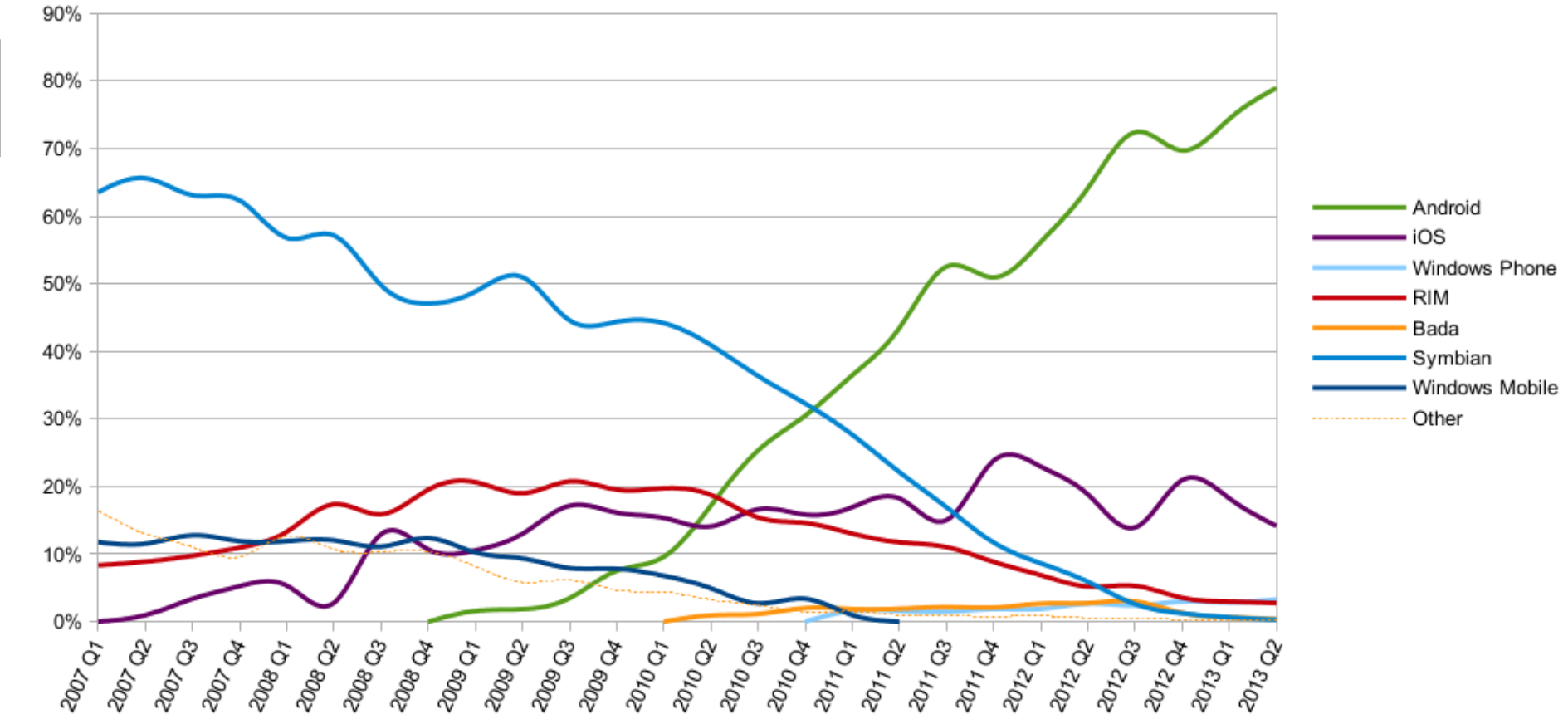
GDG DevFest
2013 Season

2013.10.03 DevFest @ **Omsk**

Android Studio

Make your first Android app

World-Wide Smartphone Sales (%)



http://en.wikipedia.org/wiki/Mobile_operating_system

Getting Started with Android Studio

EARLY ACCESS PREVIEW

Android Studio is a new Android development environment based on IntelliJ IDEA. Similar to Eclipse with the ADT Plugin, Android Studio provides integrated Android developer tools for development and debugging. On top of the capabilities you expect from IntelliJ, Android Studio offers:

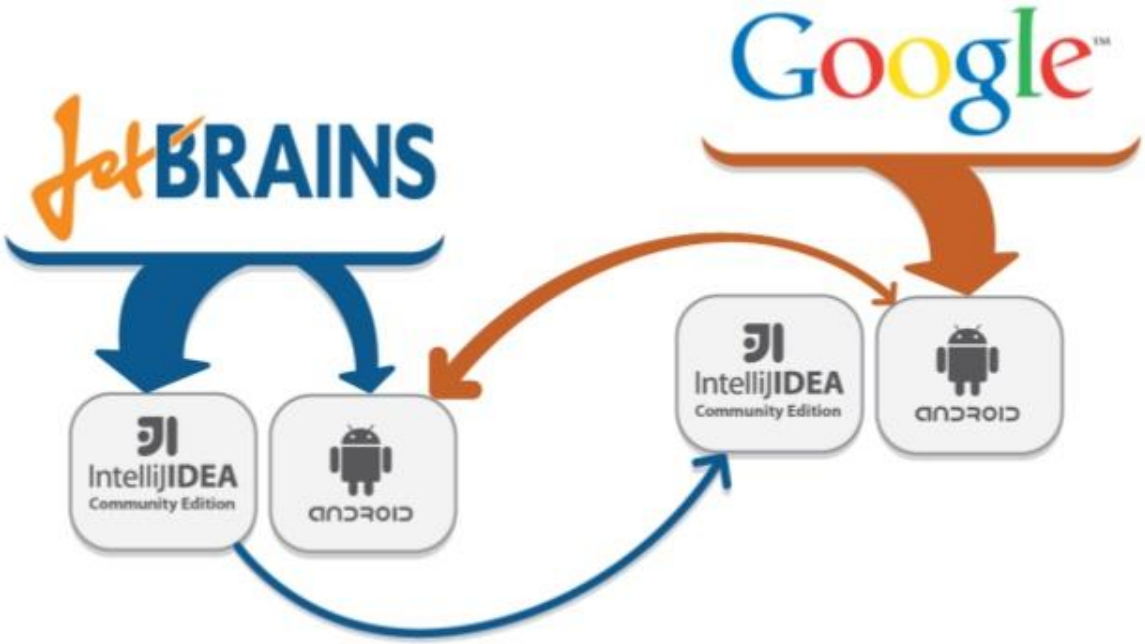
- Gradle-based build support.
- Android-specific refactoring and quick fixes.
- Lint tools to catch performance, usability, version compatibility and other problems.
- ProGuard and app-signing capabilities.
- Template-based wizards to create common Android designs and components.
- A rich layout editor that allows you to drag-and-drop UI components, preview layouts on multiple screen configurations, and much more.
- Built-in support for Google Cloud Platform, making it easy to integrate Google Cloud Messaging and App Engine as server-side components.

Download Android Studio v0.3.1
for Linux

This download includes:

Android Studio ⊂ IntelliJ IDEA 13

Сотрудничество JetBrains и Google



IntelliJ IDEA 13

Android

ANDROID STUDIO

Google's new official IDE for Android developers is now based on IntelliJ Platform and provides the same feature set as IntelliJ IDEA Community Edition.

GRADLE BUILD SYSTEM

The IDE provides now seamless integration with the new Gradle-based Android build system, including code assistance for editing Gradle DSL.

LINT INSPECTION

Better Android-specific code analysis with new Lint inspection.

RENDERSCRIPT

Syntax highlighting for RenderScript files.

XML EDITOR

Code completion for required attributes and rearranging of attributes based on code styles for XML files.

LOGCAT

The new enhanced user interface for the Logcat tool window, which now lets you filter by package name.

NINE-PATCH EDITOR

Now you can edit your 9-patch graphics files without leaving the IDE, using the built-in 9-patch editor.

COLOR PICKER

Now you can select colors in XML drawables and layout files via the new *Color picker*.

DATABASE ACCESS ULTIMATE

The IDE provides database tools for accessing device-embedded SQLite database.

The built-in tools lets you browse tables, edit its data and run queries.

LAYOUT PREVIEW

The layout preview has been improved with more options and capabilities to display more than one device simultaneously.

NAVIGATE TO RELATED FILE

Navigate between the layout file and related *Activity* or *Fragment* classes via the *Go to Related File* action.

NAVIGATE TO DECLARATION

Navigation to the declaration in the manifest for *Activity*, *Service* and other Android classes.

http://www.jetbrains.com/idea/nextversion/index.html

Gradle is Coming

Build
Test
Deploy
The Enterprise Automation Tool

Automation Evolved

- Strong yet flexible conventions
- Enterprise level control capabilities
- Manageable and understandable builds

gradle

OVERVIEW | DOWNLOADS | DOCUMENTATION | LEARN | WEBINARS | GRADLEWARE | HELP

Gradle 1.9-rc-2 is now available. We would appreciate your feedback!

WHAT IS GRADLE?

Gradle is build automation *evolved*. Gradle can automate the building, testing, publishing, deployment and more of software packages or other types of projects such as generated static websites, generated documentation or indeed anything else.

Gradle combines the power and flexibility of Ant with the dependency management and conventions of Maven into a more effective way to build. Powered by a Groovy DSL and packed with innovation, Gradle provides a declarative way to describe all kinds of builds through sensible defaults. Gradle is quickly becoming the build system of choice for many open source projects, leading edge enterprises and legacy automation challenges.

Learn more about what makes Gradle a compelling choice for build automation or get started with Gradle right now.

New O'Reilly Book, Out Now!

Building & Testing with Gradle

GET GRADLE!

Download Gradle 1.8

(released 24th September 2013)

[release notes] [more downloads]

Recent News

- Gradle 1.9-rc-2 is now available for testing
- Gradle 1.9-rc-1 is now available for testing

more...

Upcoming Trainings

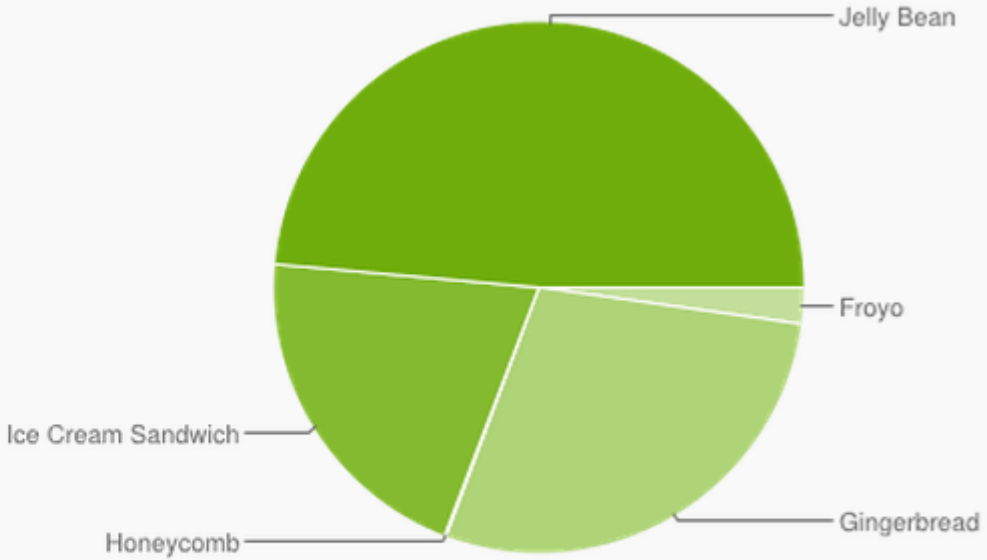
- Nov 4-6, 2013, San Francisco, US

more...

Read the "Building and Testing with Gradle" book online now for free @ gradleware.com!

Android Platform Versions

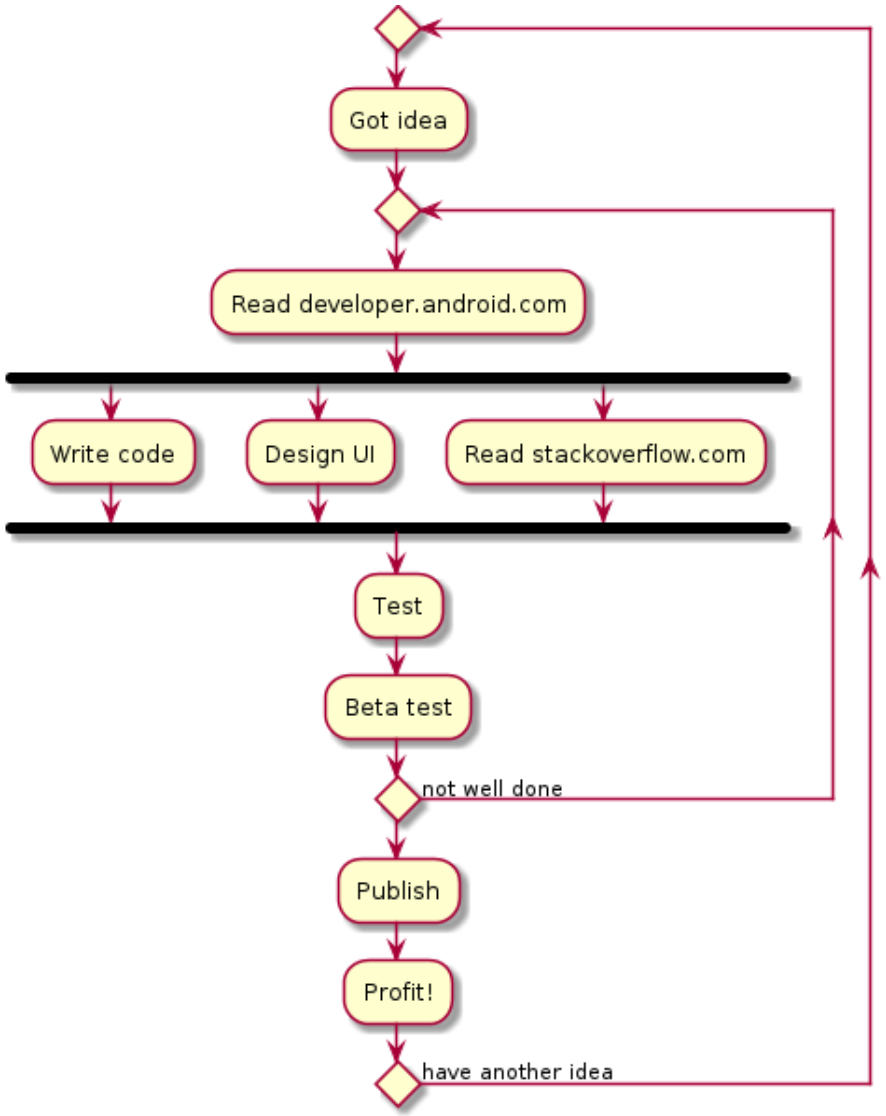
Version	Codename	API	Distribution
2.2	Froyo	8	2.2%
2.3.3 - 2.3.7	Gingerbread	10	28.5%
3.2	Honeycomb	13	0.1%
4.0.3 - 4.0.4	Ice Cream Sandwich	15	20.6%
4.1.x	Jelly Bean	16	36.5%
4.2.x		17	10.6%
4.3		18	1.5%



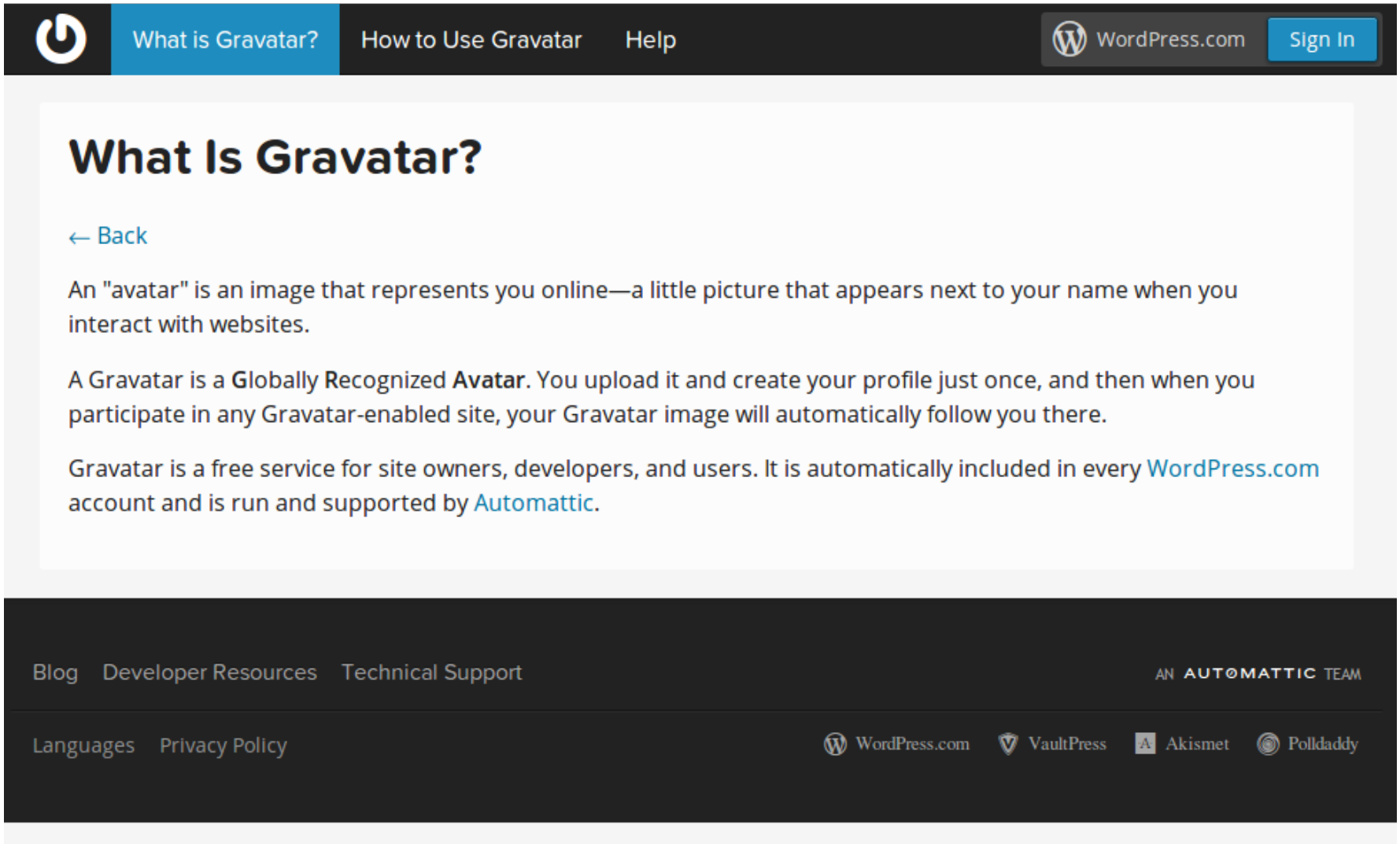
Data collected during a 7-day period ending on October 2, 2013.
Any versions with less than 0.1% distribution are not shown.

http://developer.android.com/about/dashboards/index.html

The Workflow

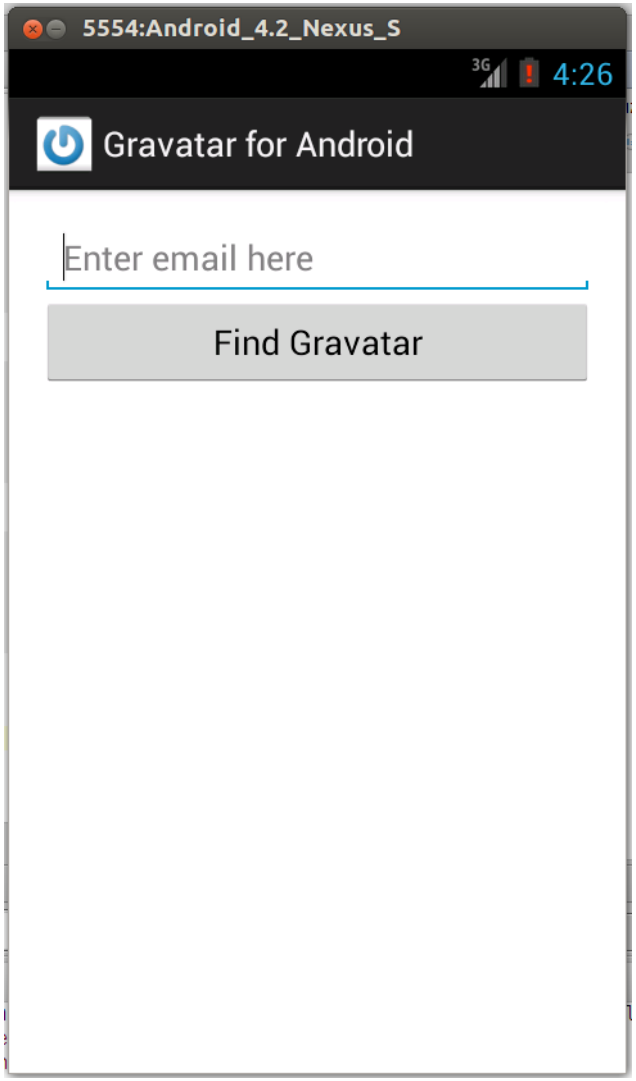


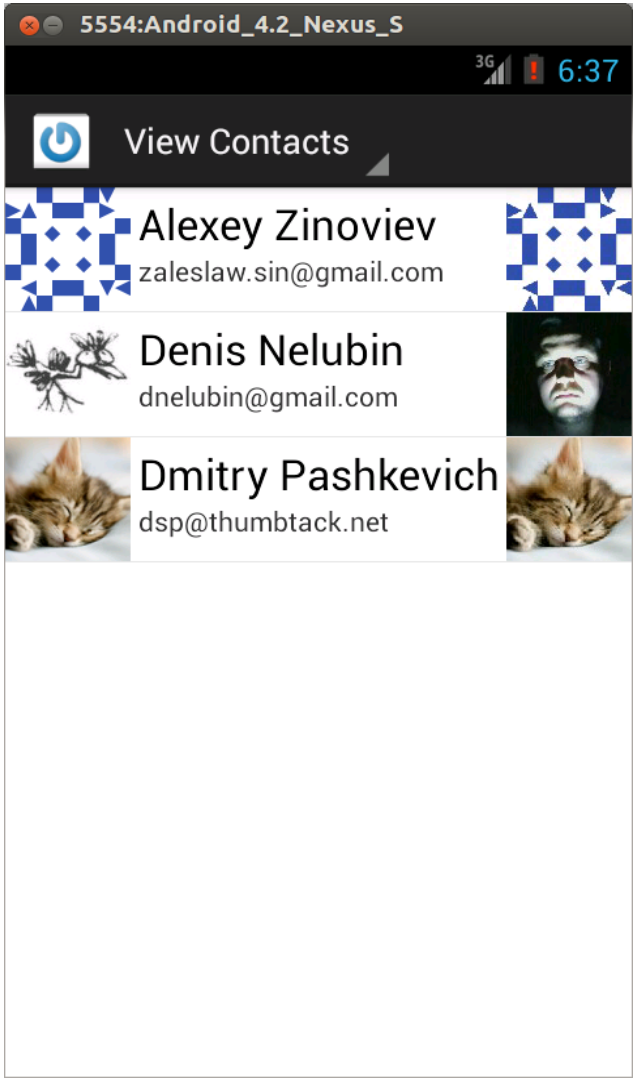
Gravatar



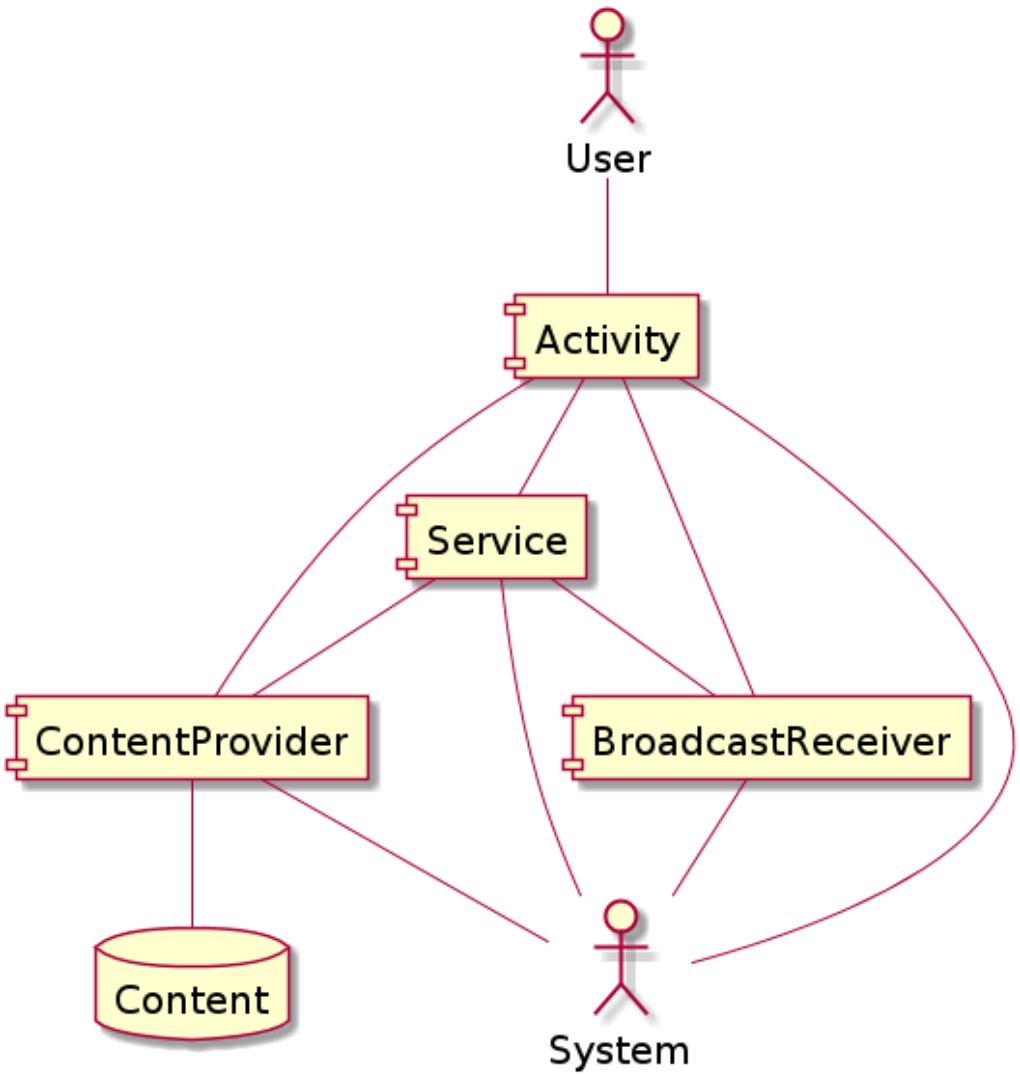
http://en.gravatar.com/support/what-is-gravatar/

Gravatar for Android

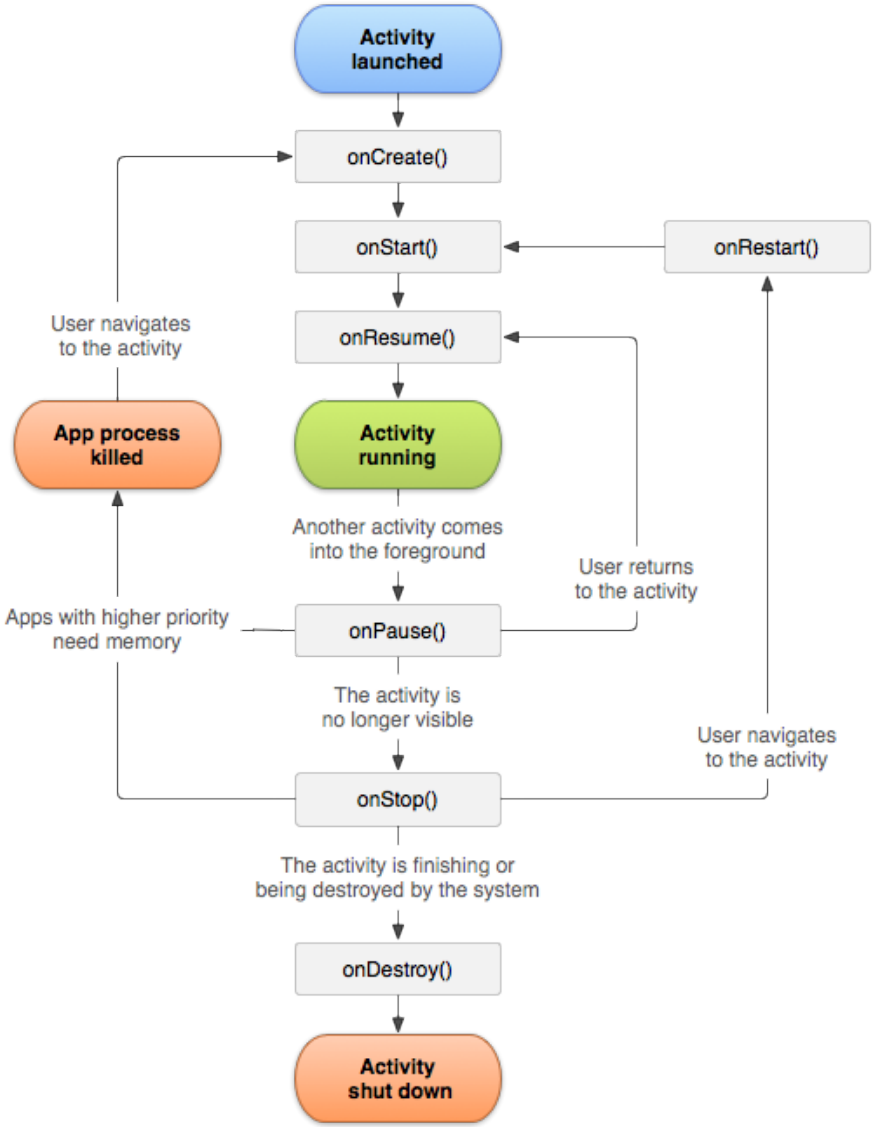




The App

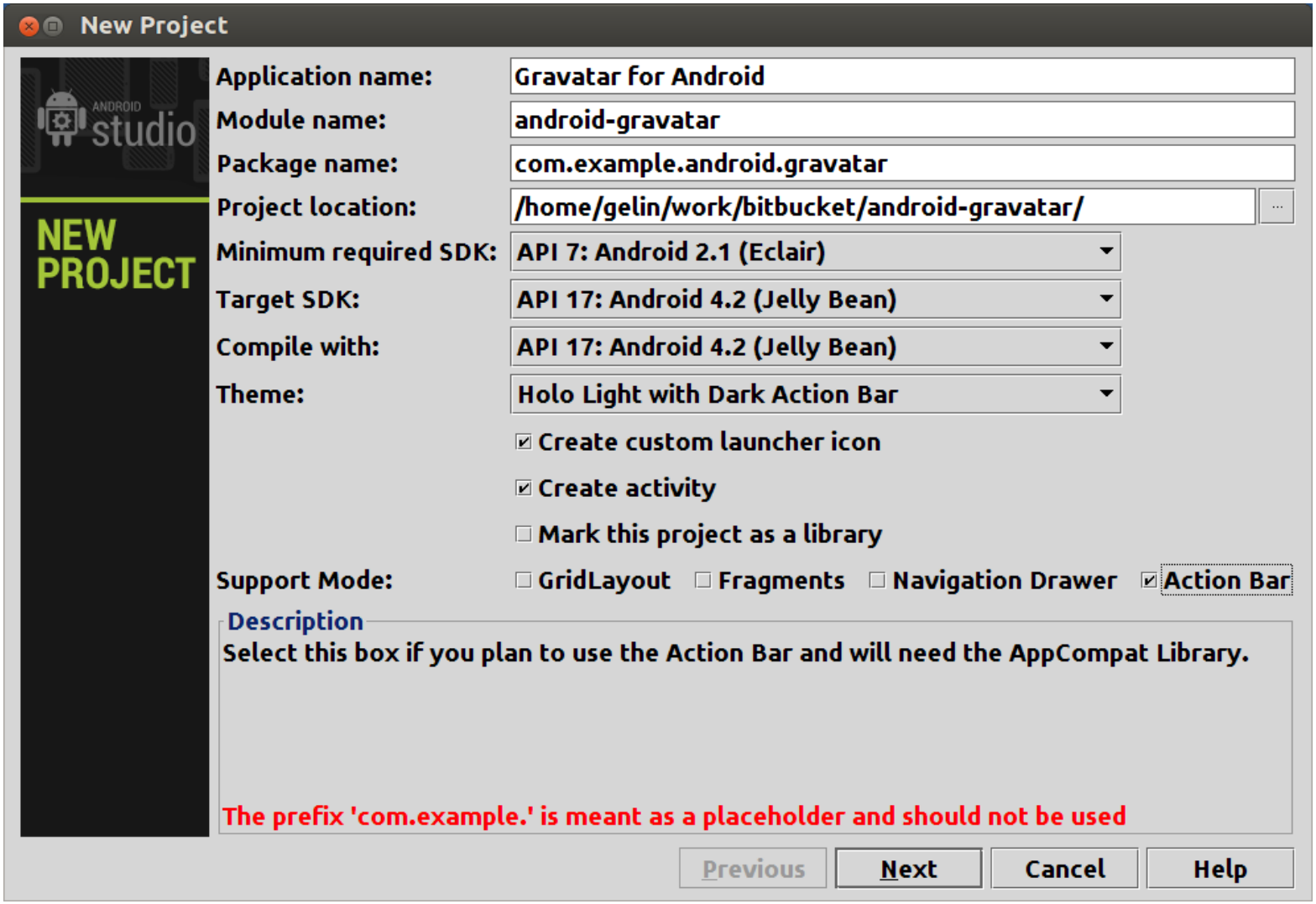

User
Activity
Service
ContentProvider
BroadcastReceiver
Content
System

The Activity

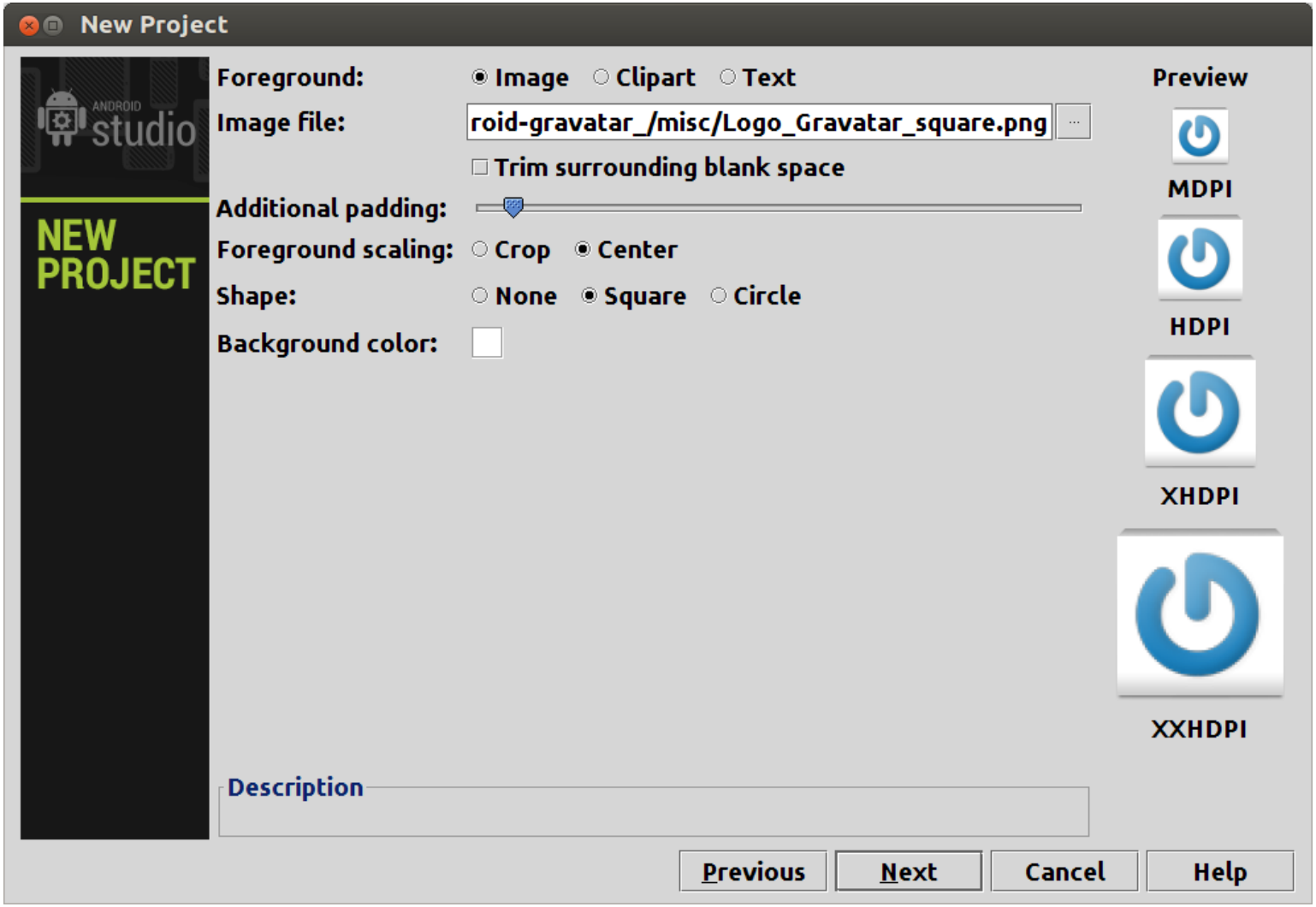


http://developer.android.com/guide/components/activities.html

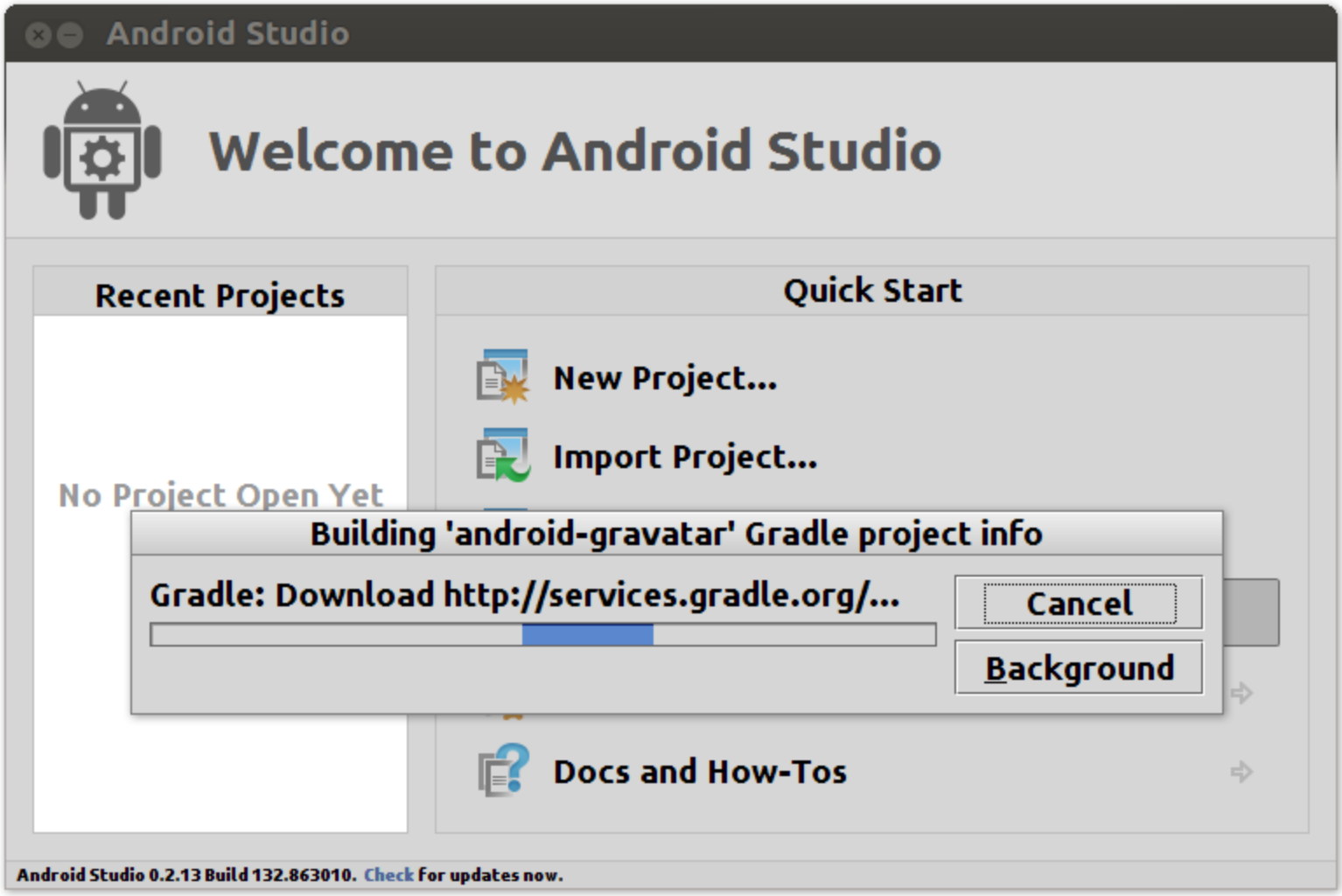
Creating the Project



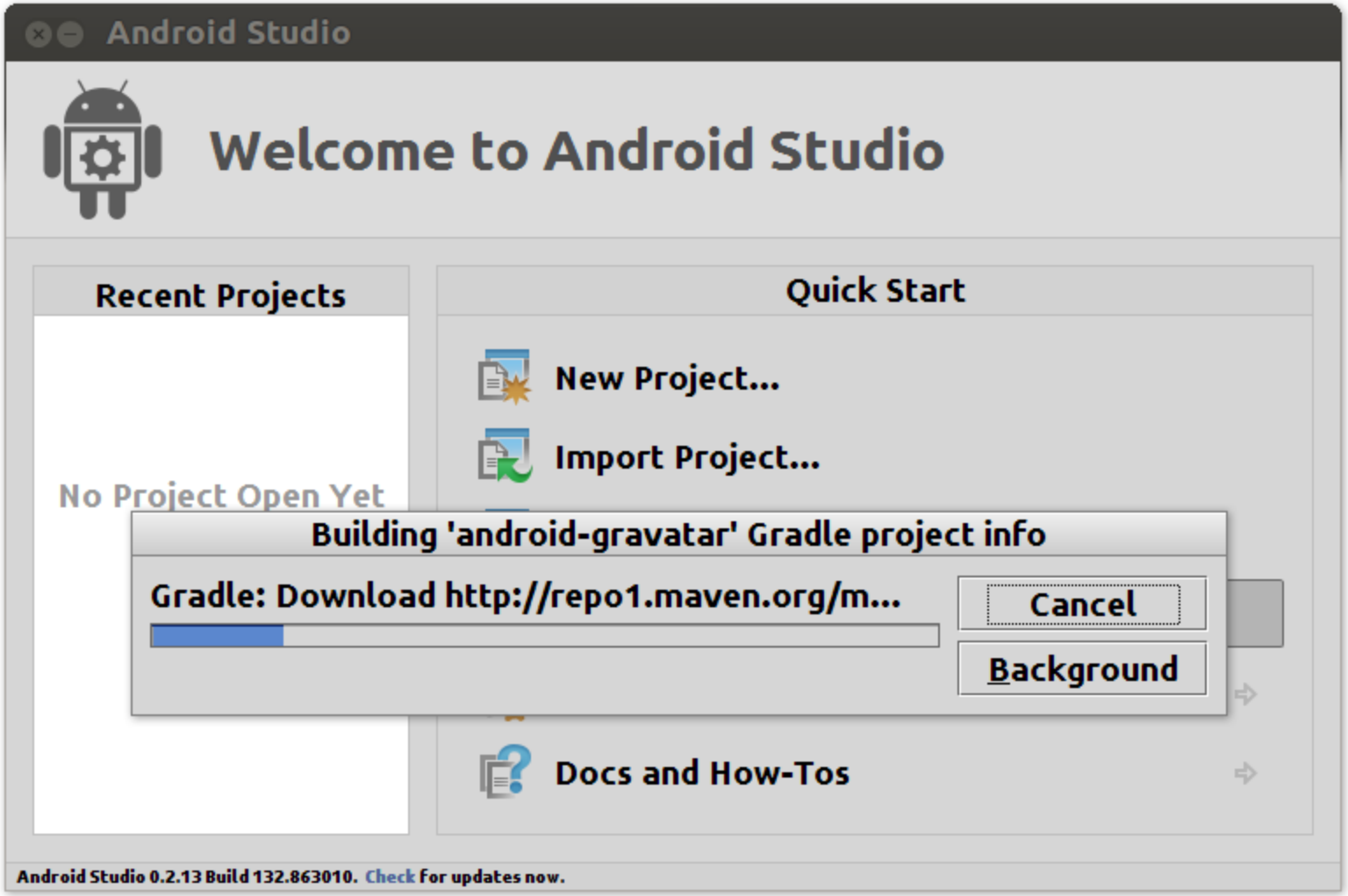
The Logo


New Project
ANDROID studio
NEW PROJECT
Foreground:
Image
Clipart
Text
Image file:
roid-gravatar_/misc/Logo_Gravatar_square.png
Trim surrounding blank space
Additional padding:
Foreground scaling:
Crop
Center
Shape:
None
Square
Circle
Background color:
Preview
MDPI
HDPI
XHDPI
XXHDPI
Description
Previous
Next
Cancel
Help

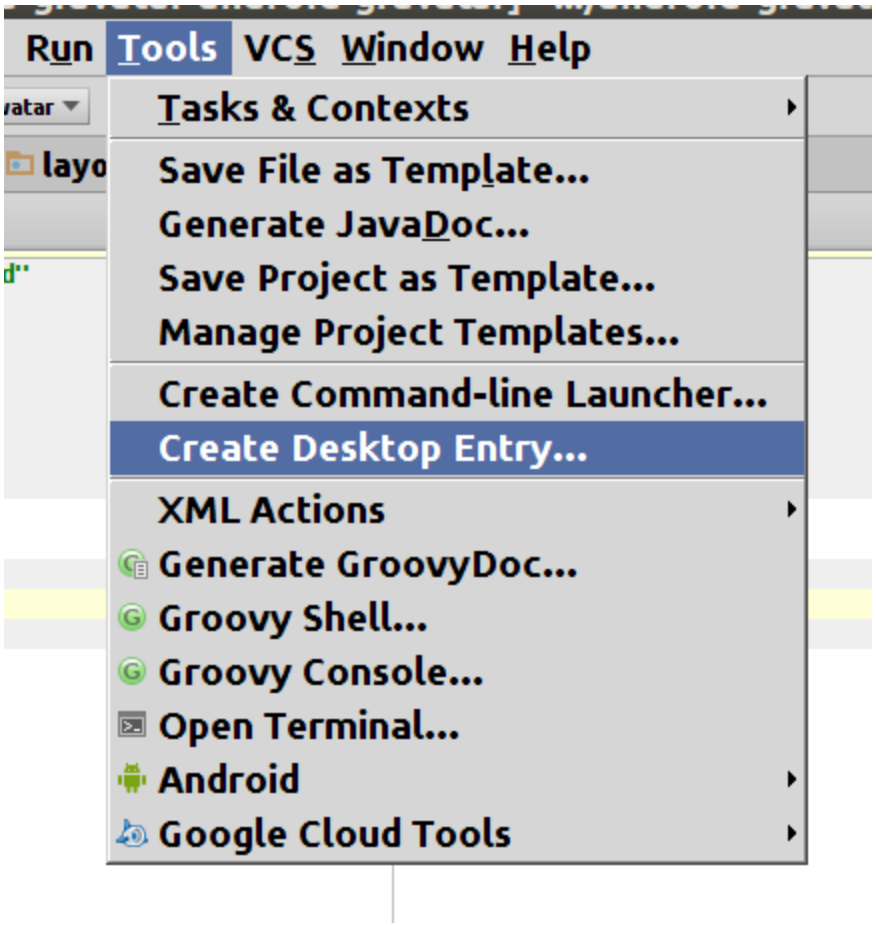
Downloading...



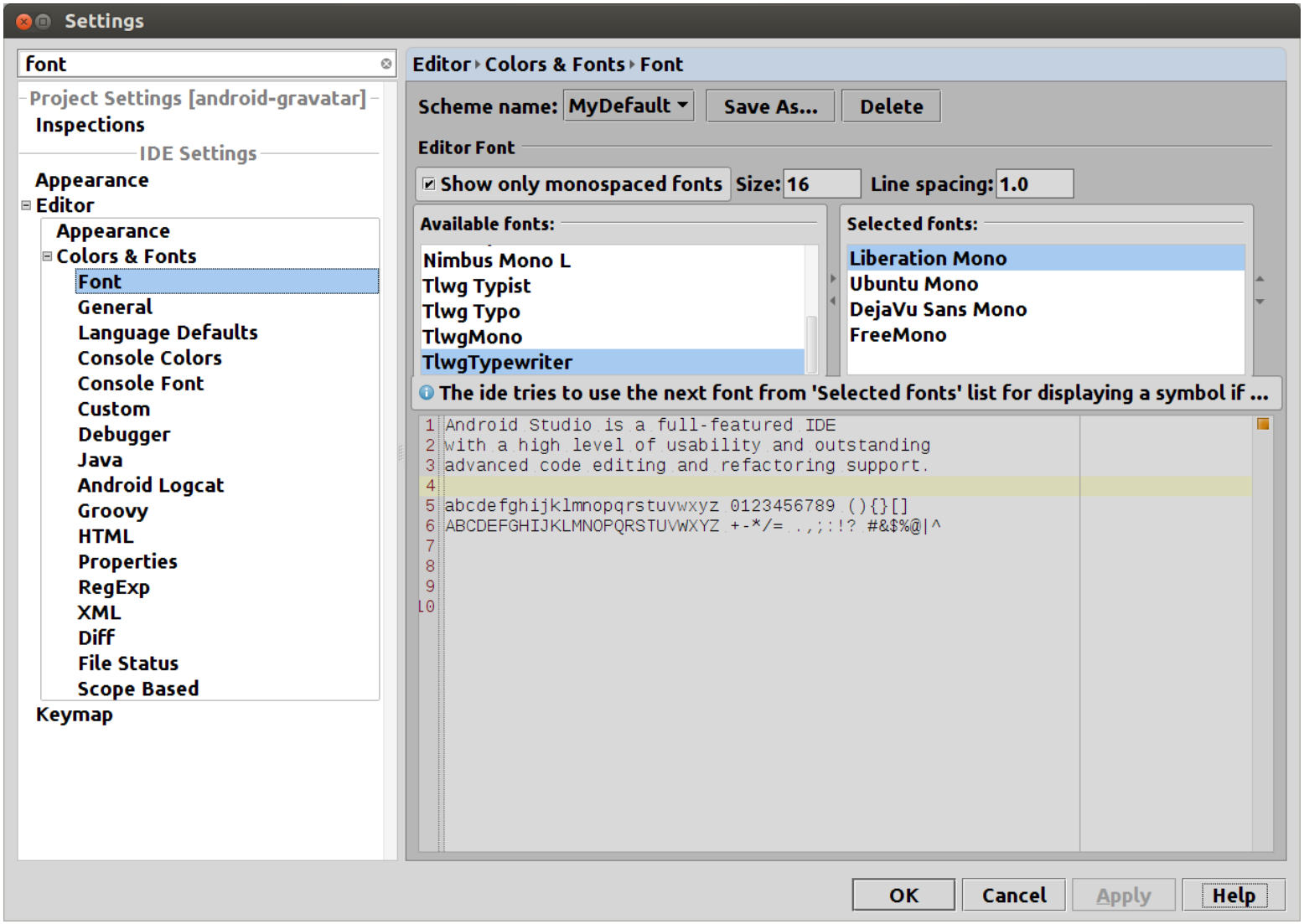
Downloading...



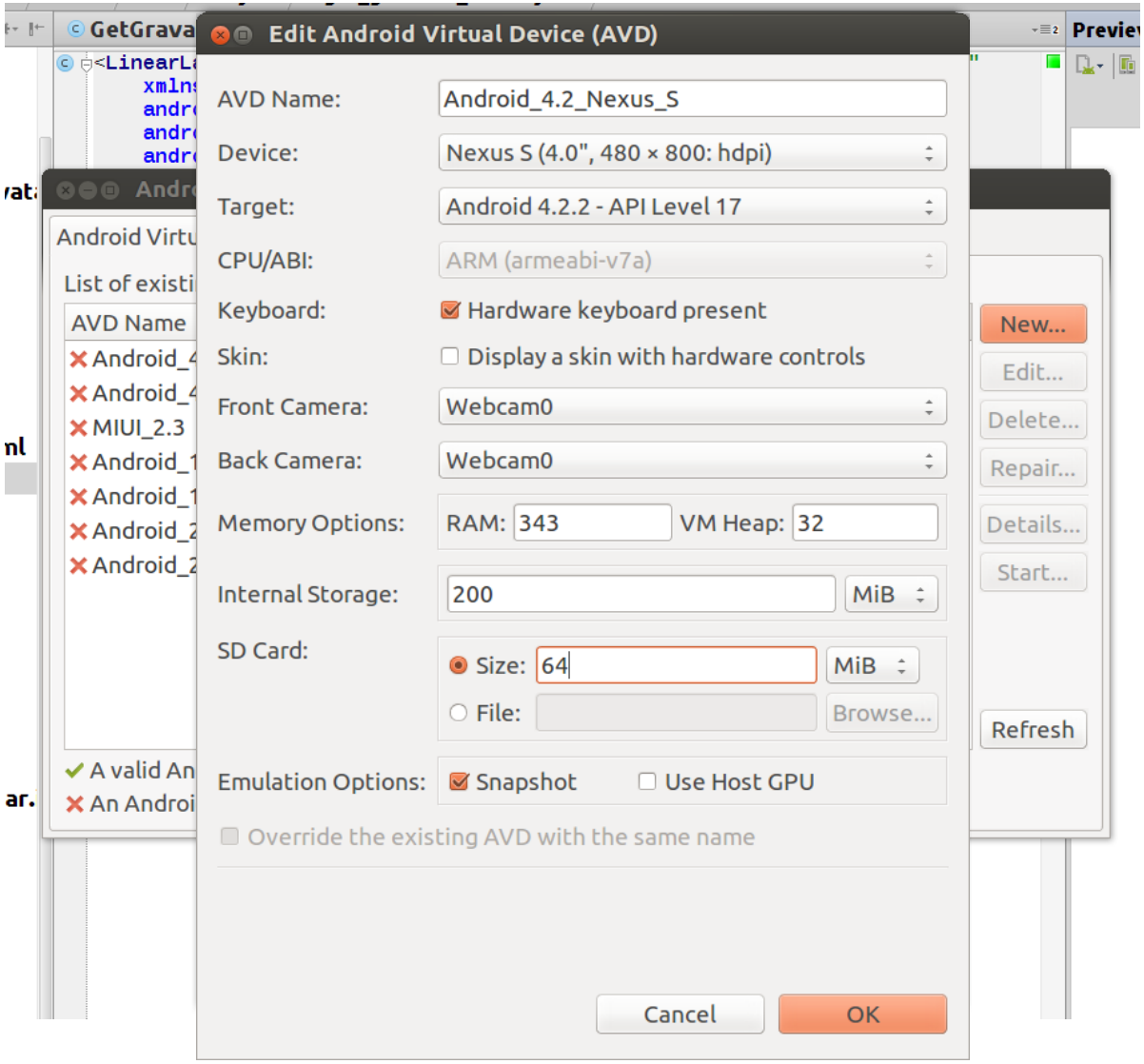
I <3 Desktop


Run
Tools
VCS
Window
Help
Tasks & Contexts
Save File as Template...
Generate JavaDoc...
Save Project as Template...
Manage Project Templates...
Create Command-line Launcher...
Create Desktop Entry...
XML Actions
Generate GroovyDoc...
Groovy Shell...
Groovy Console...
Open Terminal...
Android
Google Cloud Tools

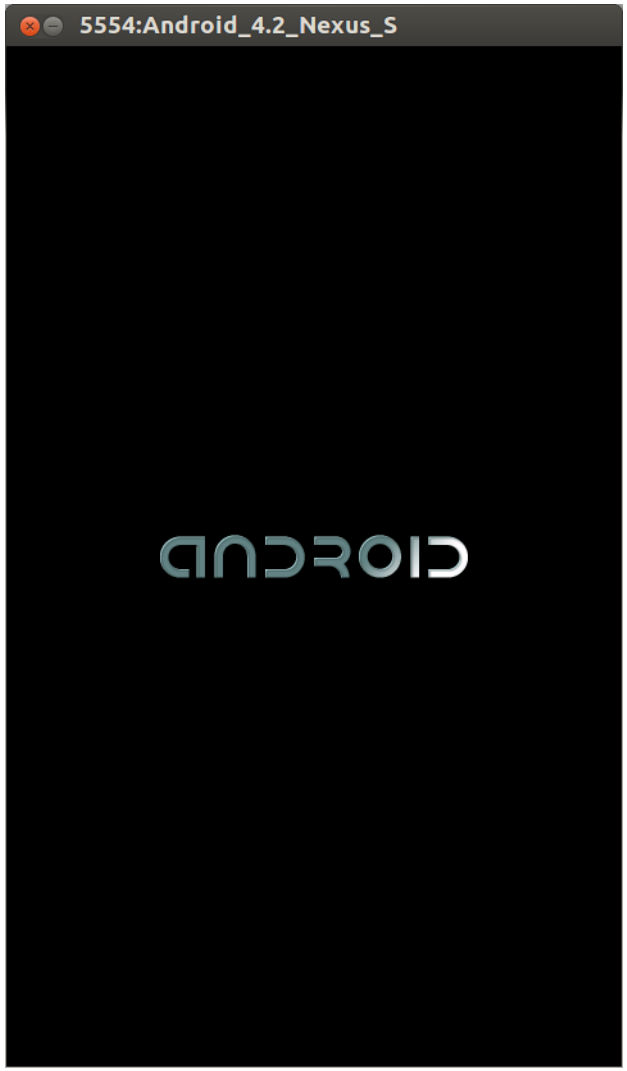
I <3 My Eyes

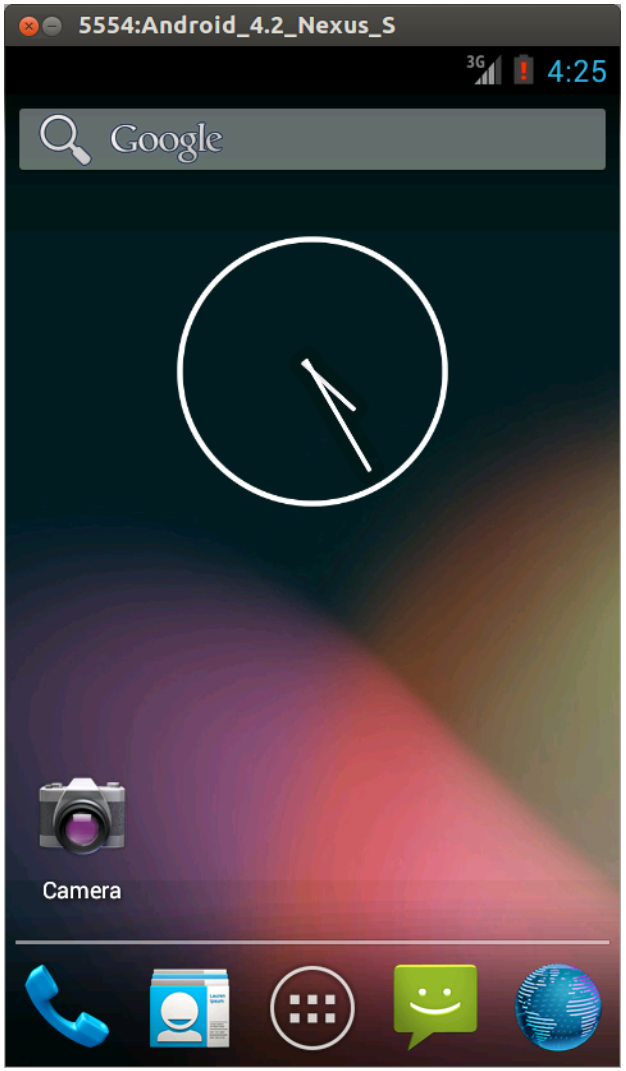

Settings
Font
Project Settings [android-gravatar]
Inspections
IDE Settings
Appearance
Editor
Appearance
Colors & Fonts
Font
General
Language Defaults
Console Colors
Console Font
Custom
Debugger
Java
Android Logcat
Groovy
HTML
Properties
RegExp
XML
Diff
File Status
Scope Based
Keymap
Editor ▸ Colors & Fonts ▸ Font
Scheme name: MyDefault
Save As...
Delete
Editor Font
Show only monospaced fonts
Size: 16
Line spacing: 1.0
Available fonts:
Nimbus Mono L
Tlwg Typist
Tlwg Typo
TlwgMono
TlwgTypewriter
Selected fonts:
Liberation Mono
Ubuntu Mono
DejaVu Sans Mono
FreeMono
The ide tries to use the next font from 'Selected fonts' list for displaying a symbol if ...
1 Android Studio is a full-featured IDE
2 with a high level of usability and outstanding
3 advanced code editing and refactoring support.
4
5 abcdefghijklmnopqrstuvwxyz 0123456789 (){}[]
6 ABCDEFGHIJKLMNOPQRSTUVWXYZ +-*/= .,;:!? #&$%@|^
7
8
9
10
OK
Cancel
Apply
Help

Emulate It


Edit Android Virtual Device (AVD)
AVD Name: Android_4.2_Nexus_S
Device: Nexus S (4.0", 480 × 800: hdpi)
Target: Android 4.2.2 - API Level 17
CPU/ABI: ARM (armeabi-v7a)
Keyboard: Hardware keyboard present
Skin: Display a skin with hardware controls
Front Camera: Webcam0
Back Camera: Webcam0
Memory Options: RAM: 343 VM Heap: 32
Internal Storage: 200 MiB
SD Card:
Size: 64 MiB
File: Browse...
Emulation Options: Snapshot Use Host GPU
Override the existing AVD with the same name
Cancel
OK
Android Virtu
List of existi
AVD Name
Android_4
Android_4
MIUI_2.3
Android_1
Android_1
Android_2
Android_2
A valid An
An Androi
New...
Edit...
Delete...
Repair...
Details...
Start...
Refresh

Emulated Android





Don’t Make Bicycles

jgravatar

jgravatar is a tiny Java library for accessing avatar images from gravatar.com

Usage example

```
Gravatar gravatar = new Gravatar();
gravatar.setSize(50);
gravatar.setRating(GravatarRating.GENERAL_AUDIENCES);
gravatar.setDefaultImage(GravatarDefaultImage.IDENTICON);
String url = gravatar.getUrl("iHaveAn@email.com");
byte[] jpg = gravatar.download("info@ralfebert.de");
```

License

You can use jgravatar under the terms of the BSD or the LGPL license:

https://github.com/ralfebert/jgravatar

Gradle Depends

```
dependencies {

    // You must install or update the Support Repository through the SDK mana
    // The Support Repository (separate from the corresponding library) can b
    // compile 'com.android.support:appcompat-v7:18.0.0'

    compile 'commons-codec:commons-codec:1.3'   // v.1.3 is required to avoid
    compile 'commons-io:commons-io:2.4'
    compile 'commons-lang:commons-lang:2.6'

}
```

Gradle Happens

2 Answers active oldest **votes**

9

Using the command line, in the root of your project, run :

```
./gradlew clean && ./gradlew build
```

Then recompile your project in studio and you should see your new dependencies.

share | improve this answer

answered May 30 at 16:17

lukas
524 ●3 ●9

It works, thank you! – Egor May 31 at 8:09

2 ./gradlew clean build – J c Jun 9 at 20:31

'.' is not recognised as an internal or external command. – Wotuu Sep 28 at 22:55

'.' refers to your current folder. – lukas Sep 29 at 12:34

http://stackoverflow.com/questions/16840982/

Gradle Upgrades

9

I saw this error after upgrading from 0.2.13 to 0.3. These are the steps I completed to resolve the issue.

1.In build.gradle make sure gradle is set to 0.6.+

```
buildscript {
    repositories {
        mavenCentral()
    }
    dependencies {
        classpath 'com.android.tools.build:gradle:0.6.+'
    }
}
```

2.In gradle-wrapper.properties make sure to use gradle 1.8

```
) 15:27:10 PDT 2013
onBase=GRADLE_USER_HOME
onPath=wrapper/dists
se=GRADLE_USER_HOME
th=wrapper/dists
onUrl=http\://services.gradle.org/distributions/gradle-1.8-bin.zip
```

3.Sync project with gradle files by pressing the button to the left of the avd button

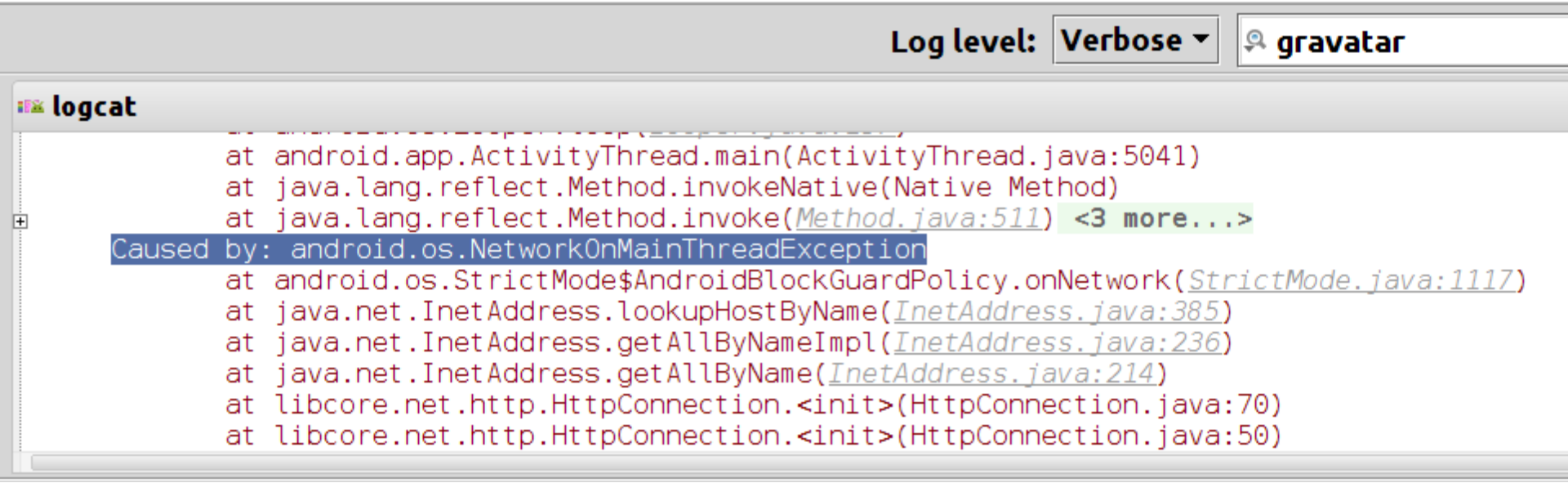
4.Try to build project again. If still having issues possibly try File > Invalidate Caches/Restart

share | improve this answer

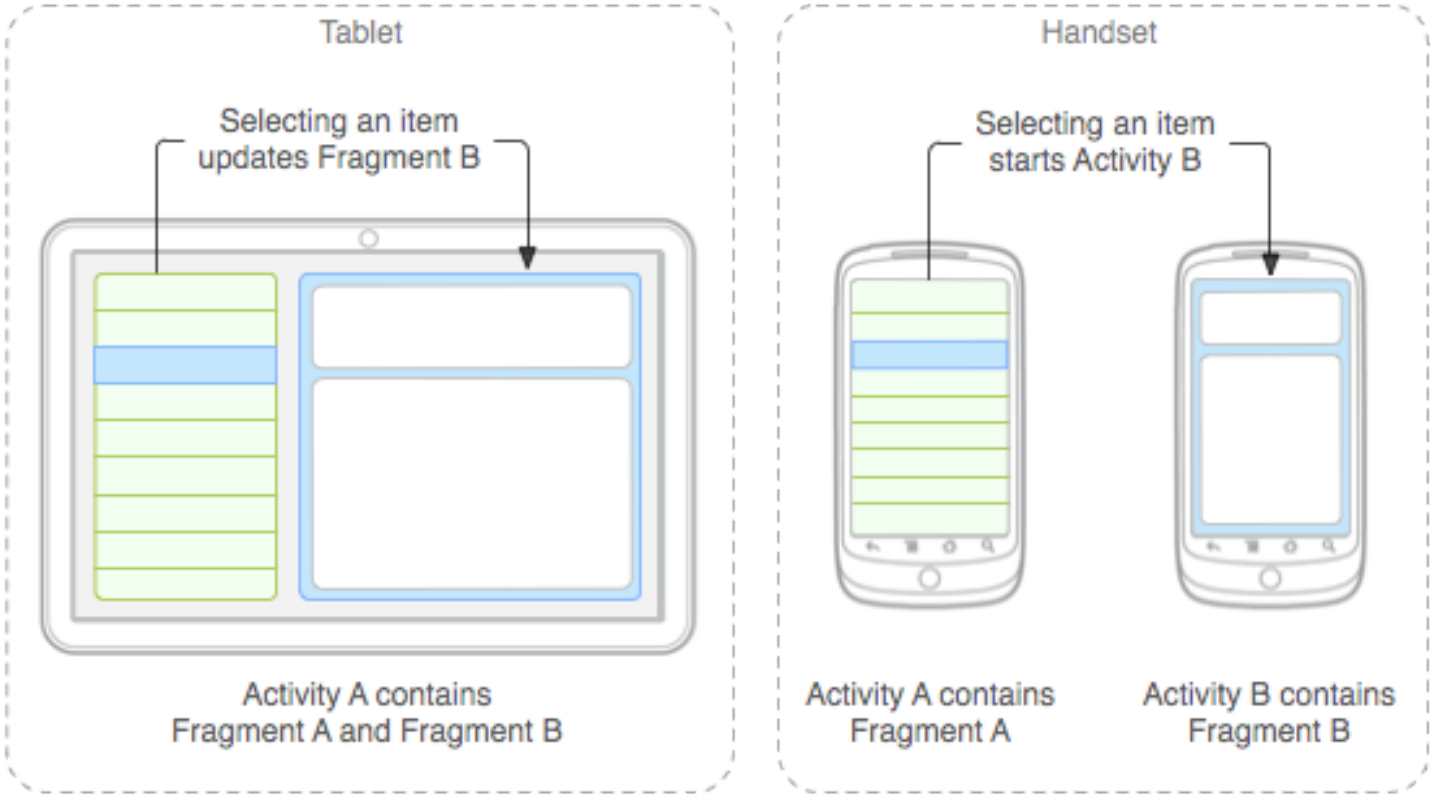
answered yesterday
Adam Johns
1.274 1 4 22

http://stackoverflow.com/questions/18256177/

Use Threads, Duke

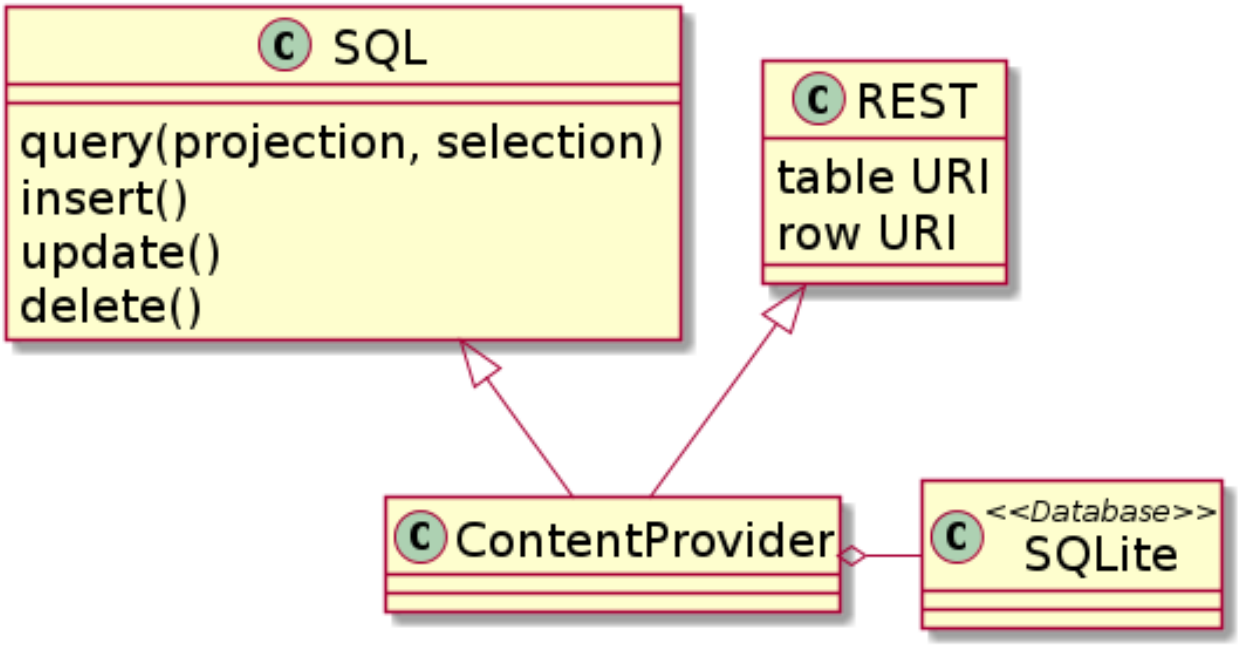


The Fragments

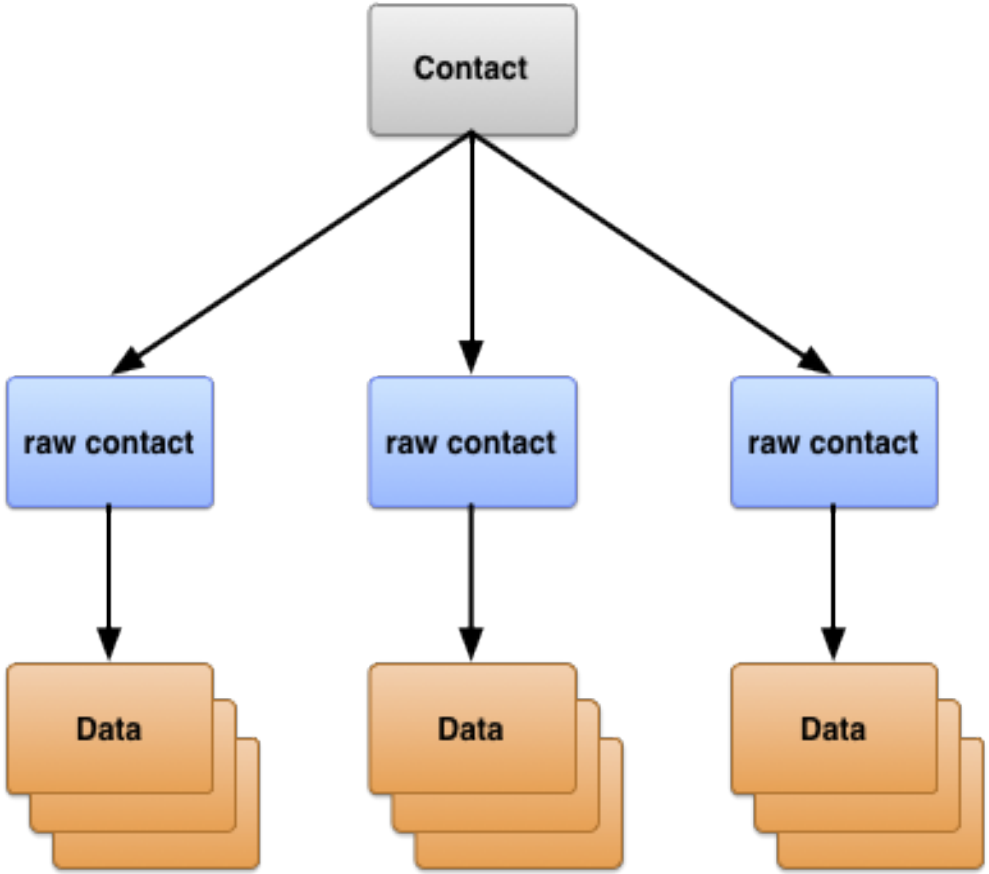


http://developer.android.com/guide/components/fragments.html

Provide Me

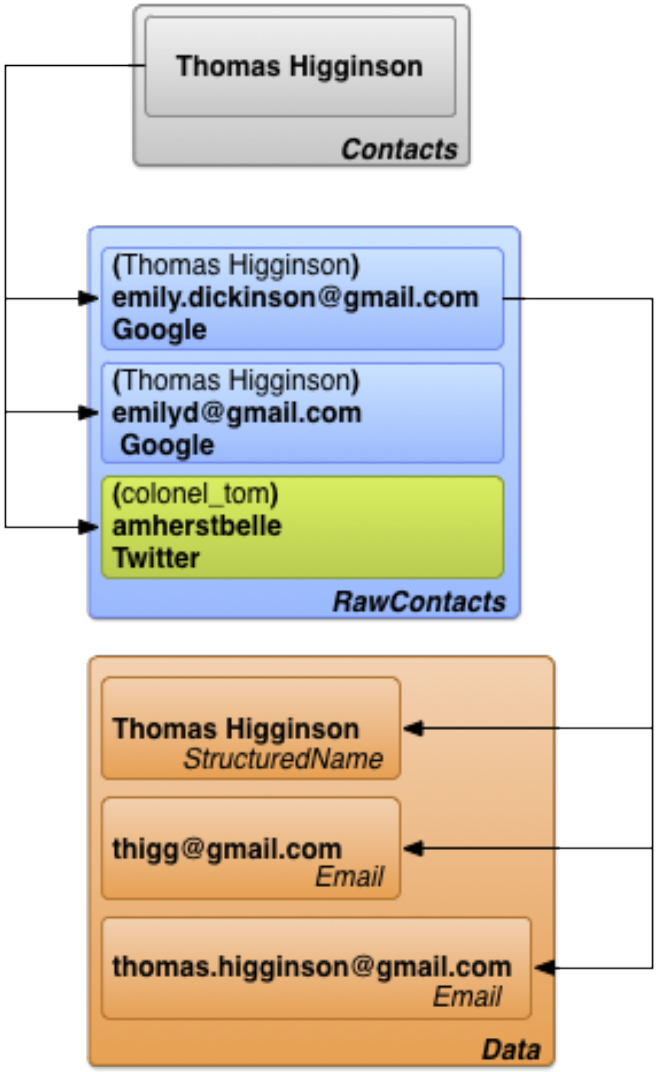

SQL
query(projection, selection)
insert()
update()
delete()
REST
table URI
row URI
ContentProvider
<<Database>>
SQLite

Gosh! Contacts



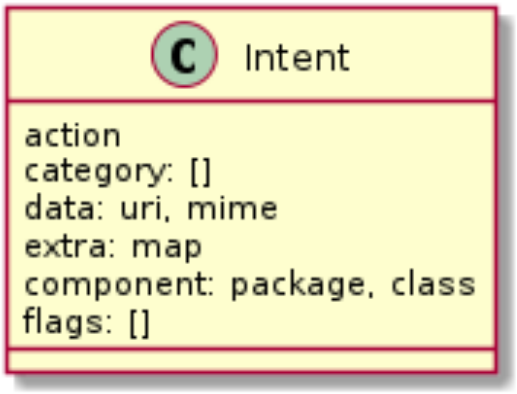
http://developer.android.com/guide/topics/providers/contacts-provider.html

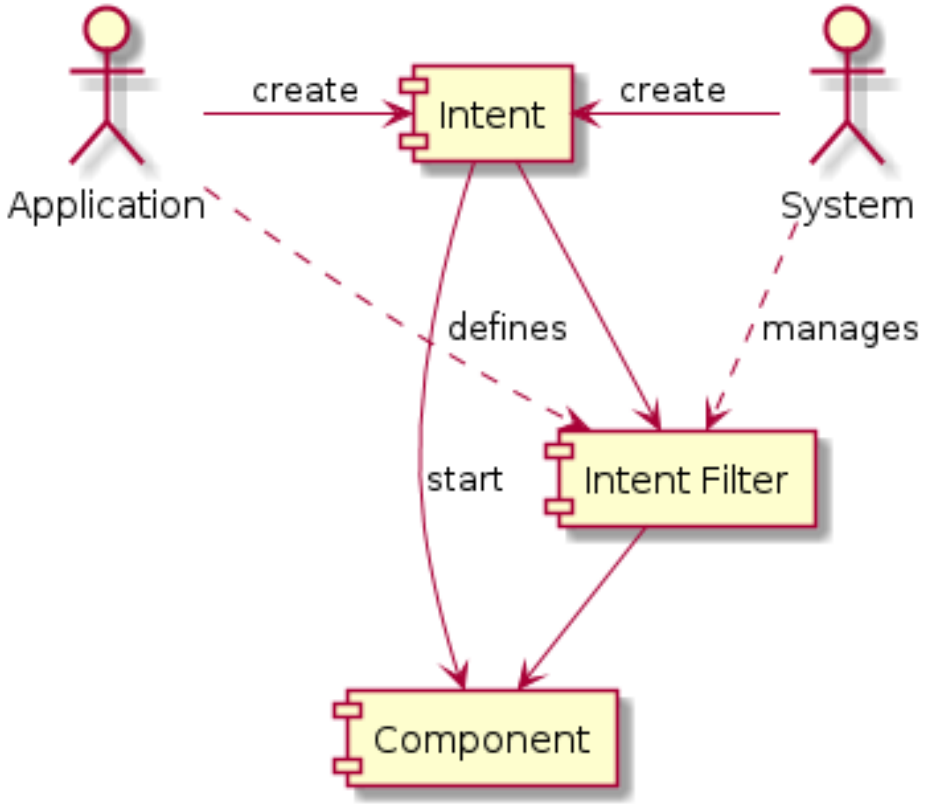
Gosh! Contacts



http://developer.android.com/guide/topics/providers/contacts-provider.html

The Intent


Intent
action
category: []
data: uri, mime
extra: map
component: package, class
flags: []


create
Intent
create
Application
System
defines
manages
start
Intent Filter
Component

Show the Contact

2

In my application when a user clicks on a button I want to open the contacts application and display a particular contacts information.

At the minute I have this:

```
ıtent intent = new Intent(Intent.ACTION_VIEW, People.CONTENT_URI);
:artActivity(intent);
```

This displays the contact application with all the contacts displayed.

But how do I get it to display just one contact according to the contacts name or number?

This Code works: (answer)

```
Uri contactUri = ContentUris.withAppendedId(People.CONTENT_URI, 23

Intent intent = new Intent(Intent.ACTION_VIEW, contactUri);
startActivity(intent);
```

android | content | android-intent | contacts

share | improve this question edited Mar 19 at 17:06 asked Mar 29 '10 at 9:04

http://stackoverflow.com/questions/2536761/

Not All Styles Happens

5

You need to set the activated style for your list row. The catch is that this is only available on API Level 11 and higher.

One way to do this is to use two separate styles. In `res/values-v11/styles.xml`, you could have:

```
<?xml version="1.0" encoding="utf-8"?>
<resources>
  <style name="activated" parent="android:Theme.Holo">
    <item name="android:background">?android:attr/activatedBackgr
  </style>
</resources>
```

Whereas `res/values/styles.xml` you would have:

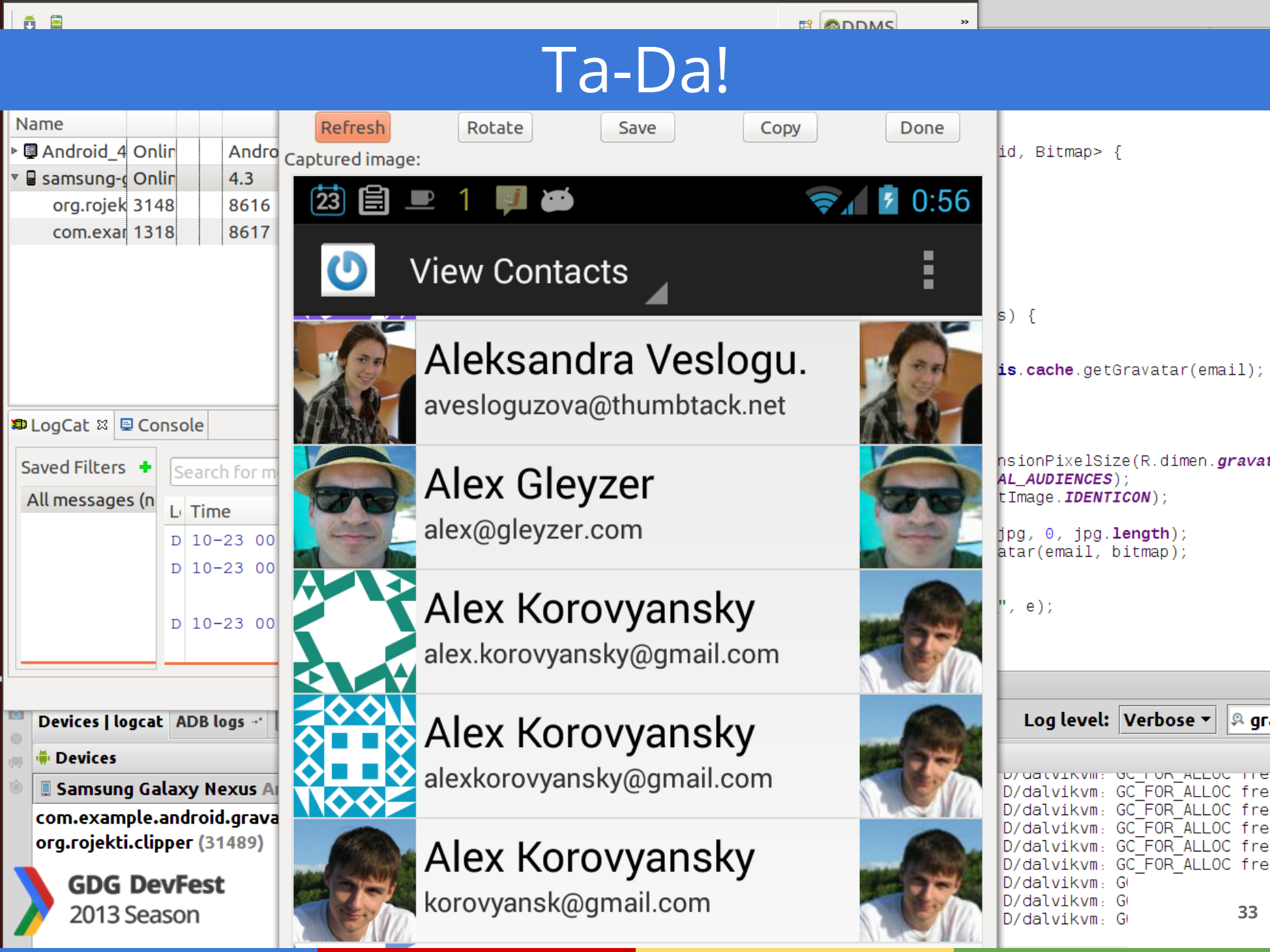
```
<?xml version="1.0" encoding="utf-8"?>
<resources>
  <style name="activated">
  </style>
</resources>
```

Your row layout would then use that `activated` style, such as:

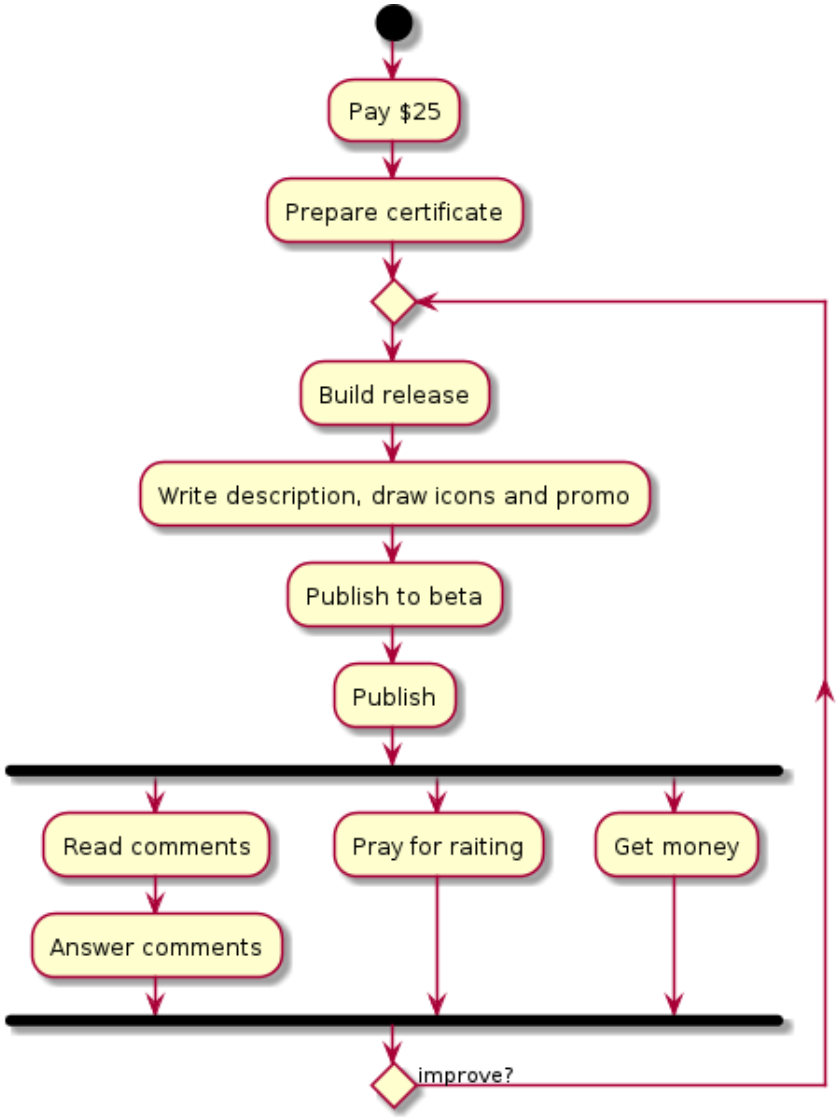
```
<?xml version="1.0" encoding="utf-8"?>
<TextView xmlns:android="http://schemas.android.com/apk/res/andro
  android:id="@android:id/text1"
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:textAppearance="?android:attr/textAppearanceLarge"
  android:gravity="center_vertical"
  android:layout_marginLeft="4dip"
  android:minHeight="?android:attr/listPreferredItemHeight"
  style="@style/activated"
/>
```

http://stackoverflow.com/questions/7779743/

Ta-Da!


Refresh
Rotate
Save
Copy
Done
Captured image:
View Contacts
Aleksandra Veslogu.
avesloguzova@thumbtack.net
Alex Gleyzer
alex@gleyzer.com
Alex Korovyansky
alex.korovyansky@gmail.com
Alex Korovyansky
alexkorovyansky@gmail.com
Alex Korovyansky
korovyansk@gmail.com
LogCat
Console
Devices | logcat
ADB logs
Devices
Samsung Galaxy Nexus
com.example.android.grava
org.rojekti.clipper (31489)
Log level: Verbose
GDG DevFest
2013 Season
33

Be Popular


Pay $25
Prepare certificate
Build release
Write description, draw icons and promo
Publish to beta
Publish
Read comments
Answer comments
Pray for raiting
Get money
improve?

Android Studio

Denis Nelubin

Speaker

System Architector

dnelubin@gmail.com

Thanks