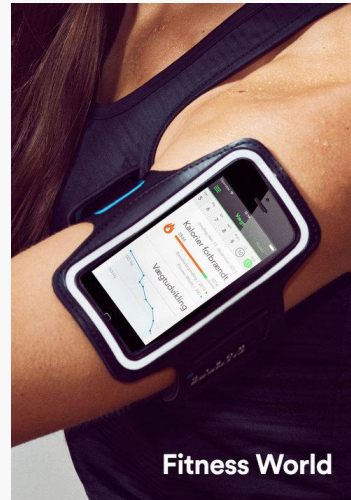
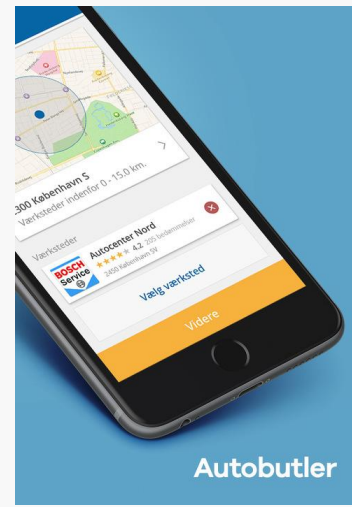
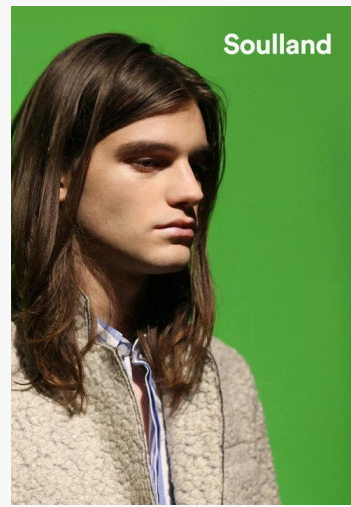
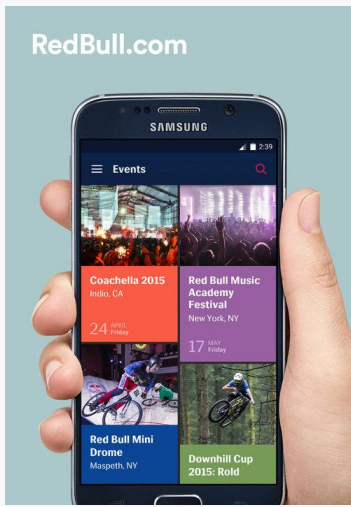






Mads  
Developer



# From idea to Google Play

Wireframes

Design

Development





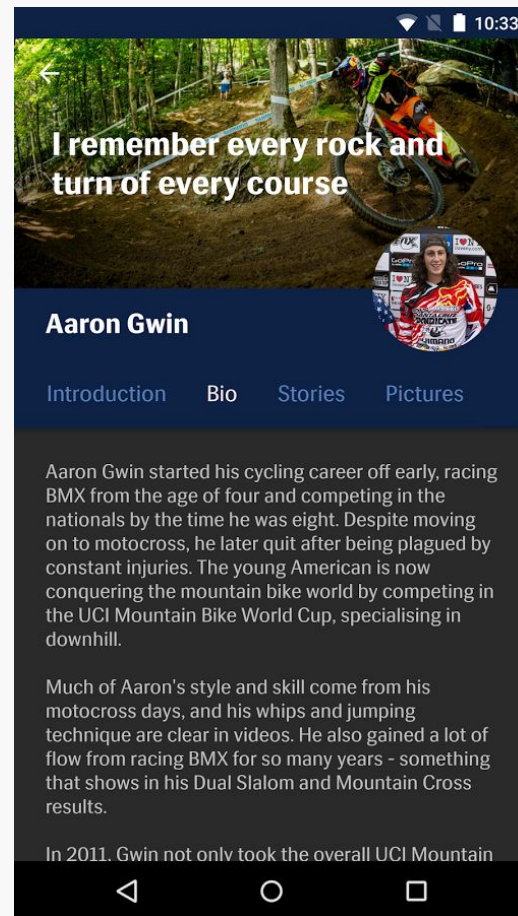
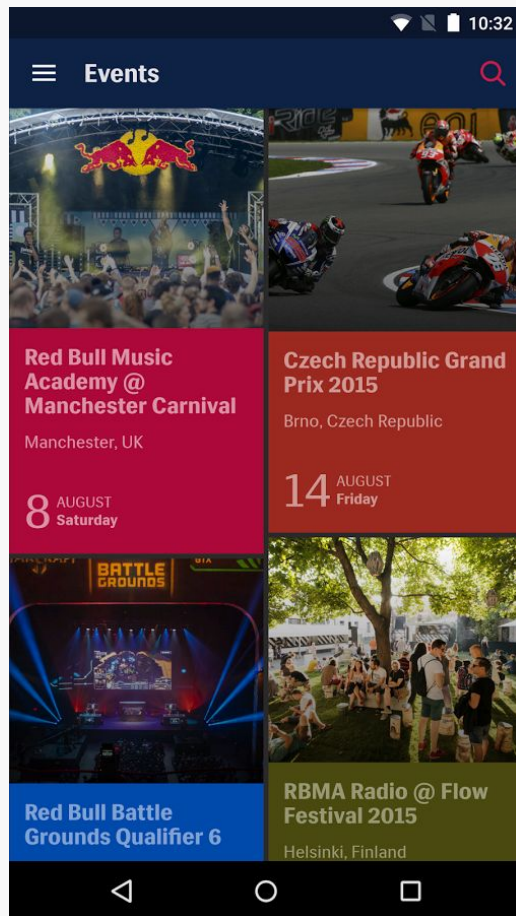
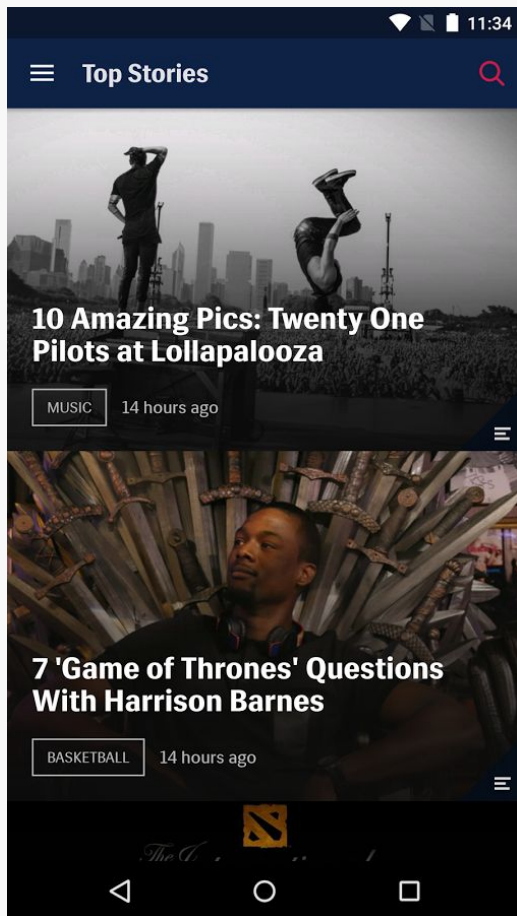
# Wireframes

Features  
Navigation  
Flows

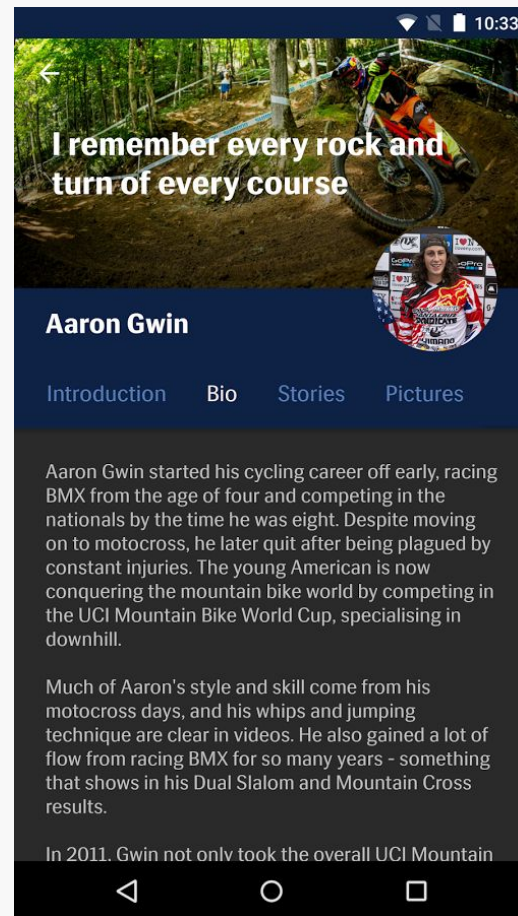
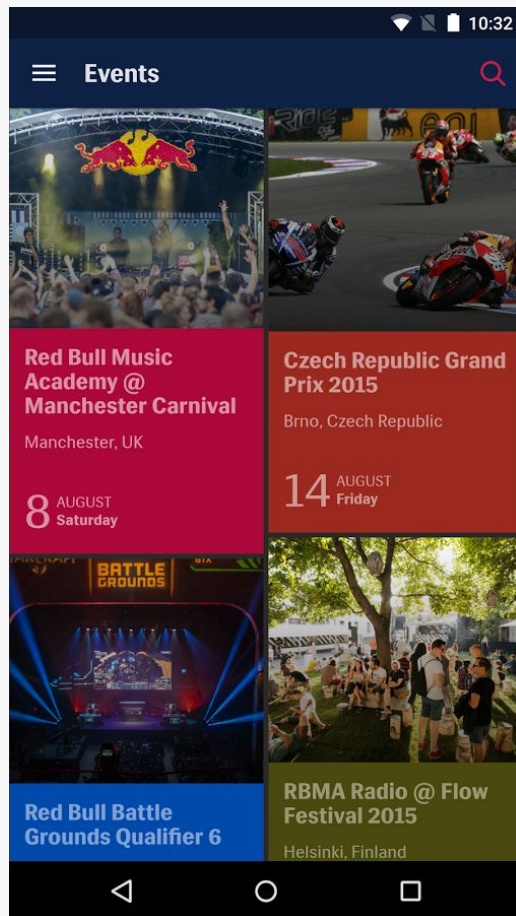
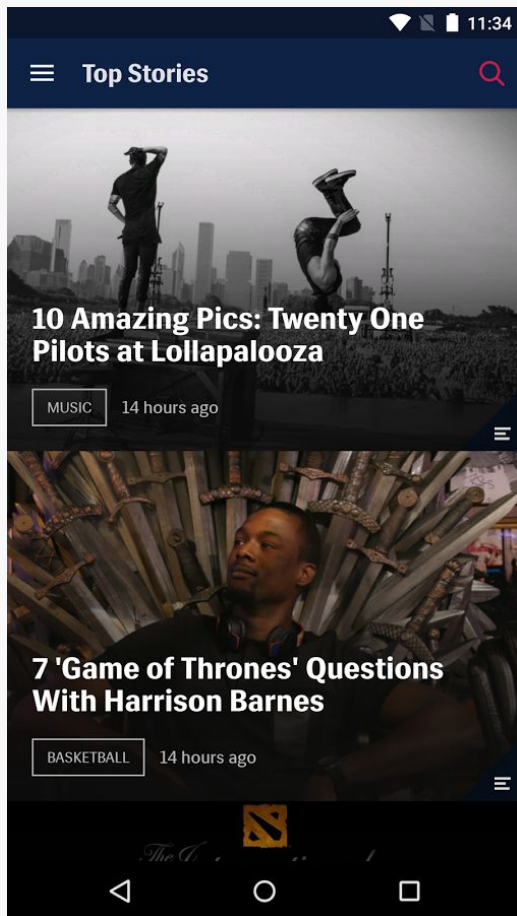
Design



Map to concrete frameworks



Identify separable  
components



Development

# Architecture

No silver bullet

# Architecture

Find the most optimal solution for the task at hand

Separation of concerns

Activities are often tightly coupling view and controller

Maintain structure and/or refactor (Be consistent)



# Google's libraries

Support libraries (AppCompat, Design, RecyclerView etc.)

<http://developer.android.com/tools/support-library/index.html>

Fragments

Data Binding Library

<http://developer.android.com/tools/data-binding/guide.html>

Third party libraries when  
necessary

# Third party

Retrofit

[square.github.io/retrofit/](https://square.github.io/retrofit/)

Glide / Picasso

<https://github.com/bumptech/glide>

Java 8 backports

<https://github.com/orfjackal/retrolambda>

<https://sourceforge.net/projects/streamsupport/>

# Third party

## RxJava

<https://github.com/ReactiveX/RxJava>

<http://reactivex.io/>

<https://github.com/ReactiveX/RxAndroid>

## Kotlin

<https://kotlinlang.org/>

# Tools

# Android Studio

# Git

SourceTree + Git Flow

<https://www.sourcetreeapp.com/>

<http://nvie.com/posts/a-successful-git-branching-model/>



# Issue Tracker

Github, Youtrack

# Charles Web Proxy

<https://www.charlesproxy.com/>

# Facebook Stetho

<http://facebook.github.io/stetho/>

```

▼ <com.facebook.stetho.sample.sampledebugapplication>
  ▼ <com.facebook.stetho.sample.elementsactivity>
    ▼ <com.android.internal.policy.impl.phonewindow>
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            ▼ <linearlayout>
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            ► <toolbar id="@android:id/action_bar">...</toolbar>
            <com.android.internal.widget.actionbarcontextview id="@android:id/action_context_bar"></com.android.internal.widget.actionbarcontextview>
          </com.android.internal.widget.actionbarcontainer>
        </com.android.internal.policy.impl.phonewindow$decorview>
      </com.android.internal.policy.impl.phonewindow>
    </com.facebook.stetho.sample.elementsactivity>
  </com.facebook.stetho.sample.sampledebugapplication>

```

... #@id/color\_list #@android:id/listContainer #@android:id/list textview#@android:id/text1

Styles Computed Event Listeners »

```

view.mMeasureCache: LongSparseLongMap
View.mID: 16908308
View.mInputEventConsistencyVerifi...
View.mKeyedTags: null
View.mLabelForId: -1
View.mLastIsOpaque: false
View.mLayerPaint: null
View.mLayerType: 0
View.mLayoutInsets: null
▼ View.mLayoutParams: LayoutParams
  LayoutParams.height: -2
  LayoutParams.layoutAnimationPar...
  LayoutParams.width: -1
  ► Object.shadow$_klass_: Class
  Object.shadow$_monitor_: -13123...
  forceAdd: false
  itemId: -1
  recycledHeaderFooter: false
  scrappedFromPosition: 2
  viewType: 0
View.mLeft: 0
View.mLeftPaddingDefined: false
View.mListenerInfo: null
View.mMatchIdPredicate: null
View.mMatchLabelForPredicate: null
► View.mMeasureCache: LongSparseLong/
View.mMeasuredHeight: 144
View.mMeasuredWidth: 189
View.mMinHeight: 144
View.mMinWidth: 0
View.mNestedScrollingParent: null
View.mNextFocusDownId: -1
View.mNextFocusForwardId: -1
View.mNextFocusLeftId: -1
View.mNextFocusRightId: -1
View.mNextFocusUpId: -1

```

# Fabric

[fabric.io](https://fabric.io)



## LEVEL 1



#675

**ActionMenuView.java line 643**

android.support.v7.widget.ActionMenuView.getMenu

16

CRASHES

8

USERS



#445

**Engine.java line 333**

org.andengine.engine.Engine.onAccuracyChanged

10

CRASHES

10

USERS



#682

3

CRASHES

1

USER



#455

**Object.java line null**

java.lang.Object.wait

2

CRASHES

2

USERS



#447

**BinderInternal.java line 47**

com.android.internal.os.BinderInternal\$GcWatcher.finalize

2

CRASHES

2

USERS



#469

**Reference.java line 142**

java.lang.ref.Reference.&lt;init&gt;

2

CRASHES

2

USERS



#610

**PushReceiver.java line 109**

com.playhaven.android.push.PushReceiver.onReceive

2

CRASHES

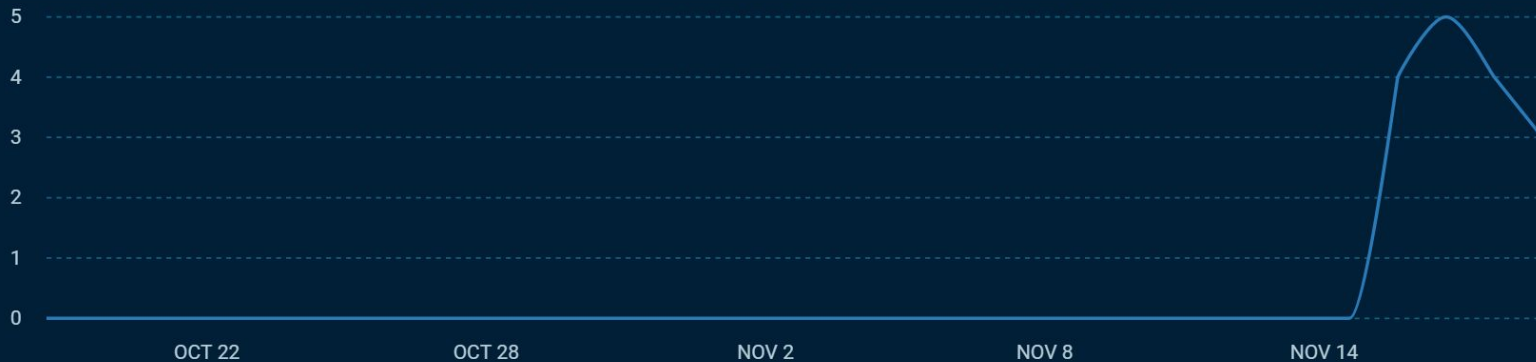
1

USER

#675 **ActionMenuView.java** line 643  
android.support.v7.widget.ActionMenuView.getMenu

16  
CRASHES

8  
USERS



Share

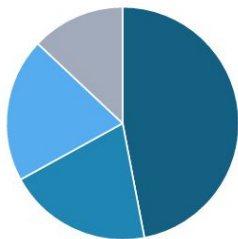


<http://crashes.to/...>



Export Ids

#### DEVICES



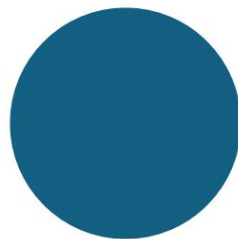
47% ENSPERT

20% DEVICE

20% QMOBILE

13% OTHER

#### OPERATING SYSTEMS



100% ANDROID 4



18.75%  
ROOTED



834.00 MB  
FREE SPACE



180.33 MB  
FREE RAM



100.00%  
APP IN FOCUS



87.50%  
PROXIMITY ON



**Fatal Exception: java.lang.NoClassDefFoundError**  
android.support.v7.internal.view.menu.MenuBuilder

[raw](#)

android.support.v7.widget.ActionMenuView.getMenu (ActionMenuView.java:643)

android.support.v7.widget.Toolbar.ensureMenu (Toolbar.java:876)

dalvik.system.NativeStart.main (NativeStart.java)

17

ACTIVE USERS RIGHT NOW



DAILY ACTIVE USERS ?

991

▲ 5.5%



DAILY NEW USERS ?

157

▼ -6.5%



MONTHLY ACTIVE USERS ?

44.6k

▼ -2.9%



CRASH-FREE USERS ?

99.2%



SESSIONS ?

1.5k

▼ -3.3%



ADD AN EVENT

Good  
Adoption

69.4%

ADOPTION



691

USERS

996

SESSIONS

OS ADOPTION ?

KitKat 19	<div></div>	66.7% ✓
Lollipop 21	<div></div>	72.6% ✓
Lollipop 22	<div></div>	75.4% ✓
Jelly Bean 17	<div></div>	73.0% ✓
Jelly Bean 16	<div></div>	67.2% ✓
Jelly Bean 18	<div></div>	46.5% ✓

DEVICE ADOPTION ?

Motorola/XT1032	<div></div>	80.8% ✓
Samsung/SM-G900F	<div></div>	68.2% ✓
LGE/Nexus 5	<div></div>	68.2% ✓
Samsung/SM-G925F	<div></div>	100.0% ✓
Samsung/SM-T110	<div></div>	100.0% ✓
Sony/D5503	<div></div>	100.0% ✓

# Droid Devs CPH

<http://lanyrd.com/series/droiddevsdk/>

mads@shape.  
dk