

# Praktischer Einstieg in die Android-Programmierung

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2013



**20** | **Lines  
of  
Code**

# Agenda

- Tools und Entwicklungsumgebung
- Grundlagen
- GUI-Entwicklung
- Custom widgets
  
- Erwartete

Vorkenntnisse: Java



<http://www.merequipment.com/blog/2008/08/19/vital-hand-tools-for-your-boat/>

# Über mich

- Langjährige Java-Erfahrung
- Großprojekte, Middleware
- Eigene Projekte
  - Android: Makrophyten-App (Beta)  
<http://www.mhoehme.de/android>

# Entwicklungsumgebung

- Java
- Android-SDK ← android.jar  
und tools, ...

<http://developer.android.com/sdk/index.html>

- Kommandozeile/  
texteditor
- Eclipse + ADT-Plugin
- Idea / Androidstudio



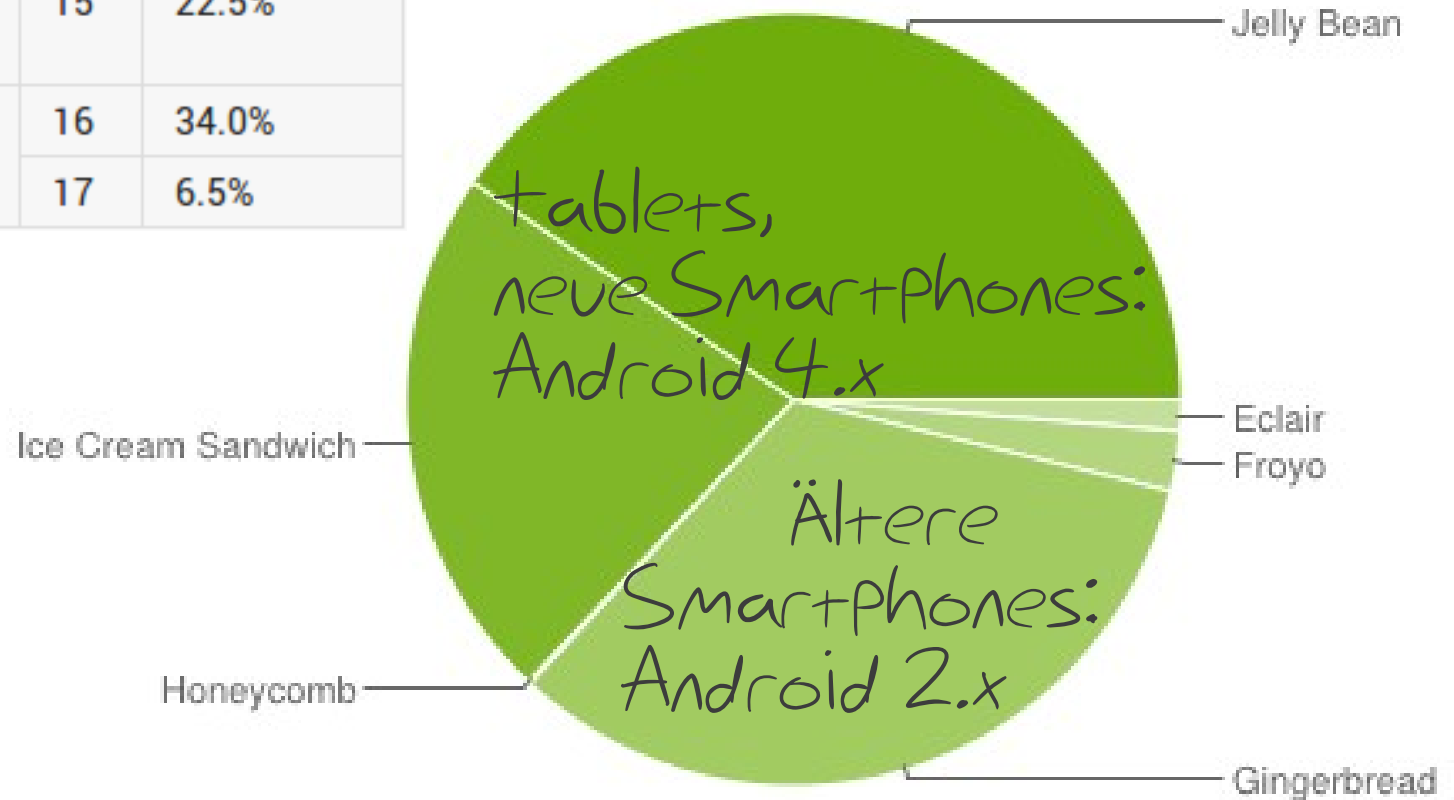
# Android SDK Manager

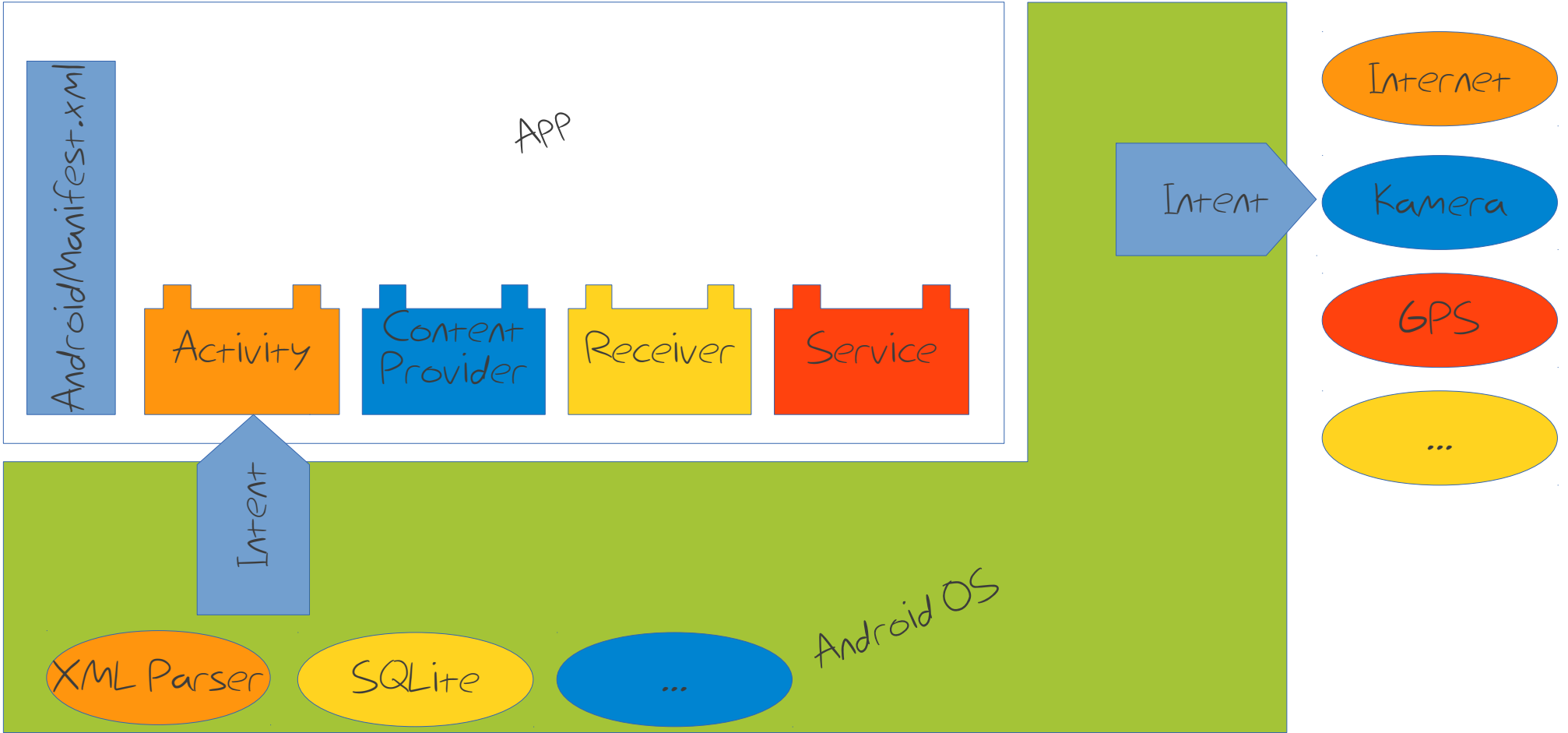
<ANDROID\_HOME>/tools/android

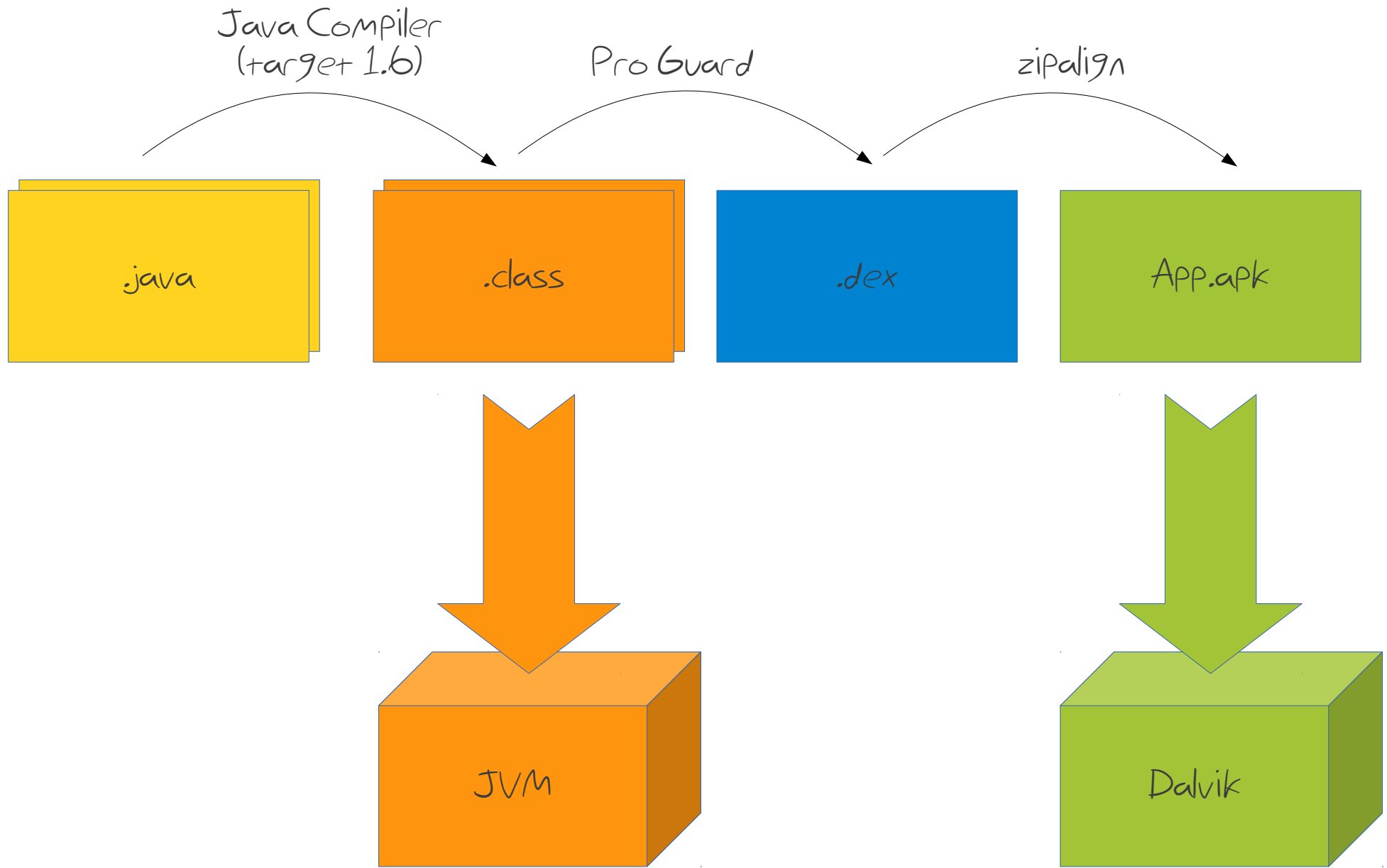
Version	Codename	API	Distribution
1.6	Donut	4	0.1%
2.1	Eclair	7	1.2%
2.2	Froyo	8	2.5%
2.3 - 2.3.2	Gingerbread	9	0.1%
2.3.3 - 2.3.7		10	33.0%
3.2	Honeycomb	13	0.1%
4.0.3 - 4.0.4	Ice Cream Sandwich	15	22.5%
4.1.x	Jelly Bean	16	34.0%
4.2.x		17	6.5%

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

Stand: 1.8.2013

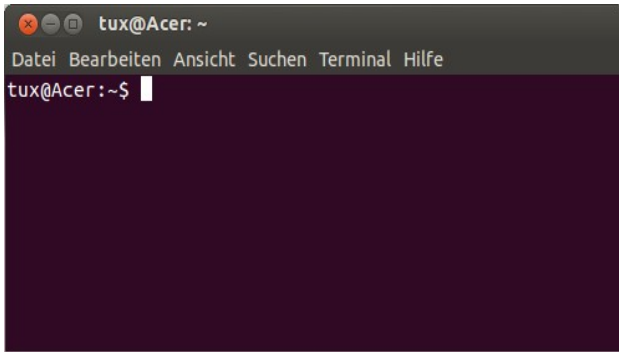
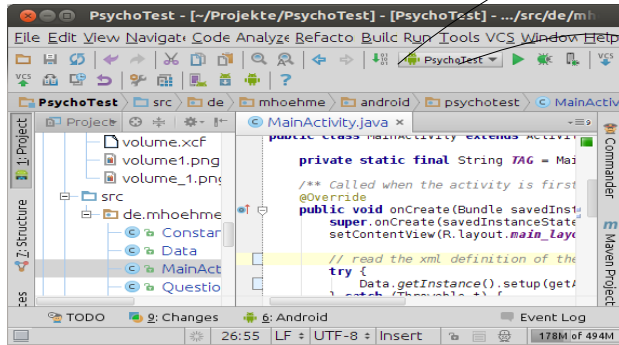








Entwicklungsumgebung  
(integriert oder  
Kommandozeile)



<ANDROID\_SDK>/tools

android



Create project  
Manage sdk  
Manage virtual devices

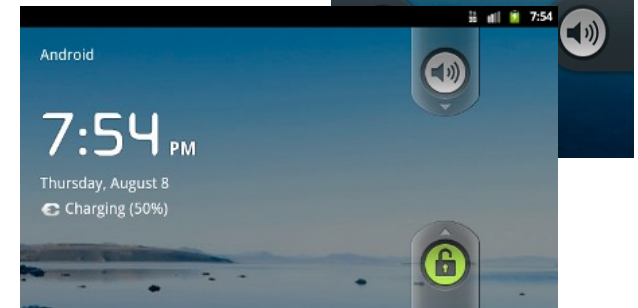
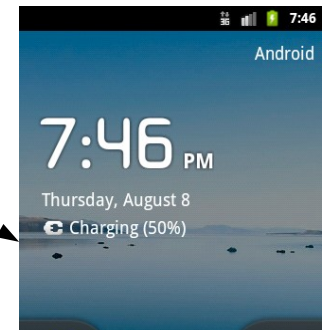
DDMS  
(Dalvik Debug Monitor)

emulator

<ANDROID\_SDK>/  
platform-tools

ADB  
(Android Debug Bridge)

adb logcat



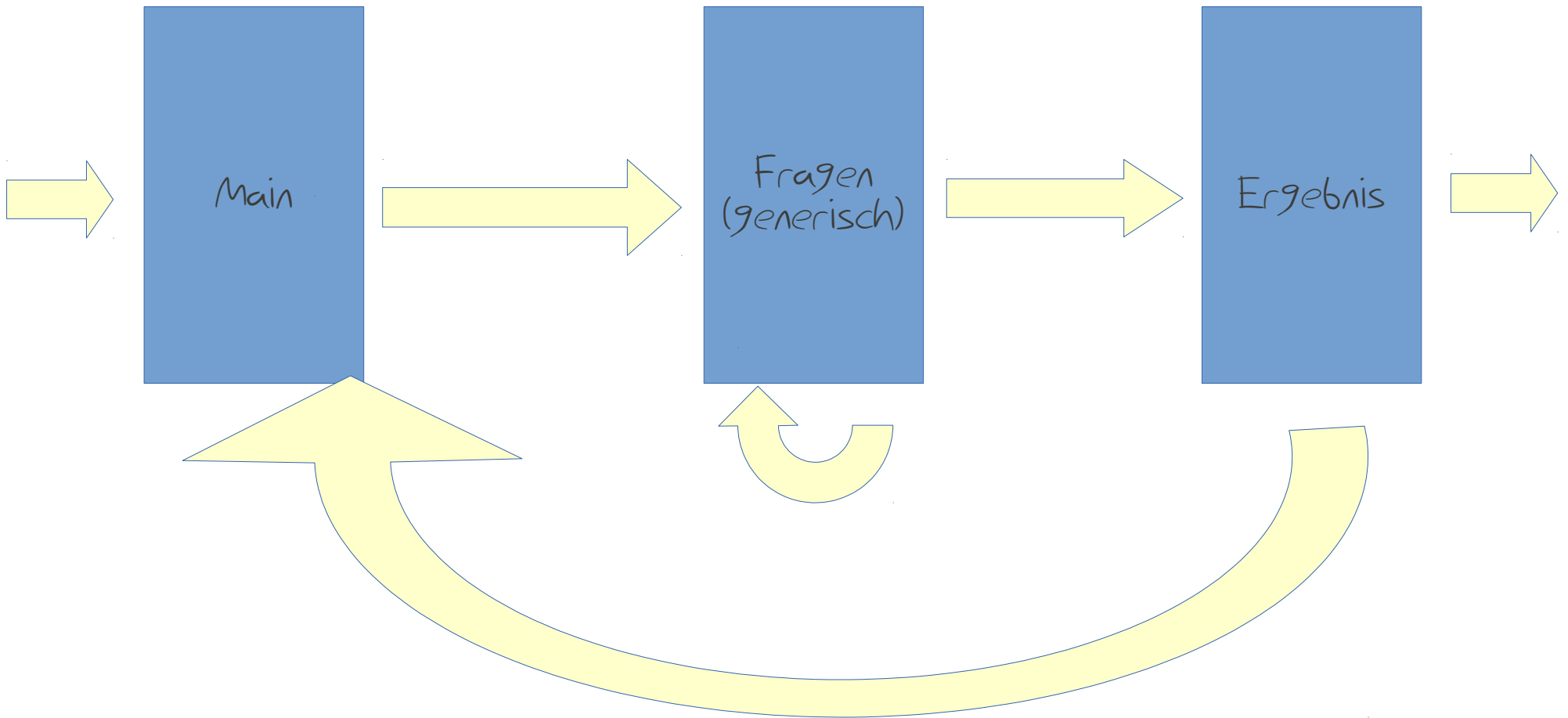
Hello, **FroSCon!**

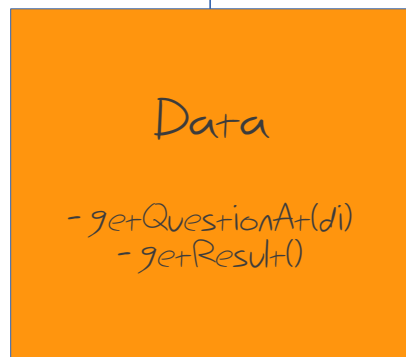


# Deployment

- Android: Einstellungen > Anwendungen > Unbekannte Quellen
- MyApp.apk auf Device kopieren
  - <PROJECT\_HOME>/...
    - bin, out (IDE-spezifisch)
  - Bluetooth, USB, Download
- File Manager
- Automatische Installation







# Resources

- Android Developer
- Stackoverflow

[http://www.mhoehme.de/  
android/froscon/  
FrOSConAPP\\_src.jar](http://www.mhoehme.de/android/froscon/FrOSConAPP_src.jar)

