

Building the To Do application

for Android

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[Encryption code]: Copyright 2000-2013 The Legion of the Bouncy Castle Inc. (<http://www.bouncycastle.org>)

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1 Building from the Source

When making any changes to the code, you also need to change the release date in the “About...” dialog (`res/values/strings.xml` / `InfoPopupText`) as well as the application’s internal version number (`AndroidManifest.xml` / `android:versionCode` and `android:versionName`).

To build the application `‘.apk’`, you will need:

- A Java 6 compiler
- Eclipse integrated development environment (IDE)
- The Android software development kit (SDK). I used release 12 for the current version.

See <http://developer.android.com/sdk/index.html> for information on how to set up a project using the Android SDK.

1.1 Generating Icons

Some of the application icons are generated from 3-D image description files using **Persistence of Vision**. The image files are included with the source code, but in case you want to tweak or change any image you can use **povray** to generate new ones.

Because some of the icons contain small details that may get lost if rendered at a low resolution, it is recommended that you render the initial image at a size which is the least common multiple of all icon sizes — 288×288 — and then use a raster graphics program such as the **GIMP**, **convert**, or **pamscale**. For each image file `‘foo.png’`, you need to create five icons: a 16×16 icon in `‘res/drawable/foo_16.png’`, a 24×24 icon in `‘res/drawable-mdpi/foo.png’`, a 32×32 icon in `‘res/drawable/foo_32.png’`, a 36×36 icon in `‘res/drawable/foo_36.png’`, and a 48×48 icon in `‘res/drawable-hdpi/foo.png’`.

The command for generating an image from one of the `‘.pov’` descriptions is:

```
povray +FN +AM3 +A0.3 +UA +W288 +H288 foo.pov
```

The main application icon was drawn by hand in the GIMP, and can be found in `‘IconMaster.xcf’`. This is scaled down to 48×48 for `‘res/drawable-mdpi/icon.png’`, and to 72×72 for `‘res/drawable-hdpi/icon.png’`.

1.2 Generating Documentation

Lastly, if you need to generate a new edition of this manual, you will need **texinfo** and **pdfTeX**.

To generate the manual in PDF, simply run:

```
texi2pdf ToDo.texinfo
```

2 To Do

- Document how the code works
- Document the data structures
- Document the encryption algorithms