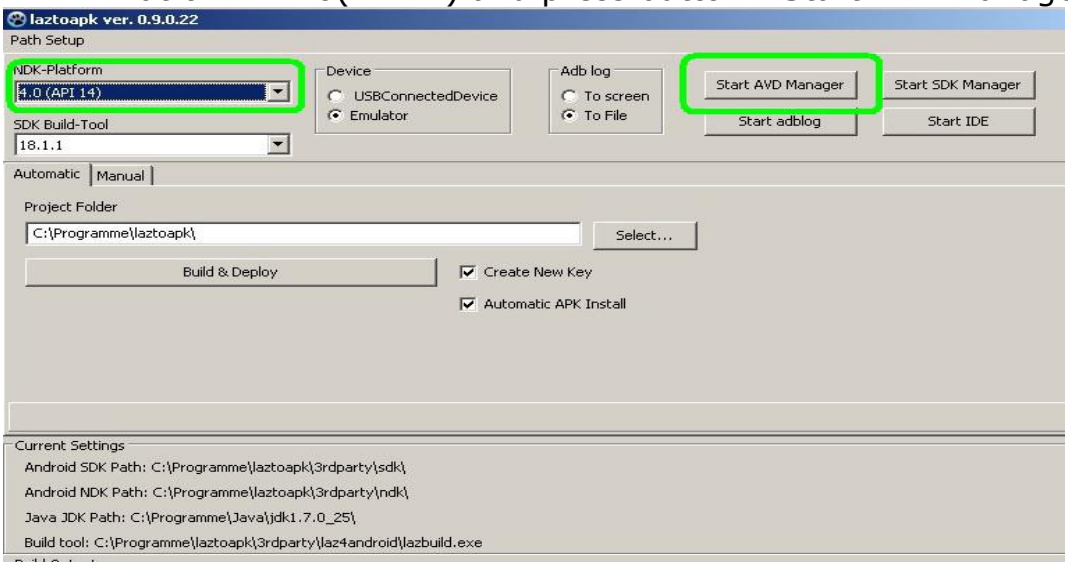
Select the following packages. (→ you can try some other's but I did not test with other version's!!!!)



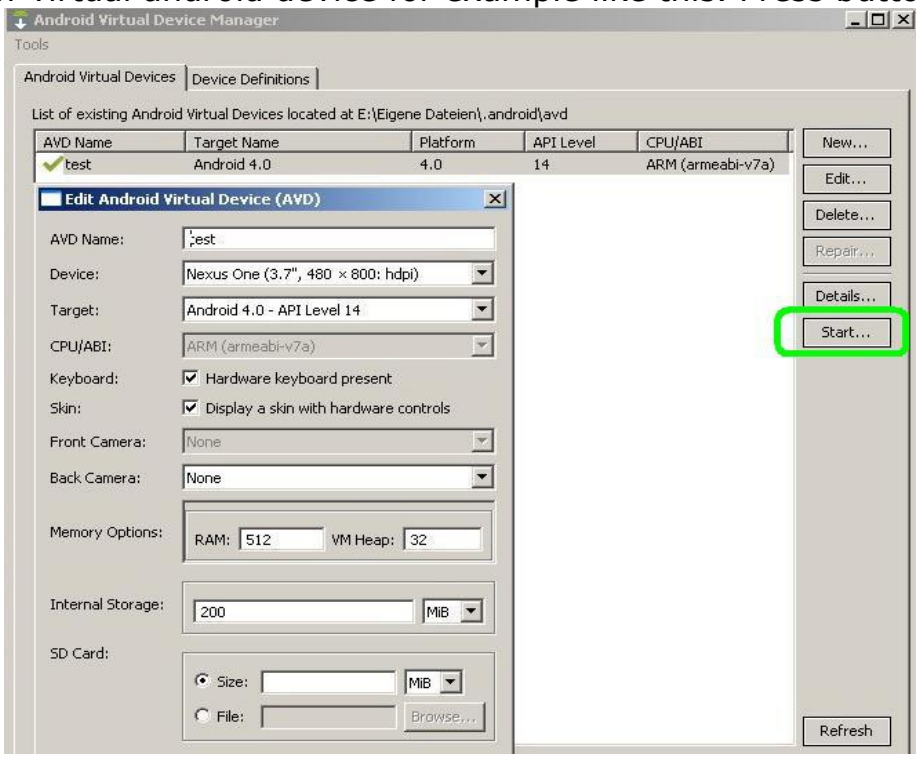
Close SDK Manager after download/installation of the packages is finished.

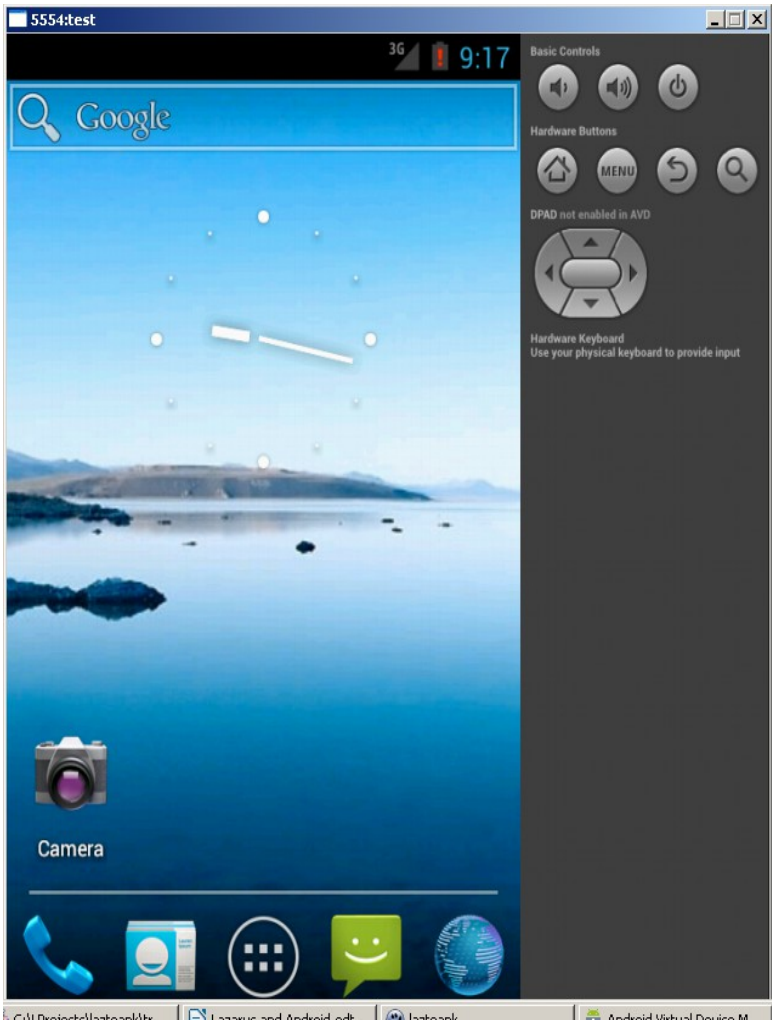
Step 06: Restart LaztoApk and start AVD-Manager

Close laztoapk and start laztoapk again.
Select <NDK-Platform> 4.0(API14) and press button <Start AVD Manager>



Setup a new virtual android device for example like this. Press button <Start>.

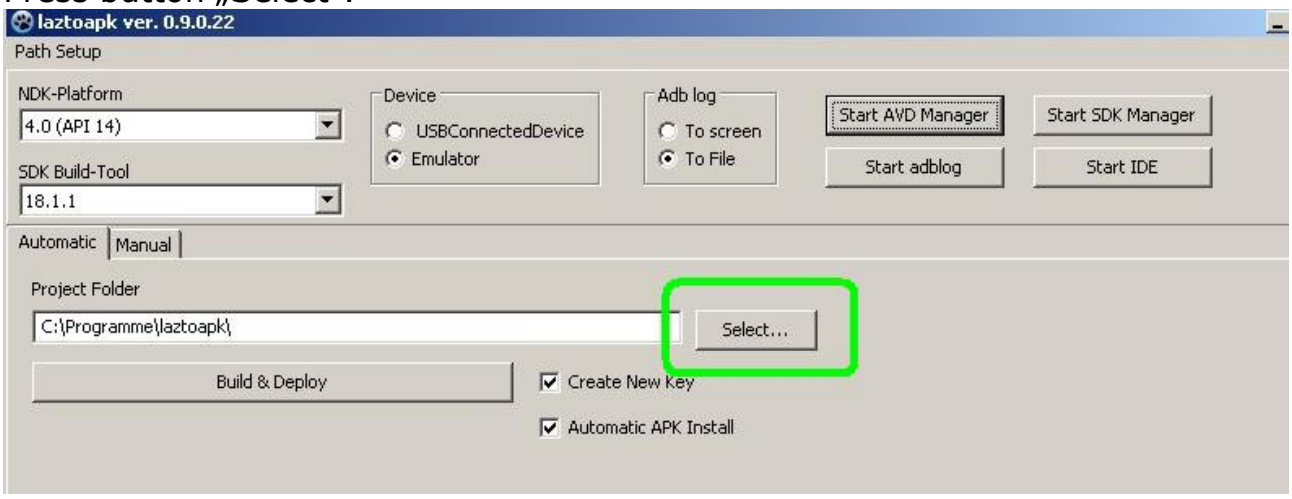




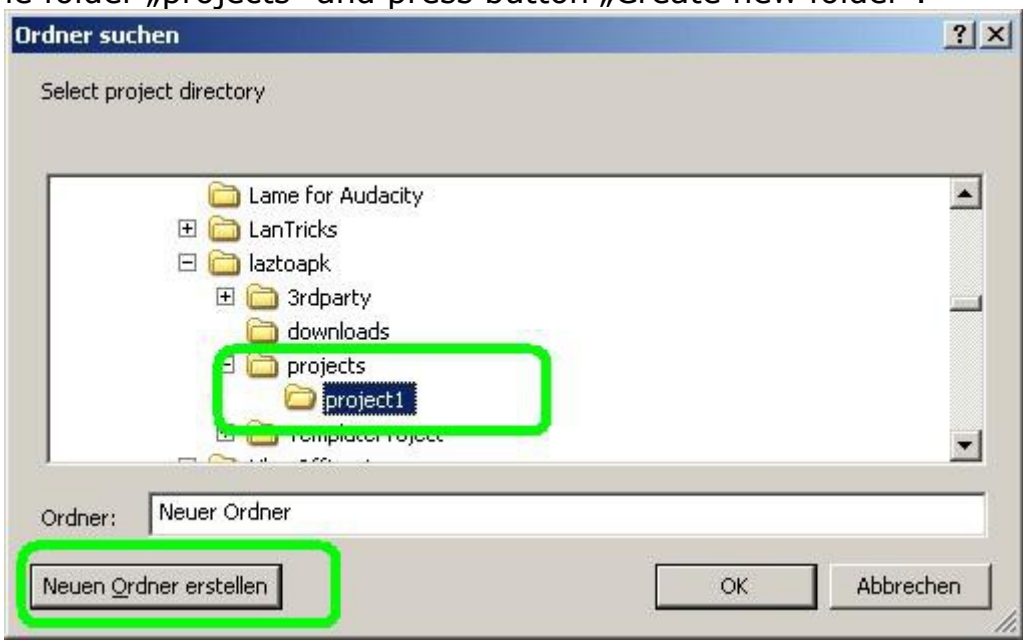
The virtual device will look like this: The virtual android device is ready.

Step 07: Build your first android app

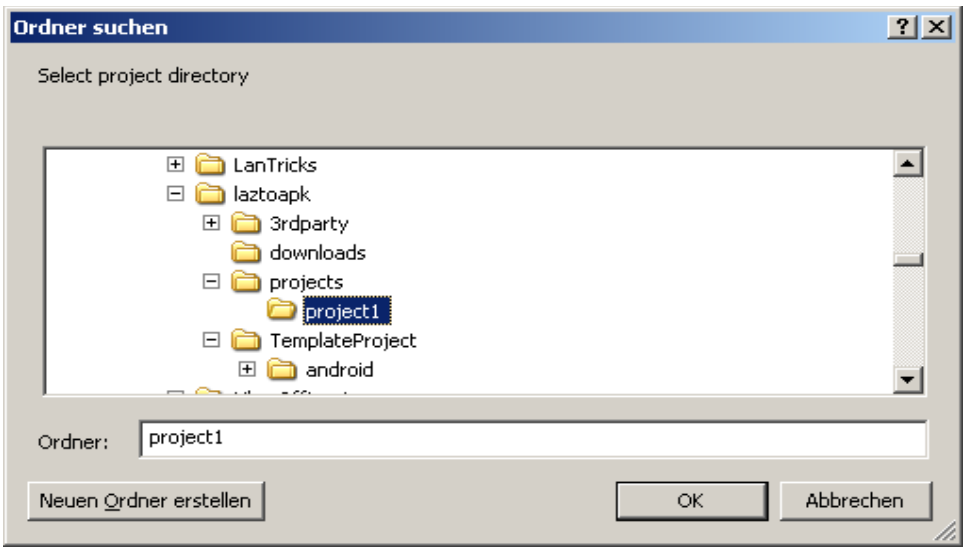
Press button „Select".



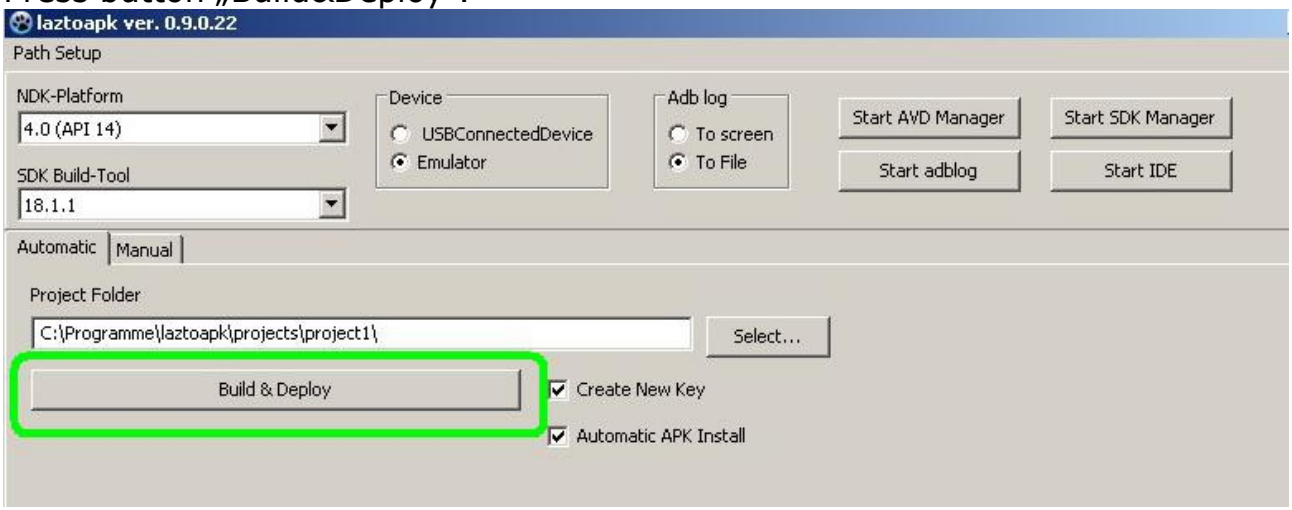
Select the folder „projects" and press button „Create new folder".



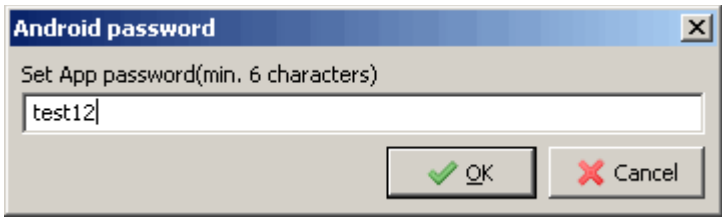
Create a new folder „project1", select the new folder and press button <OK>.



Press button „Build&Deploy“.

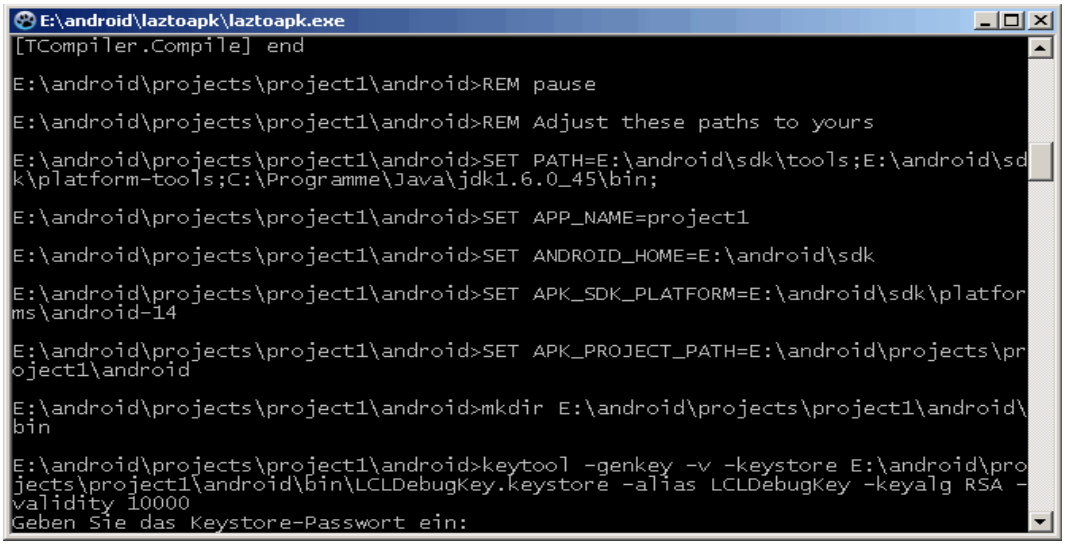


In the following dialogue, define a password for your app and press button <OK>.



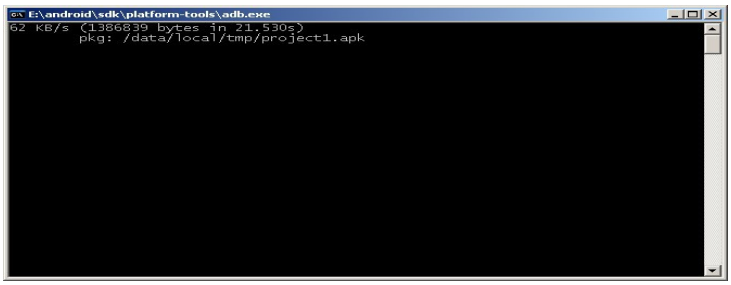
The following info message will appear.

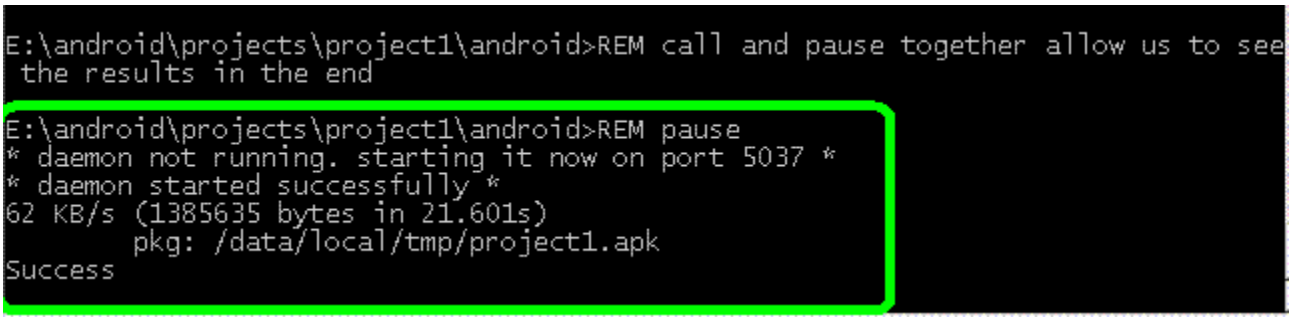
You have to enter the same password as before twice in the command windows



and do some more input as requested.

If everything works as expected, then it should look like this:



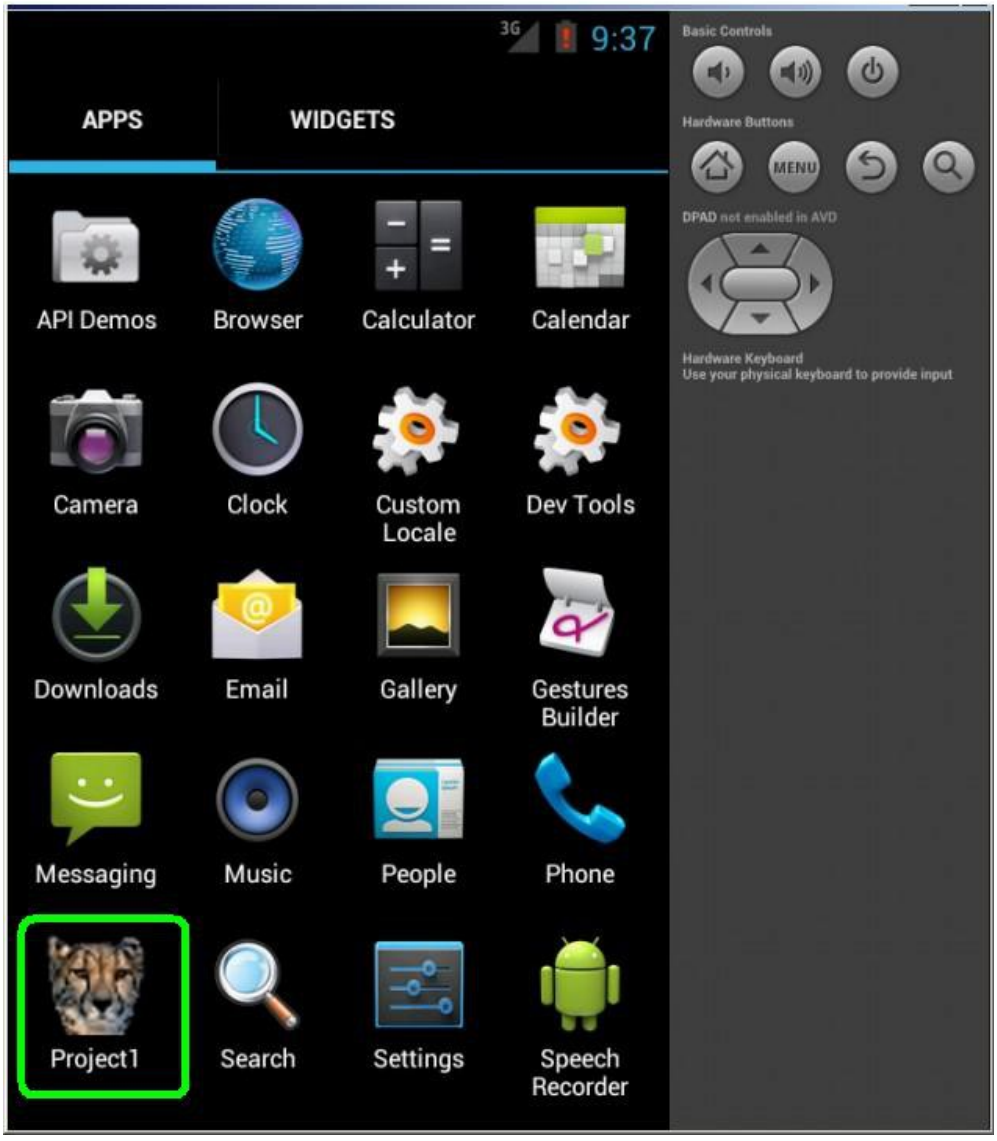


Well done, the app is now installed.

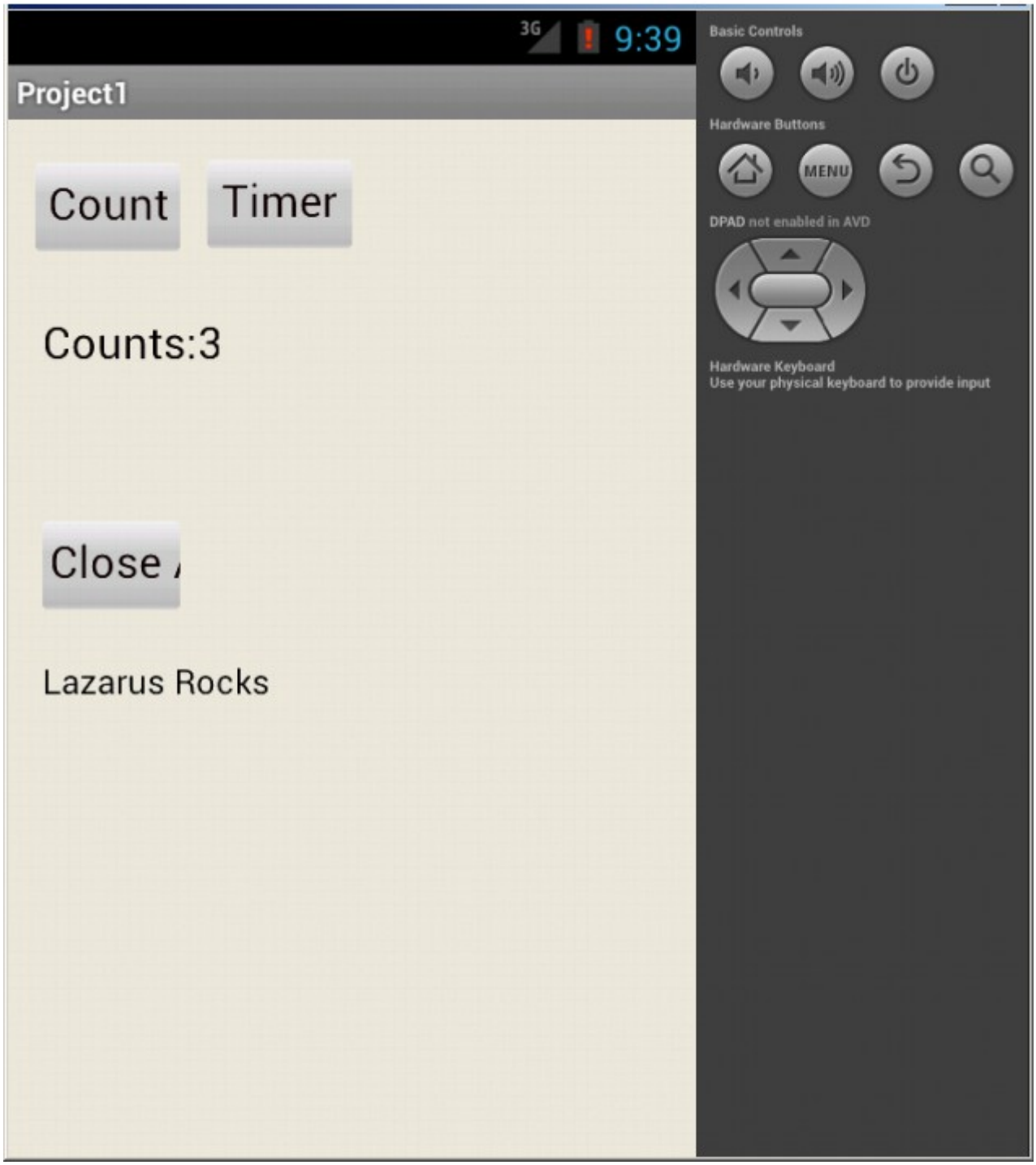
Step 08: Run the app

Let's run the app. Click onto the following icon:

Then click on „project1".



And enjoy your first android application.


3G
9:39
Project1
Count
Timer
Counts:3
Close
Lazarus Rocks
Basic Controls
Hardware Buttons
MENU
DPAD not enabled in AVD
Hardware Keyboard
Use your physical keyboard to provide input