

CV5

# Material Design

# Material Design

- Android 5.0 (API 21)
- Unifikovaný design napříč platformami (mobil, web)
- Flat design
- Jednoduché ovládací a navigační prvky

# RecyclerView

- chytré ListView
- Adapter (stejný jako u ListView)
- LayoutManager (jak se zobrazují data)
- ViewHolder (reprezentace položky)
- ItemDecoration, ItemAnimator



# RecyclerView

```
recycler = (RecyclerView) findViewById(R.id.my_recycler_view);
```

```
layoutManager = new LinearLayoutManager(this);
```

```
recycler.setLayoutManager(layoutManager);
```

```
adapter = new MyAdapter(data);
```

```
recycler.setAdapter(adapter);
```

```
public class MyAdapter
```

```
    extends RecyclerView.Adapter<MyAdapter.ViewHolder> {
```

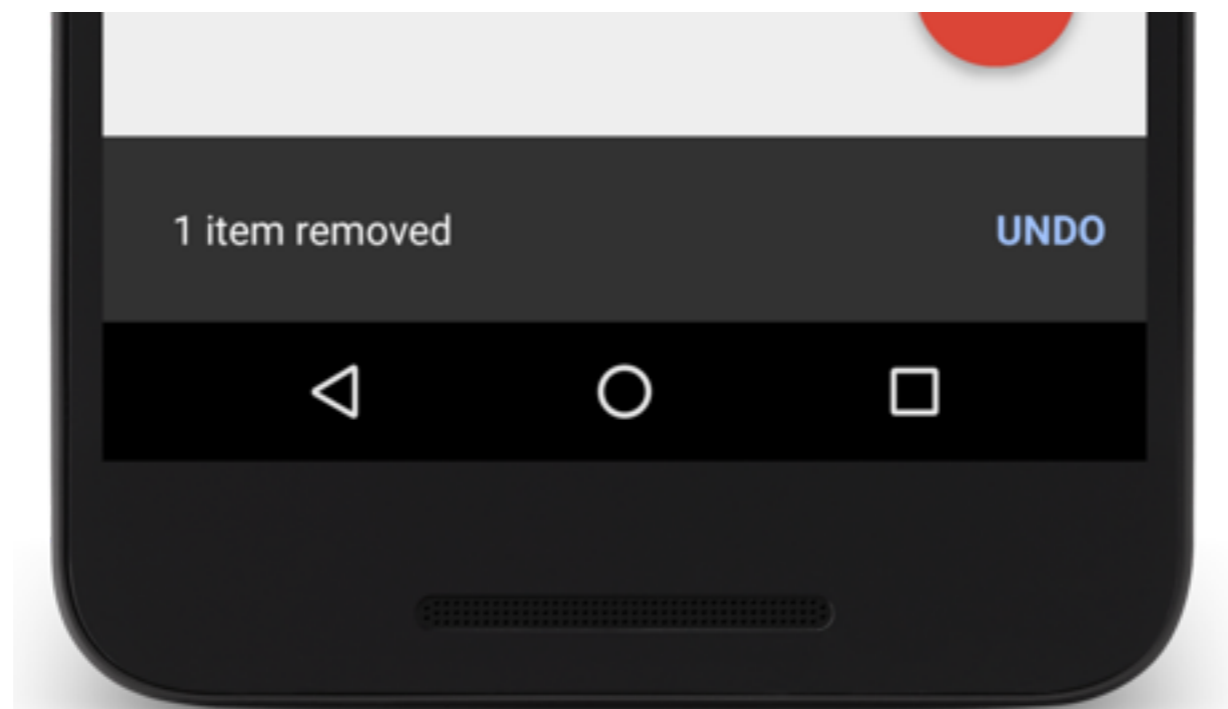
# CoordinatorLayout

- super-powered layout
- fancy animace
- interakce
- AppBarLayout, CollapsingToolbarLayout
- Behaviors

# SnackBar

<https://developer.android.com/reference/android/support/design/widget/Snackbar.html>

- Lepší Toast
- `SnackBar.make(view, "Hello", Snackbar.LENGTH_SHORT).show();`



# 6+ věcí

o kterých by měl dobrý Android vývojář vědět



# adb

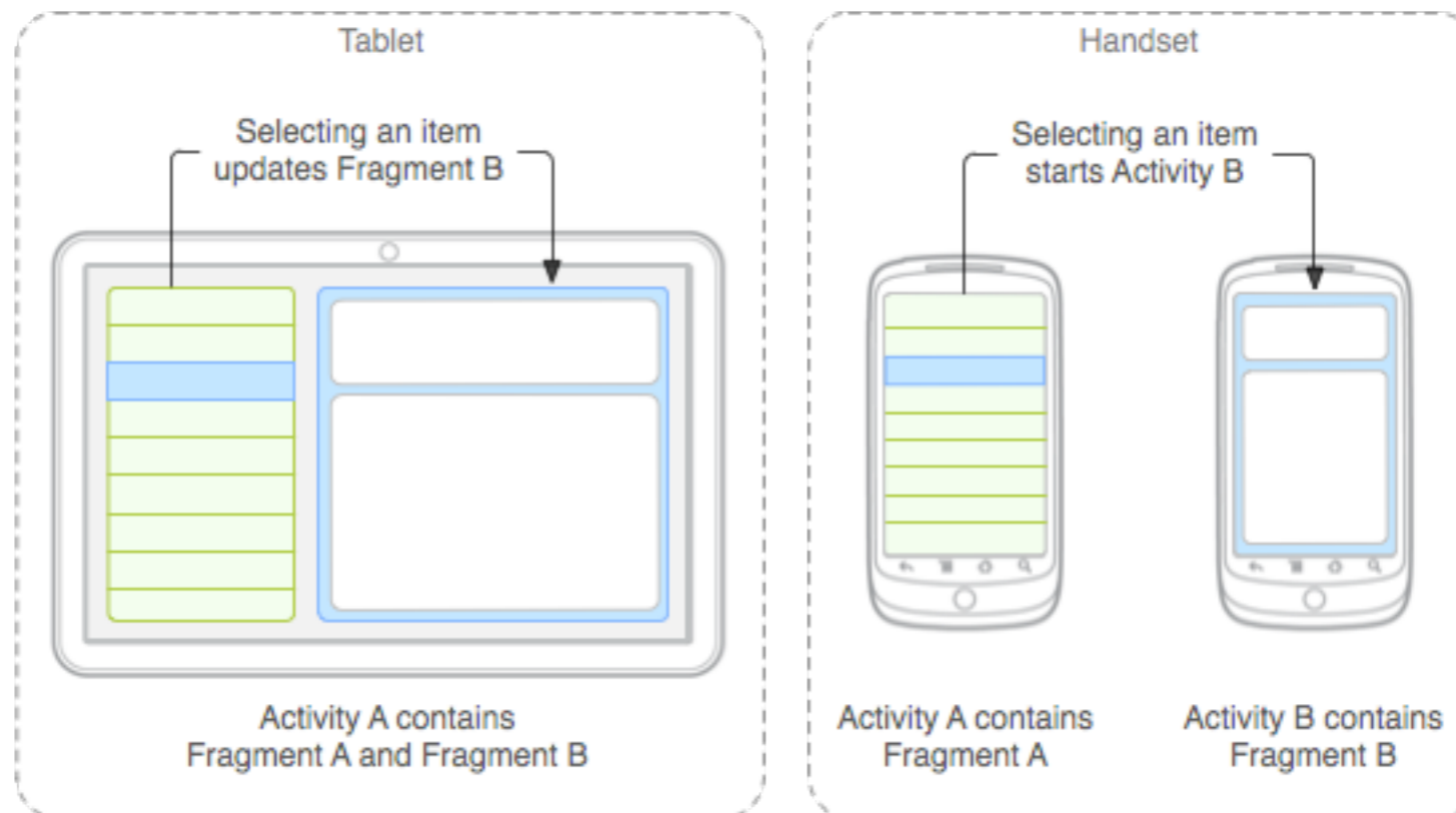
- Android Debug Bridge
- adb devices
- adb logcat
- adb pull / push
- adb shell

# Log.x

- Logování do Android Console
- `Log.d(String, String);`
- `Log.d`, `Log.wtf`, `Log.e`, `Log.w`, ...

# Fragmenty

- Když aktivita je málo
- Má šílený lifecycle
- Mohou být vnořené



# Plurals

```
<plurals name="cars">  
  <item quantity="one">%d auto</item>  
  <item quantity="few">%d auta</item>  
  <item quantity="other">%d aut</item>  
</plurals>
```

```
getResources().getQuantityString(R.plurals.cars, 2, 2);
```



# Dialogy

<https://github.com/afollestad/material-dialogs>

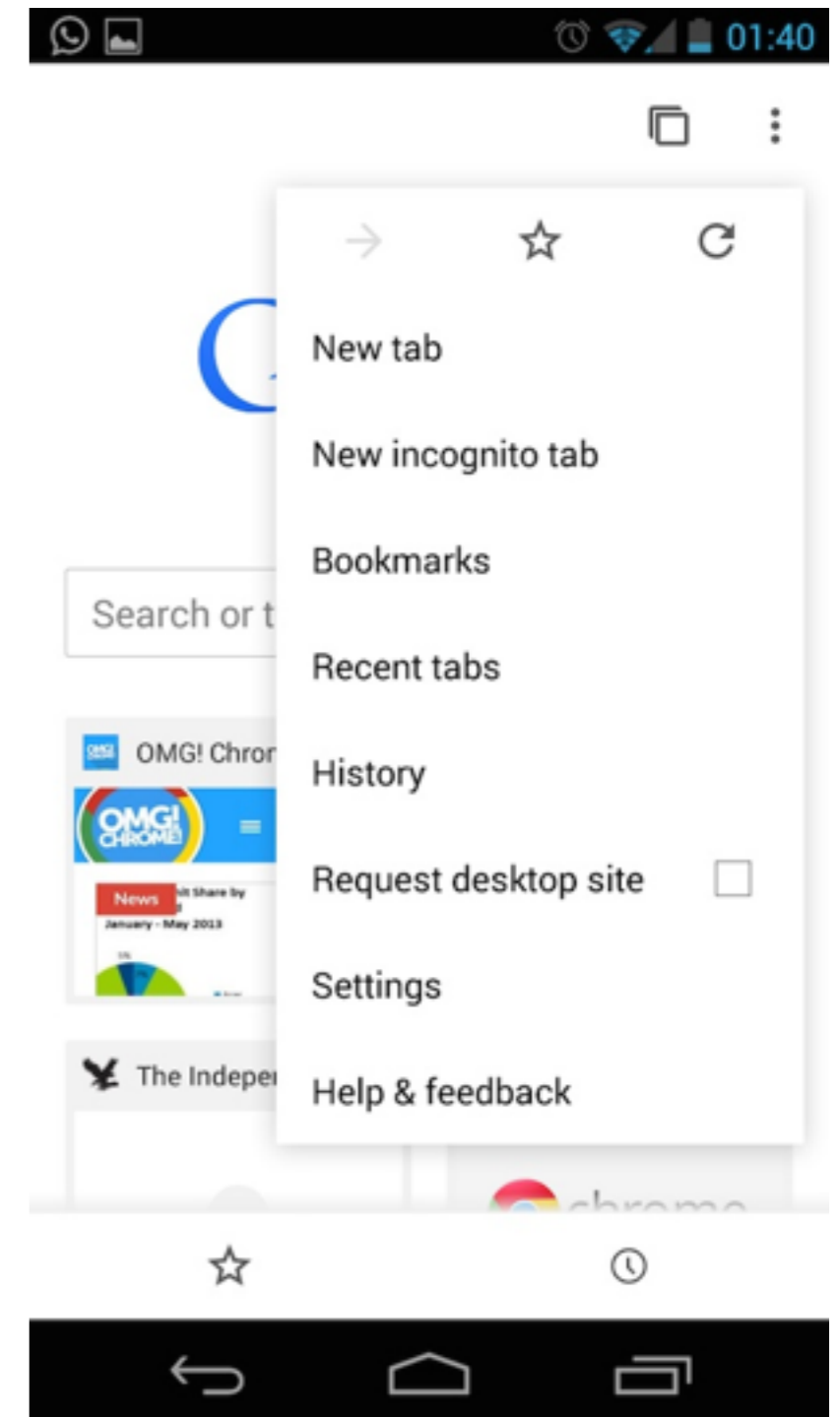
```
new MaterialDialog.Builder(this)
    .title(R.string.title)
    .content(R.string.content)
    .positiveText(R.string.agree)
    .negativeText(R.string.disagree)
    .show();
```

# Options menu

```
<?xml version="1.0" encoding="utf-8"?>
<menu xmlns:android="http://schemas.android.com/apk/res/android">
  <item android:id="@+id/new_game"
        android:icon="@drawable/ic_new_game"
        android:title="@string/new_game"
        android:showAsAction="ifRoom"/>
  <item android:id="@+id/help"
        android:icon="@drawable/ic_help"
        android:title="@string/help" />
</menu>
```

```
@Override
public boolean onCreateOptionsMenu(Menu menu) {
    MenuInflater inflater = getMenuInflater();
    inflater.inflate(R.menu.game_menu, menu);
    return true;
}

@Override
public boolean onOptionsItemSelected(MenuItem item) {
    // Handle item selection
    switch (item.getItemId()) {
        case R.id.new_game:
            newGame();
            return true;
        default:
            return super.onOptionsItemSelected(item);
    }
}
```



# ButterKnife

<http://jakewharton.github.io/butterknife/>

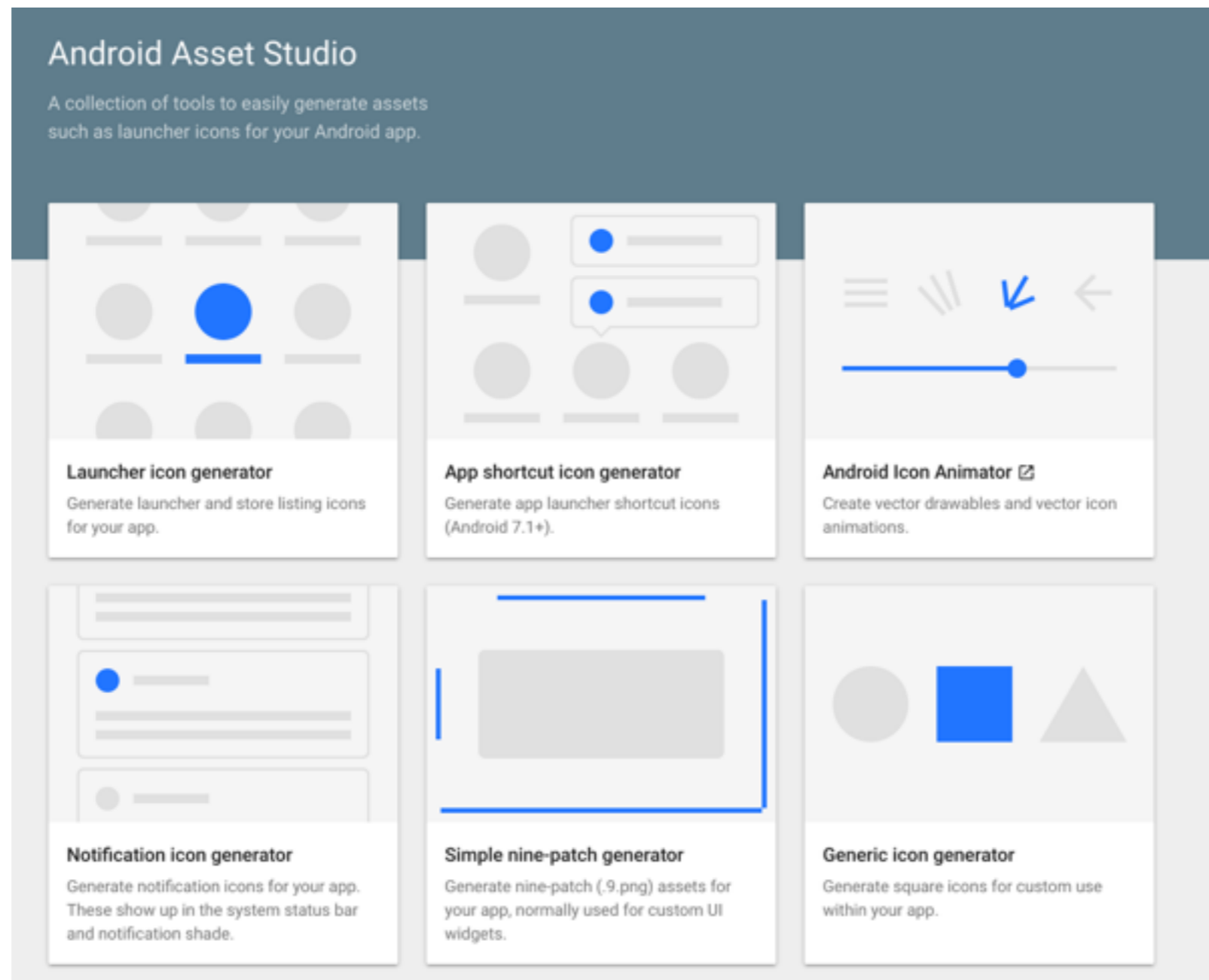
- View injection
- už nikdy přetypování a `findViewById`

```
class ExampleActivity extends Activity {  
    @Nullable @Bind(R.id.title) TextView title;  
    @Bind(R.id.subtitle) TextView subtitle;  
    @Bind(R.id.footer) TextView footer;  
  
    @Override public void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.simple_activity);  
        ButterKnife.bind(this);  
        // TODO Use fields...  
    }  
}
```



# Android Asset Studio

<https://romannurik.github.io/AndroidAssetStudio/>

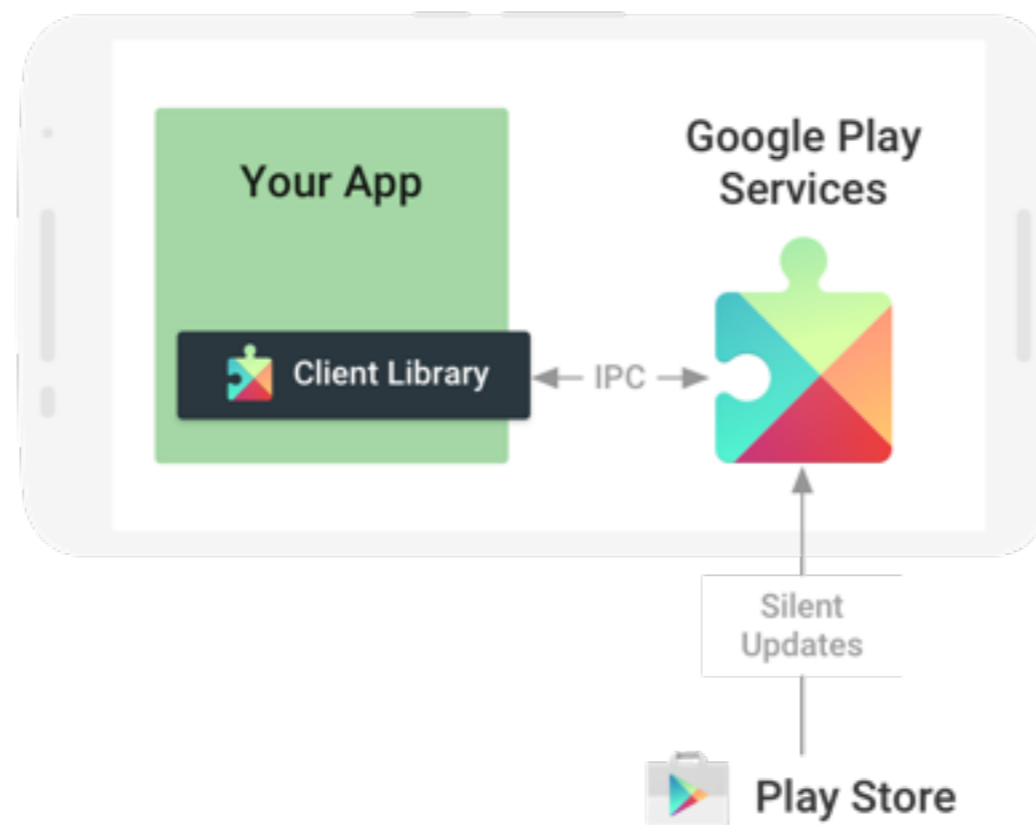




# Google Play Services

<https://developers.google.com/android/guides/overview>

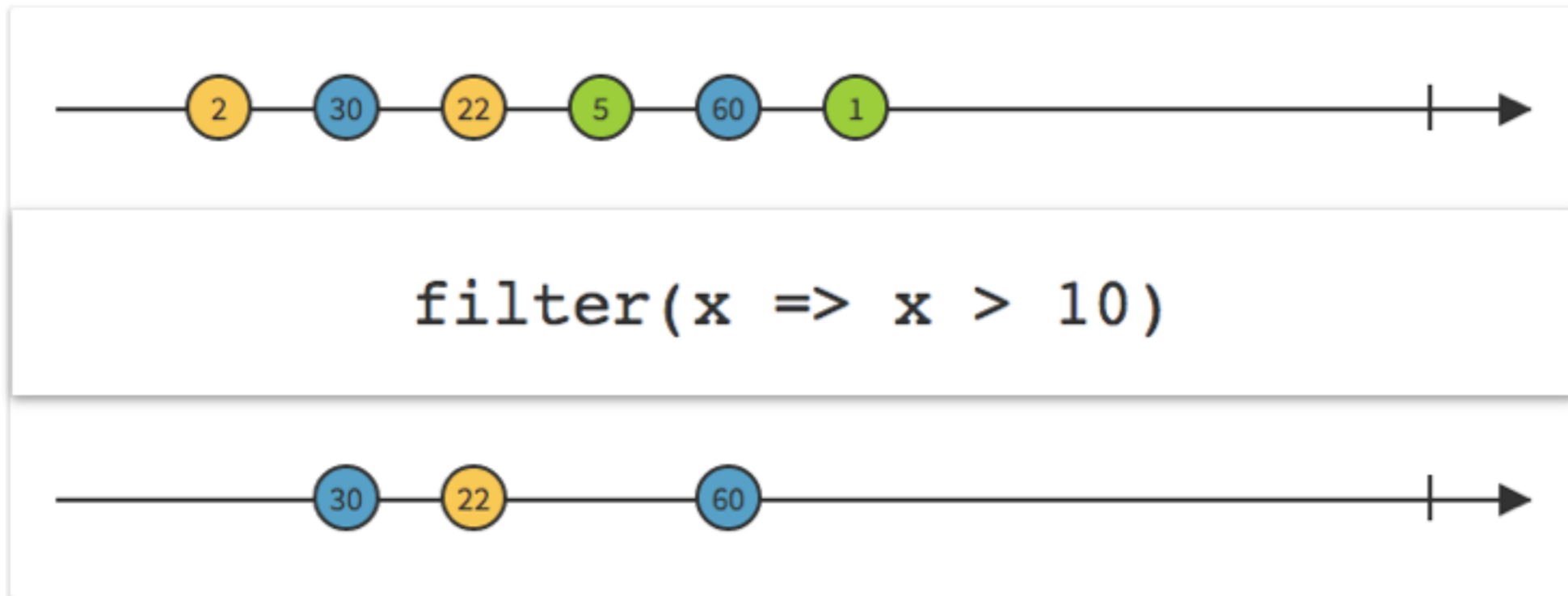
- Stahuje se stejně jako každá jiná aplikace
- Služby jako jsou Maps, Wallet, G+, Location, Wear,...



# RxJava

<http://reactivex.io/>

- Stream



- Observable, Subscriber
- <http://rxmarbles.com/>

# Fabric

<https://fabric.io>

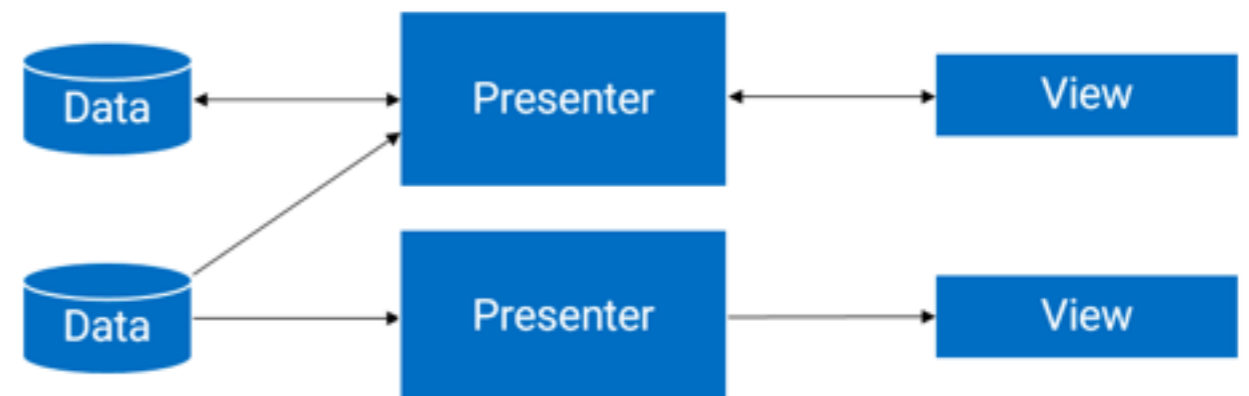
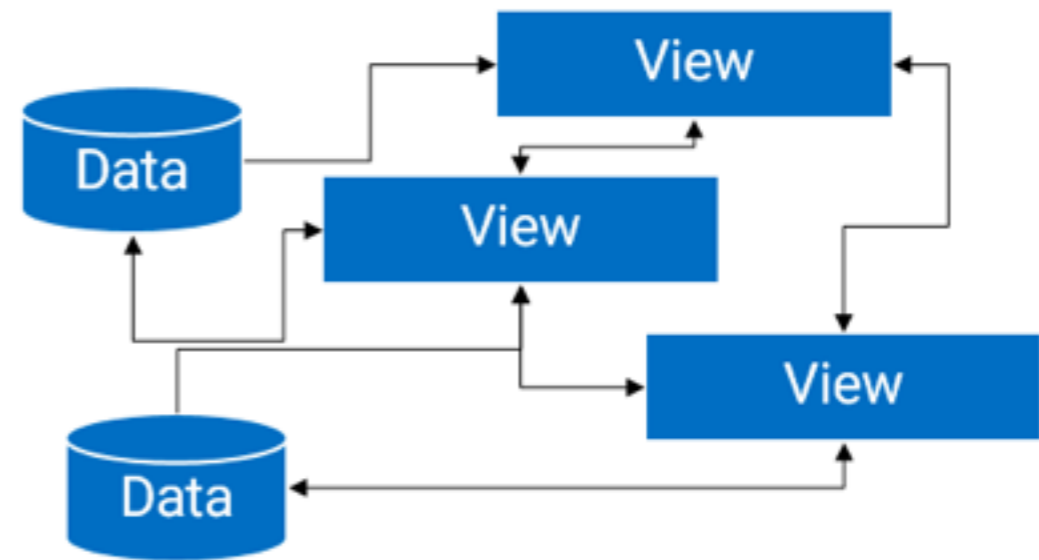


- Crash/report analytics
- User analytics
- KPI
- Adopce nové verze
- Moc moc moc moc dat a čísel

fabric

# Architektura

- VM
  - View - Model
- MVP
  - Model - View - Presenter
- MVVM
  - Model - View - ViewModel
- MVC
  - Model - View - Controller



# Kam dál?

- <https://developer.android.com>
- <https://android-arsenal.com/>
- Twitter - @JakeWharton, @AndroidDev, @androidstudio, @crafty, @chrisbanes, @cyrilmottier, @romannurik