

# PV239 - Android



Vanda Cabanová



# Rozvrh

- ▶ Prednášky: 5.3., 19.3., 2.4., 16.4., 30.4., 14.5.
- ▶ Cvičenia: 23.2., 9.3., 23.3., 6.4., 20.4., 4.5.
- ▶ Odovzdanie projektu + obhajoba: cez skúškové

# Projekty

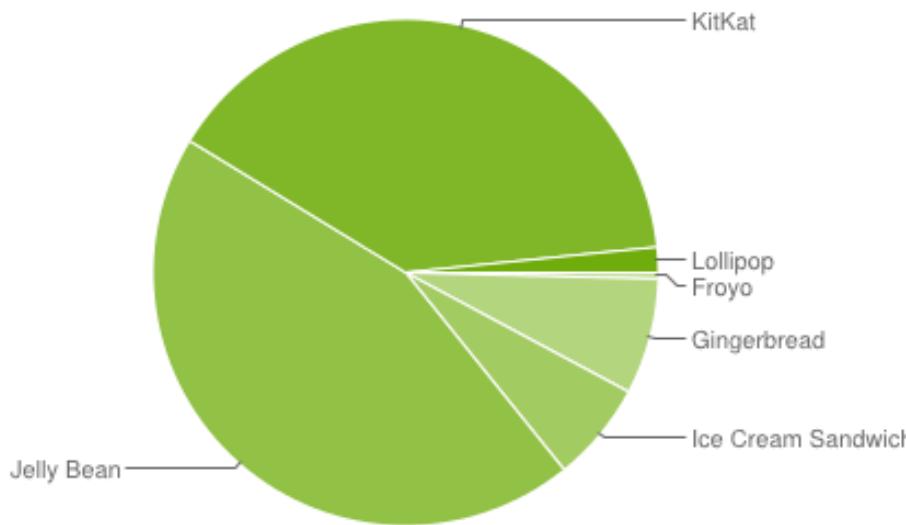
- ▶ Tímy 2-3 ľudí
- ▶ Téma:
  - ▶ Vlastná
  - ▶ Komerčný projekt
  - ▶ Konzultovaná
- ▶ Téma musí byť zadaná v ISe cvičiacimi
- ▶ Grafický návrh (do 2.3.)
- ▶ Obhajoba v skúškovom

# Rozvrh

- ▶ 1. Úvod, SW architektúra, zákl. komponenty
- ▶ 2. Activity, Fragment, styles,
- ▶ 3. Layouts, ListView, AdapterViews, Adapter
- ▶ 4. DB, ContentProvider
- ▶ 5. Networking, Services
- ▶ 6. customization

# Fragmentácia platformy

- Min, Max SDK = ?



Version	Codename	API	Distribution
2.2	Froyo	8	0.4%
2.3.3 - 2.3.7	Gingerbread	10	7.4%
4.0.3 - 4.0.4	Ice Cream Sandwich	15	6.4%
4.1.x	Jelly Bean	16	18.4%
4.2.x		17	19.8%
4.3		18	6.3%
4.4	KitKat	19	39.7%
5.0	Lollipop	21	1.6%

*Data collected during a 7-day period ending on February 2, 2015.  
Any versions with less than 0.1% distribution are not shown.*

# Projekt

- ▶ Vývojové prostredie: Android Studio
- ▶ Build systém: Gradle
- ▶ Knižnice: gradleplease.org
- ▶ Layouty
  - ▶ Formát xml
- ▶ Obrázky
  - ▶ Drawable
  - ▶ Drawable-xhdpi, Drawable-sw720, Drawable-xhdpi-large,
  - ▶ 9-patch

# Projekt

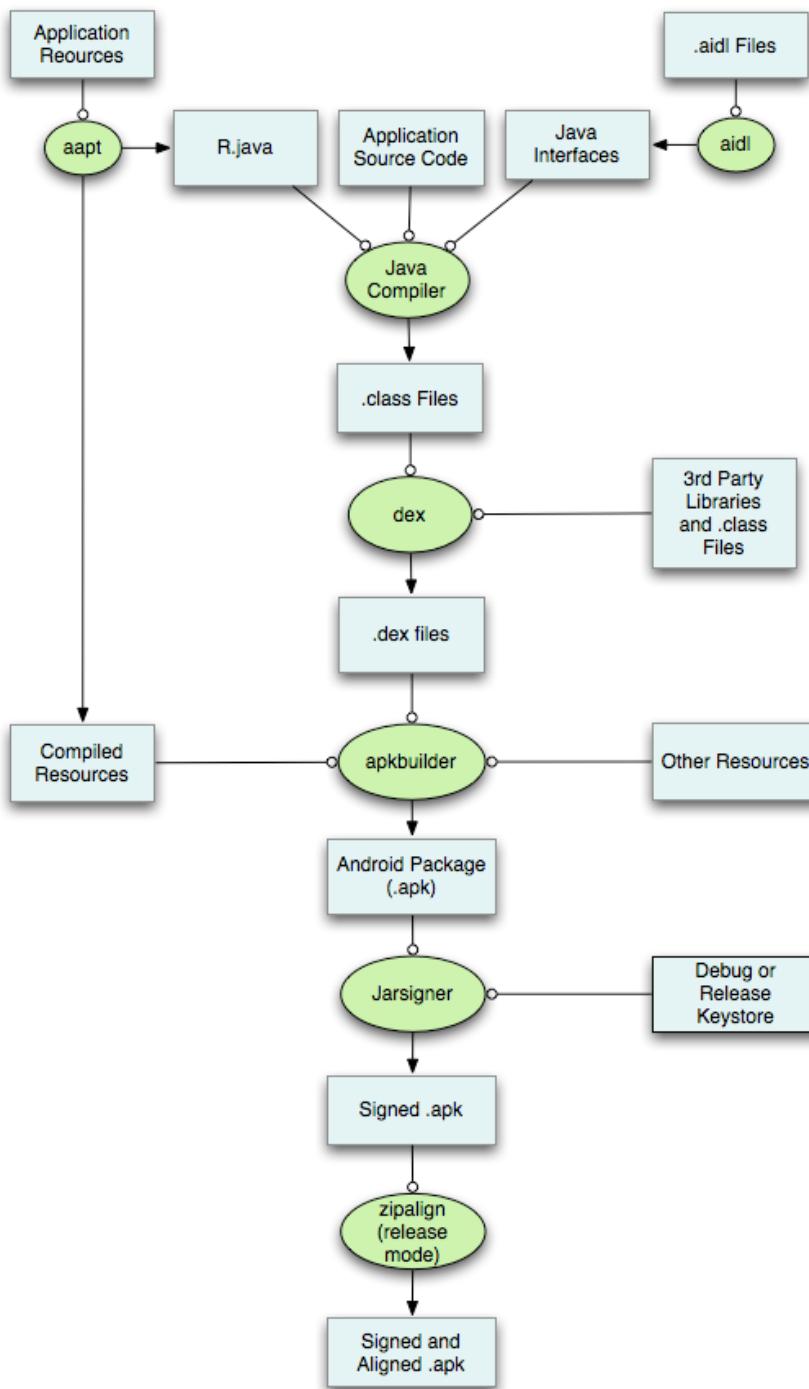
- ▶ Logika
  - ▶ Java
    - ▶ Balíčky
      - ▶ UI
      - ▶ Adapters
      - ▶ Db
      - ▶ Network
        - ▶ Model
      - ▶ Utils
      - ▶ App

# Projekt

- ▶ Values
  - ▶ Farby
  - ▶ Strings
  - ▶ Plurals
  - ▶ Dimensions
    - ▶ Dp, dip
    - ▶ match parent, fill parent, wrap content

# Build system

- ▶ Debug version
- ▶ Release version



# Build.gradle

- ▶ Dva súbory
  - ▶ Na úrovni projektu
  - ▶ Na úrovni modulu

# AndroidManifest.xml

- ▶ Konfiguračný súbor
- ▶ Deklarácia
  - ▶ Aplikácie
  - ▶ Aktivít
  - ▶ Services
  - ▶ Providerov
  - ▶ Iné
    - ▶ Features
    - ▶ API keys

# Aktivita

- ▶ Životný cyklus
  - ▶ onCreate()
  - ▶ onResume()
  - ▶ onStart()
  - ▶ onStop()
  - ▶ onDestroy()
  - ▶ onCreateOptionsMenu()
- ▶ Context
- ▶ Intent
- ▶ Môže byť viac aktivít na jednej obrazovke?

# Fragment

- ▶ Životný cyklus podobný ako Aktivita
  - ▶ onCreate()
  - ▶ onCreateView()
  - ▶ onDestroyView()
- ▶ Nemá Context
- ▶ FragmentManager
- ▶ Môže byť viac fragmentov na jednej obrazovke?