

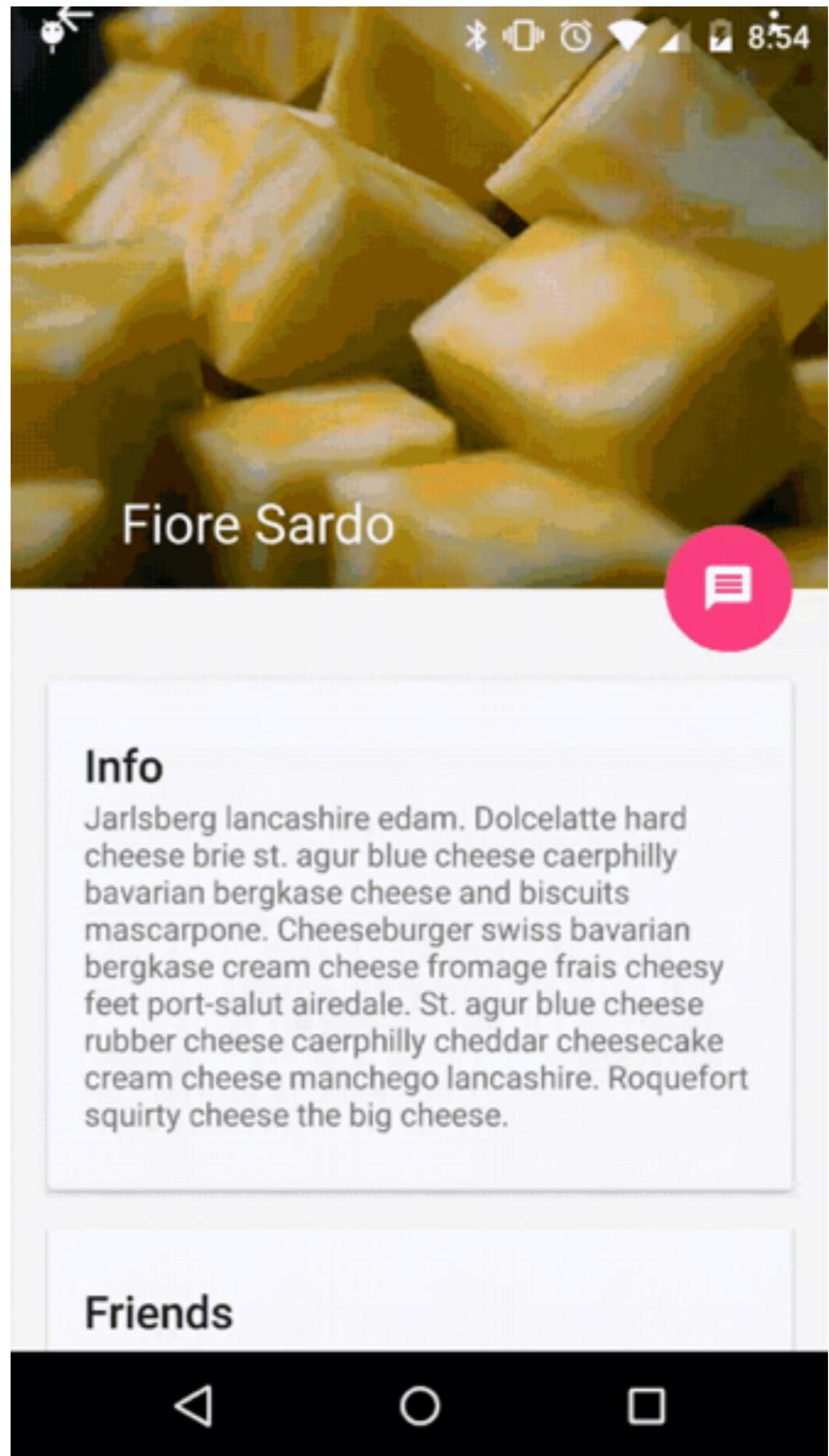
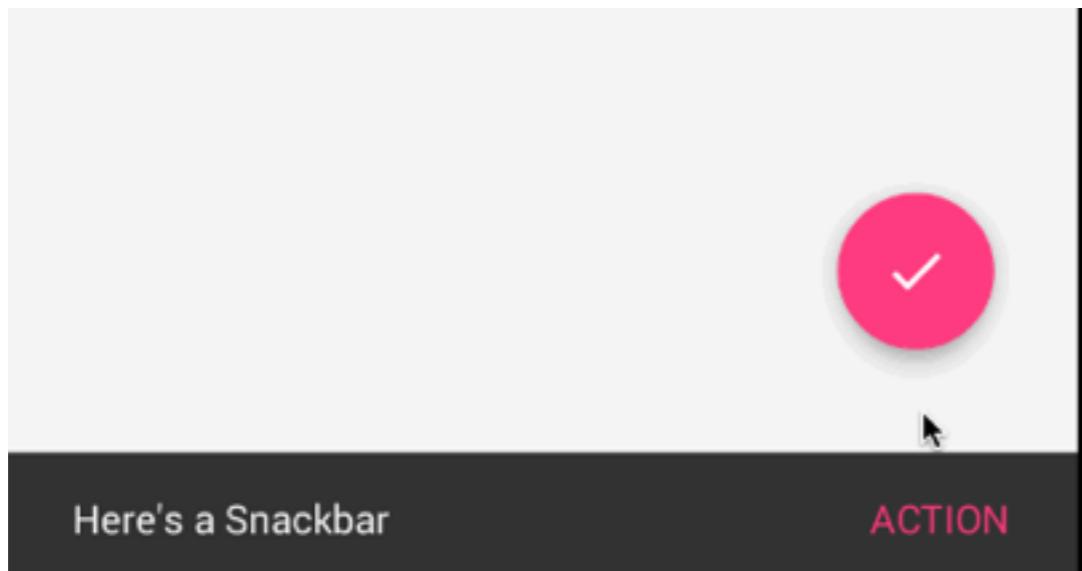
# Material design

RecyclerView & CoordinatorLayout

# RecyclerView

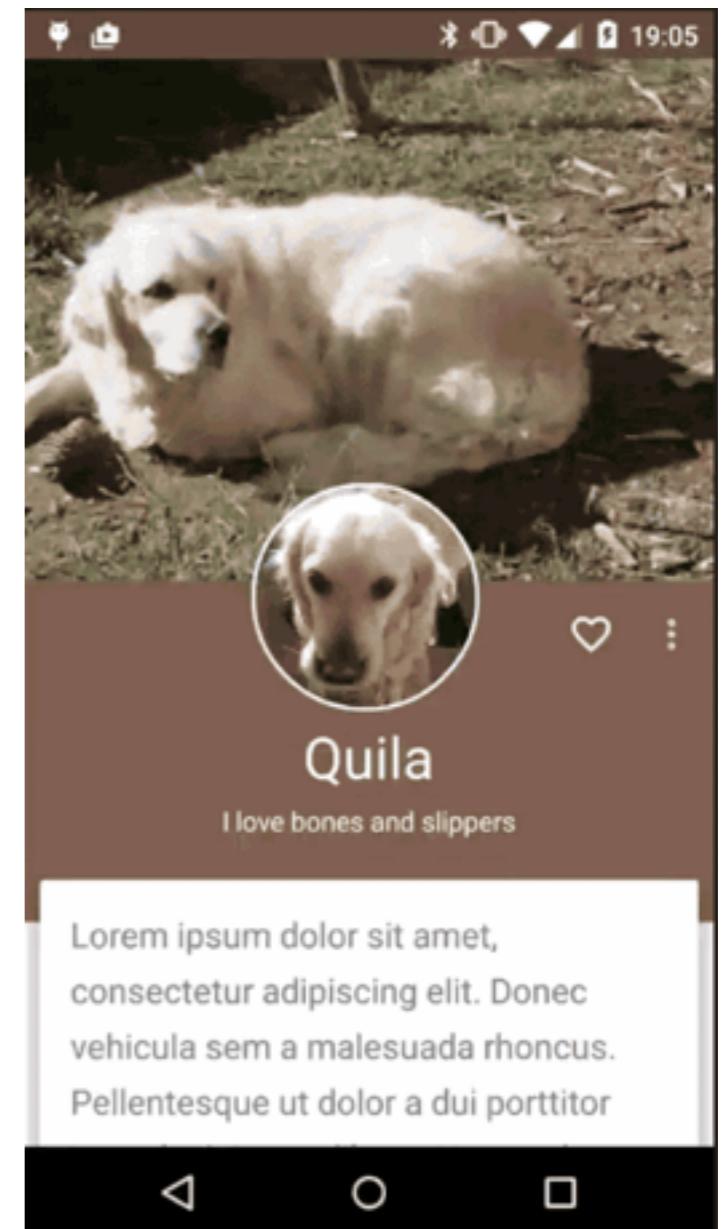
- Pokročilejší ListView (3 - LM, NS, ID/IA)
- Adapter, ViewHolder, LayoutManager - povinné
- ItemDecoration, ItemAnimator - volitelné
- Příklad!

- CoordinatorLayout
- AppBarLayout
- Snackbar
- FAB



# CoordinatorLayout

- FrameLayout, ale... ! (chytrější)
- Behavior (anotace / xml )
  - layout/scroll
  - layoutDependsOn,  
onDependentViewChanged
- Příklad!



- Support Design Library
- <https://www.google.com/design/spec/>

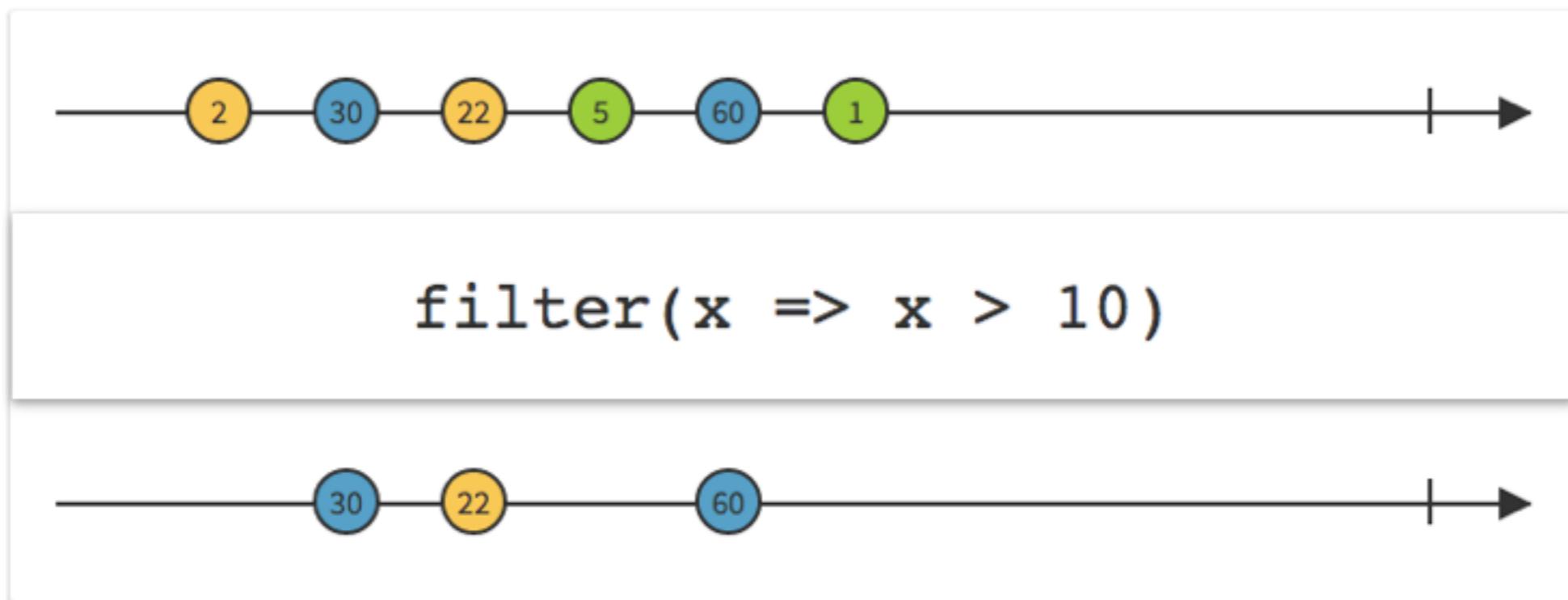
6 věcí, o kterých by  
Android vývojář měl  
vědět

# Butterknife

```
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...  
    }  
}  
  
@OnClick(R.id.submit)  
public void submit() {  
    // do something  
}
```

# RxJava

- Stream



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

# K čemu se to dá použít?

- Čtverný klik
- 3x API request (čekáme na dokončení všech)
- ...
- Příklad!

```
@GET("/api/v2/driver/{driver_id}")
Observable<Driver> getDriverRx(
    @Path("driver_id") String driverId
);
```

```
Observable<GoogleMap> getMapObservable(
    SupportMapFragment mapFragment,
    @Nullable GoogleMap oldMap
);
```

```
Observable.zip(
    Api.get().getDriverRx(ride.driver),
    Api.get().getCarPositionRx(ride.nid),
    MapHelper.getMapObservable(mapFragment, map),
    new Func3<Driver, List<CarPosition>, GoogleMap, Object>() {
        @Override public Object call(Driver d, List<CarPosition> cp, GoogleMap m) {
            // handle result
            return null;
        }
    })
.observeOn(AndroidSchedulers.mainThread())
.subscribeOn(Schedulers.io())
.subscribe(new Action1<Object>() {
    @Override public void call(Object o) {
        // do something
    });
})
```

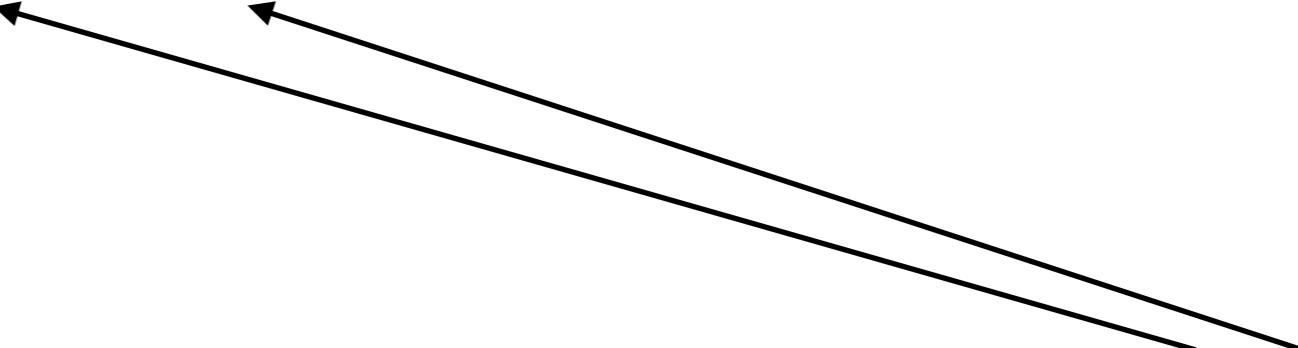
# Zdroje informací

- [www.vogella.com](http://www.vogella.com)
- Youtube - Perf Matters, Android Developers
- <http://android-developers.blogspot.cz/>
- Jake Wharton (Square)
- [androidarsenal.com](http://androidarsenal.com)

# 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);
```

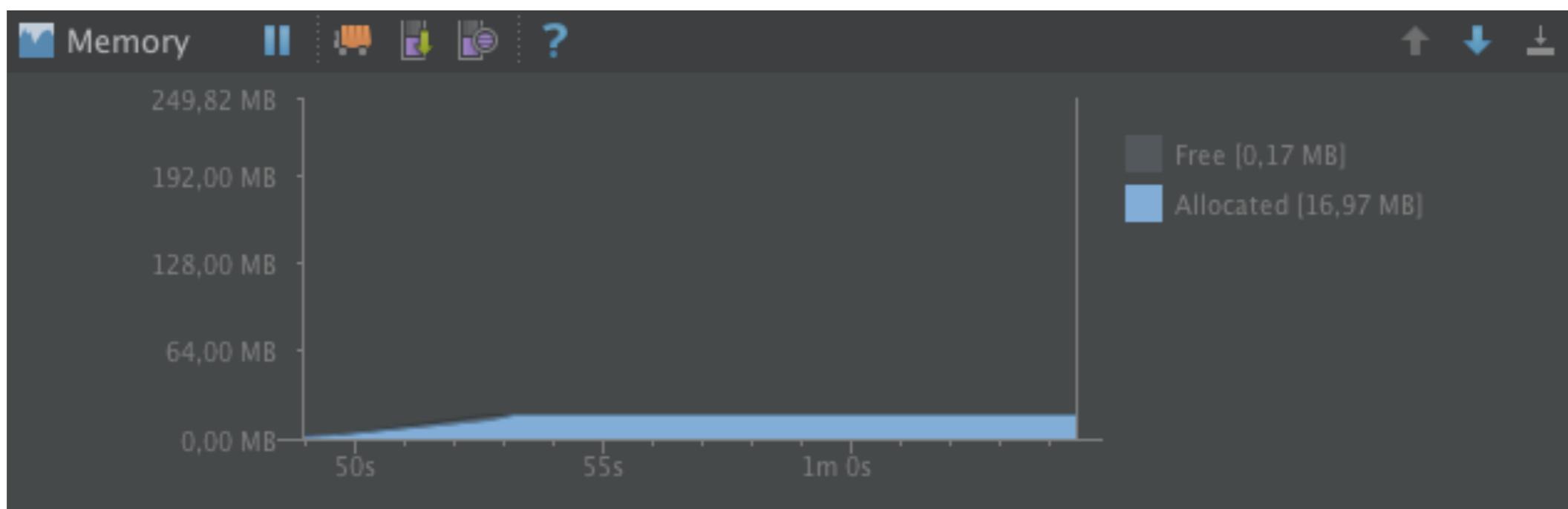


# Android Lint

- Utilita pro prozkoumání složky s projektem za účelem hledání částých chyb a možností optimalizace. Řeší např.:
  - Missing translations (and unused translations)
  - Layout performance problems (all the issues the old layoutopt tool used to find, and more)
  - Unused resources
  - Inconsistent array sizes (when arrays are defined in multiple configurations)
  - Icon problems (like missing densities, duplicate icons, wrong sizes, etc)
  - Usability problems (like not specifying an input type on a text field)
  - Manifest errors

# Memory profiling

- Allocation Tracker
- Dump Java Heap



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