

Desenvolvimento Android

Sejam bem vindos!

2005



2013





68.8%

Fonte: <http://mobithinking.com/mobile-marketing-tools/latest-mobile-stats/a#smartphoneos>

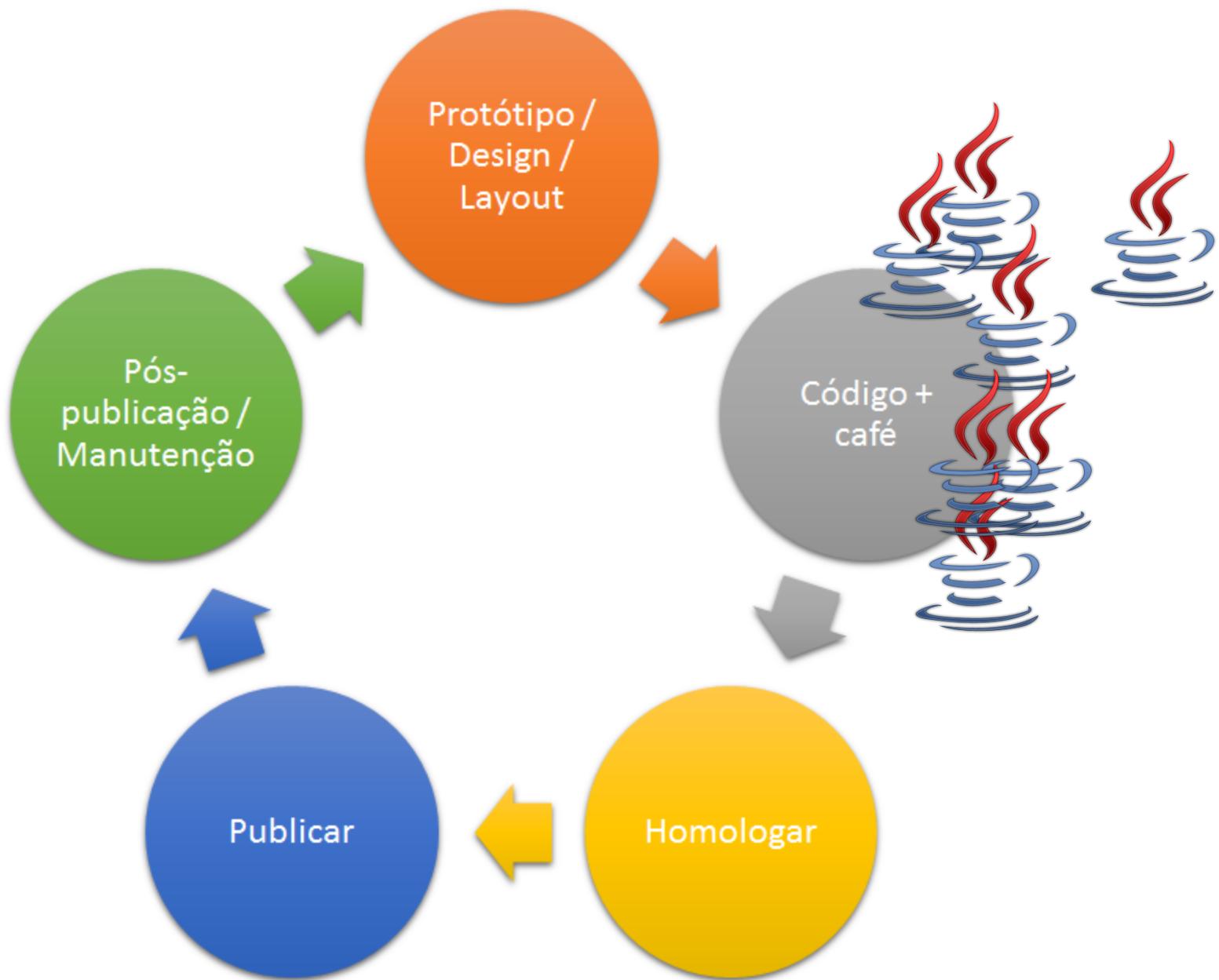
Bernardo Bosak de Rezende

Líder técnico na CWI Software,
tentando ser mestre-cervejeiro.

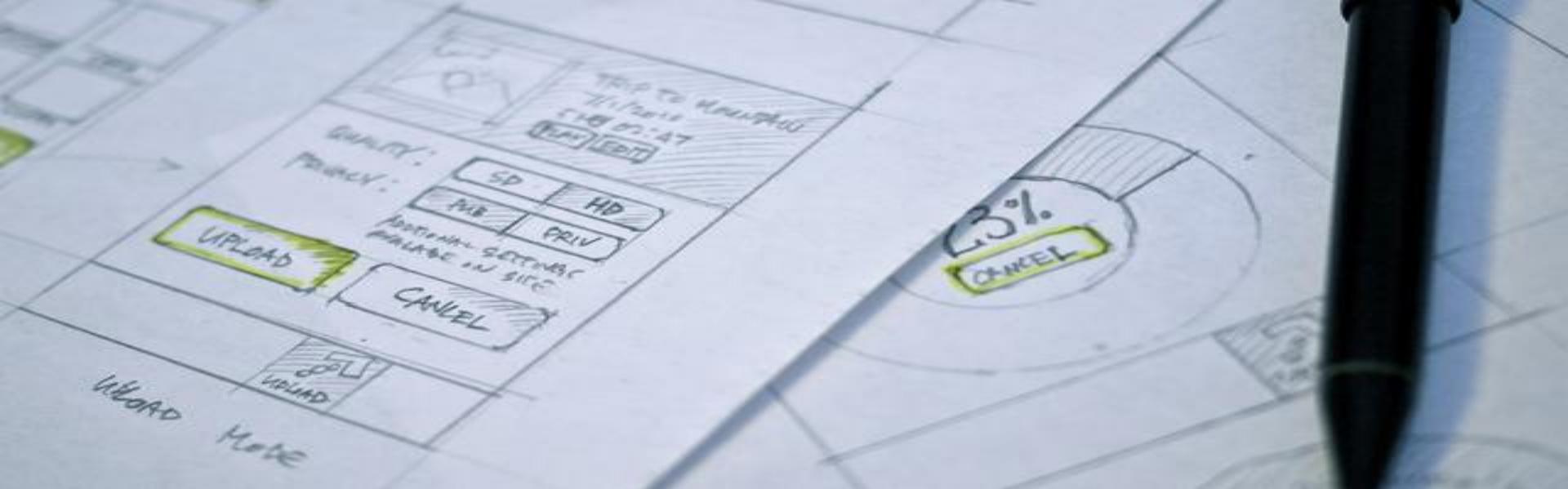
Código ou cerveja?

bernardobrezende@gmail.com

github.com/bernardobrezende







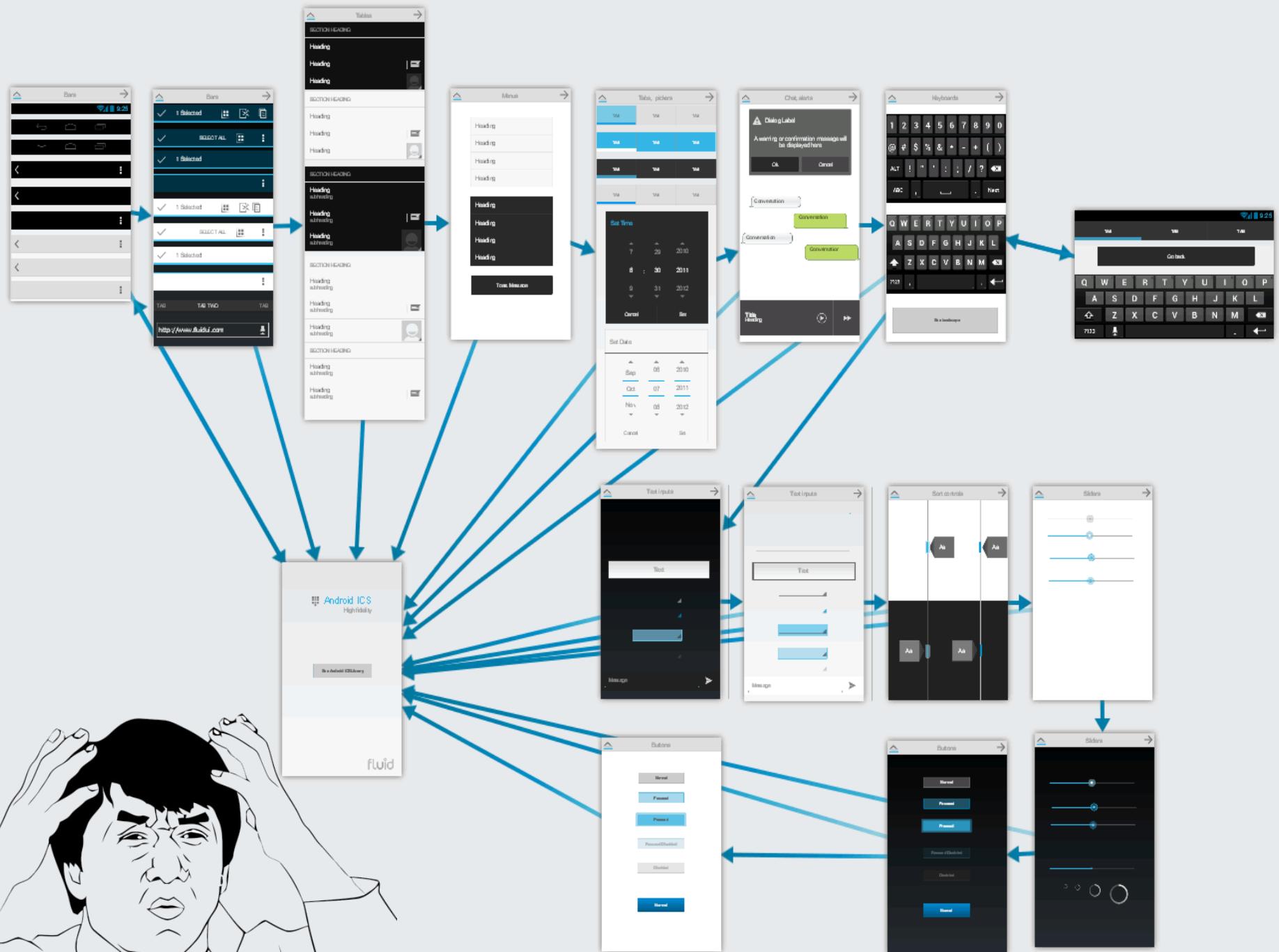
balsamiq

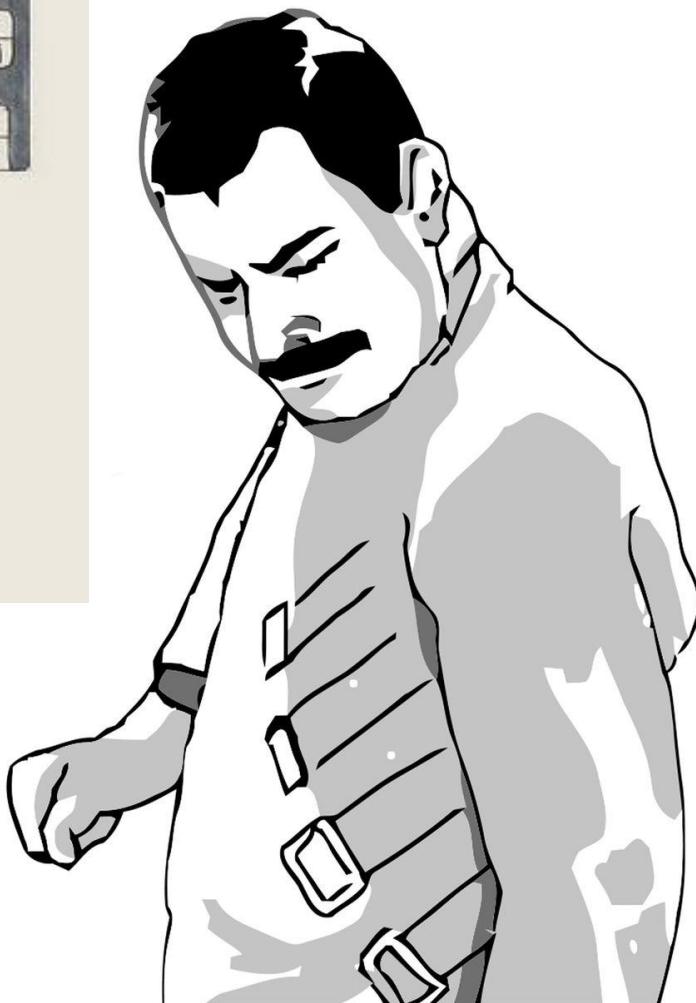
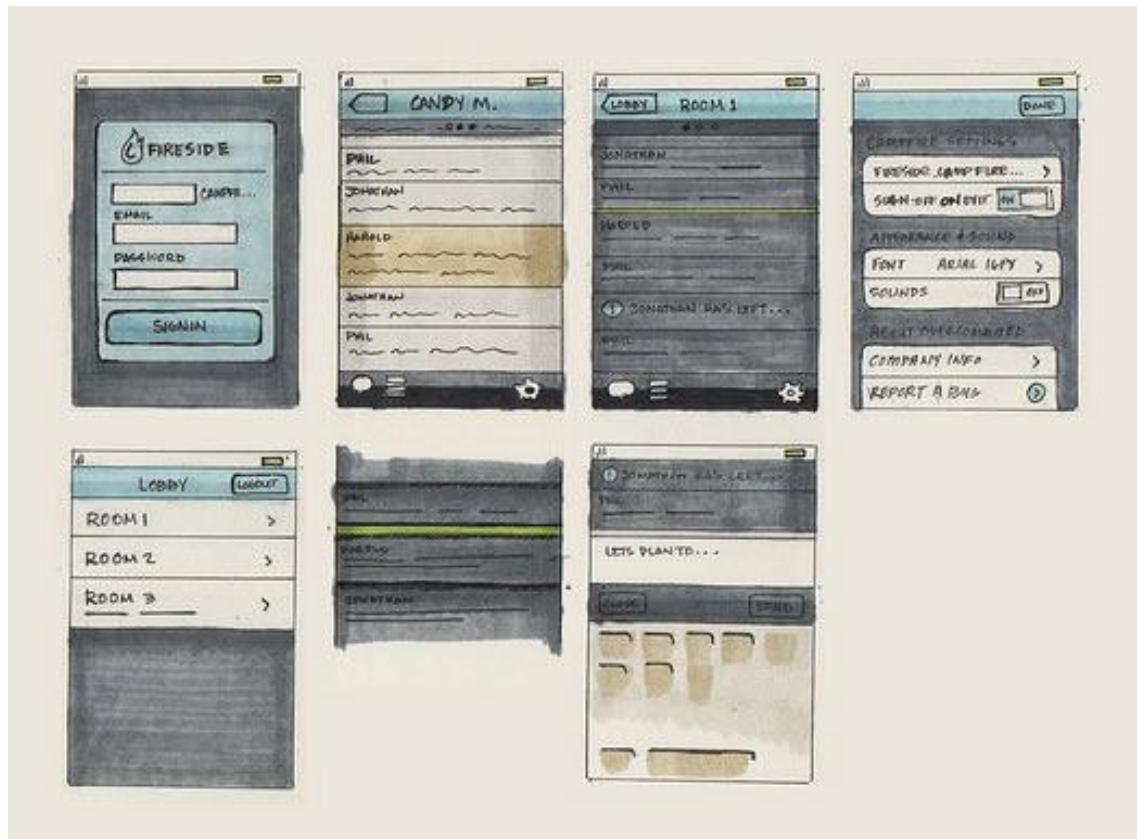
proto.io

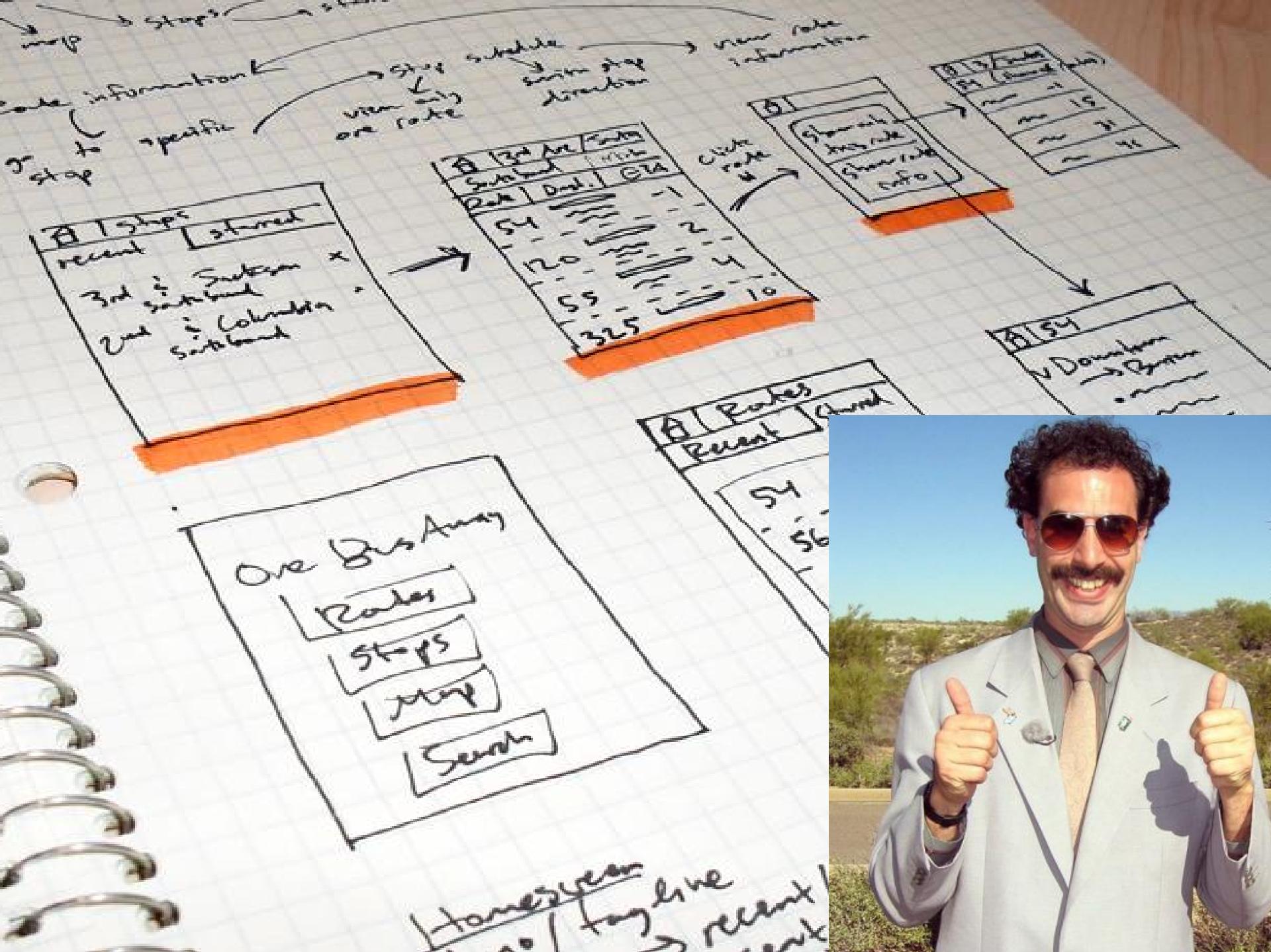
fluidui

photoshop

guardanapo...







“Designing not for art’s sake,
but for the benefit of the customer.”



Phillipe Starck

Surpreenda!

Com maneiras criativas



Expedia

The image shows a screenshot of the Expedia mobile application. At the top, there is a navigation bar with icons for flight search (airplane), purchase (handbag), and travel (person walking). Below this, the word "VIAGENS" is displayed. The main content area is divided into two main sections: "Hotéis" (Hotels) on the left and "Voo" (Flight) on the right. Under "Hotéis", there are three promotional cards: 1. "Aeroporto Othon" located at "3,8 km" with a price of "196 B R\$" and a "-15%" discount. 2. "Rios Nice Hotel" located at "2,6 km" with a price of "177 B R\$" and a "-25%" discount. 3. "Windsor Guanabara Hotel" located at "3,1 km" with a price of "290 B R\$" and a "-10%" discount. To the right of these cards, a "Voe para Las Vegas" (Fly to Las Vegas) button is visible, accompanied by a night photograph of the Las Vegas Strip. In the bottom right corner, a partial view of the Seattle skyline featuring the Space Needle is shown.

Surpreenda!

Chega de menus e botões



Procurar e selecionar receitas

COMPARTILHAR APLICATIVO

The screenshot shows a mobile application interface for a recipe app. On the left, there's a decorative background featuring a red and white checkered pattern, a wooden cutting board, two wooden spoons (one labeled 'Não' and one labeled 'Sim'), and a small notepad with the text 'Você já sabe o que preparar?'. The main area displays a list of recipes:

Receita	Temp. Prep.	Serve
Arroz Doce	01:00:00	20 Pratos
Bolo de Cenoura	01:00:00	8 Fatia
Bolo de Chocolate	00:40:00	40 Fatia
Empadão de Frango	00:50:00	8 Fatia
Massa para Coxinha	01:00:00	100 Unidades
Torta de Frango	00:40:00	15 Fatia



Prato Cheio

Surpreenda!

Conheça o usuário com o tempo



Shop by
Department



Search Amazon.com



Hello, Tom

Your Account >

The All-New
kindle fire HD
The ultimate
HD experience

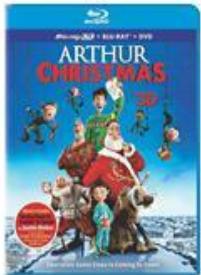


Save up to 75%
in Your City
amazonlocal

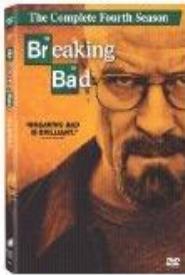
Your Recommendations



This Means War
\$3.99



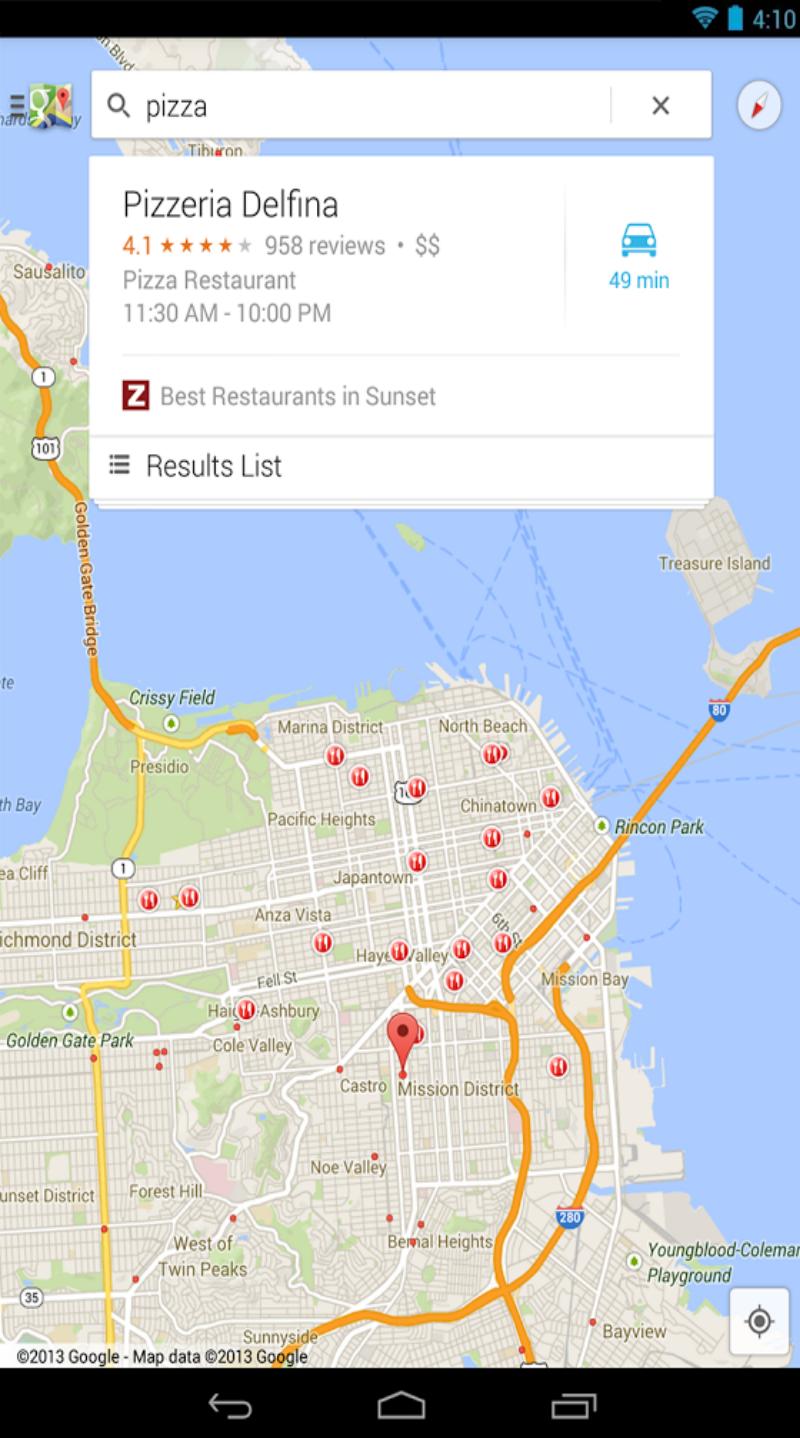
Arthur Christmas
[Blu-ray]
\$29.96



Breaking Bad:
The Complete F..
\$19.99

Featured Cell Phone Accessories >





Facilite!

Resuma, sem textos longos



News360

Technology



Gadgets

LG Announces 5.5-inch Optimus G Pro, U.S. Launch Due Q2

12 hrs ago by Tom's Hardware | 169 more





STEP 1

Sit with knees bent and feet crossed. Lean back until your abs burn. Hold arms in front of you.

• • •



Facilite!

Imagens são mais rápidas que textos!



Evernote Food



Explore



Eat

[Restaurants](#) · [Fast food](#) · [Bakeries](#) · [Ice cream](#) · M...



Drink

[Cafes](#) · [Coffee](#) · [Bars](#) · [Hipster bars](#) · [Tea houses](#) · ...



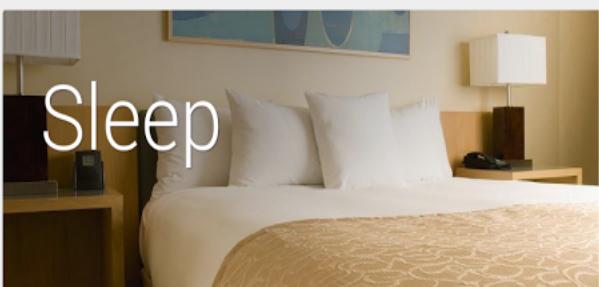
Shop

[Department stores](#) · [Clothing](#) · [Electronics](#) · [Malls](#) · ...



Play

[Movie theaters](#) · [Museums](#) · [Gyms](#) · [Parks](#) · [Art ga...](#)



Sleep

Facilite!

Decida por mim, mas a última
palavra é minha



13:59



Recent 1

Favorites

People



James

big night u ready?

13:25



Rose

Looking forward to it

12:21



Nina Kovac

missed call

10:45



Takahashi Kenta

Running 5 mins late...

09:34



Will Bergman

need coffee!! lol

09:17



Elena Powell

08:33



Facilite!

Apenas exiba o necessário



 Busca (125)
2 lug, Amanhã 11h~2...



30% OFF **Temaki House**

 Japonesa  Mooca



30% OFF **Das Pasta & Gri**

 Variada  Mooca  \$\$\$\$\$

2,8 km



30% OFF **Piazza 36**

Filtrar Bairro

Filtrar Cozinha

Filtrar Preço Médio

Perfil

Minhas Reservas

Convidar Amigos!

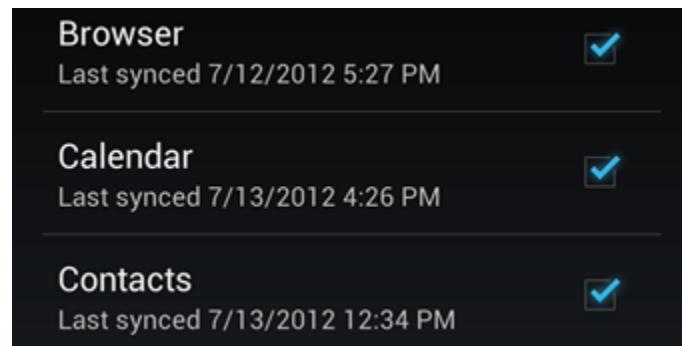
Sair



Grubster

Facilite!

Nunca perca minhas coisas!

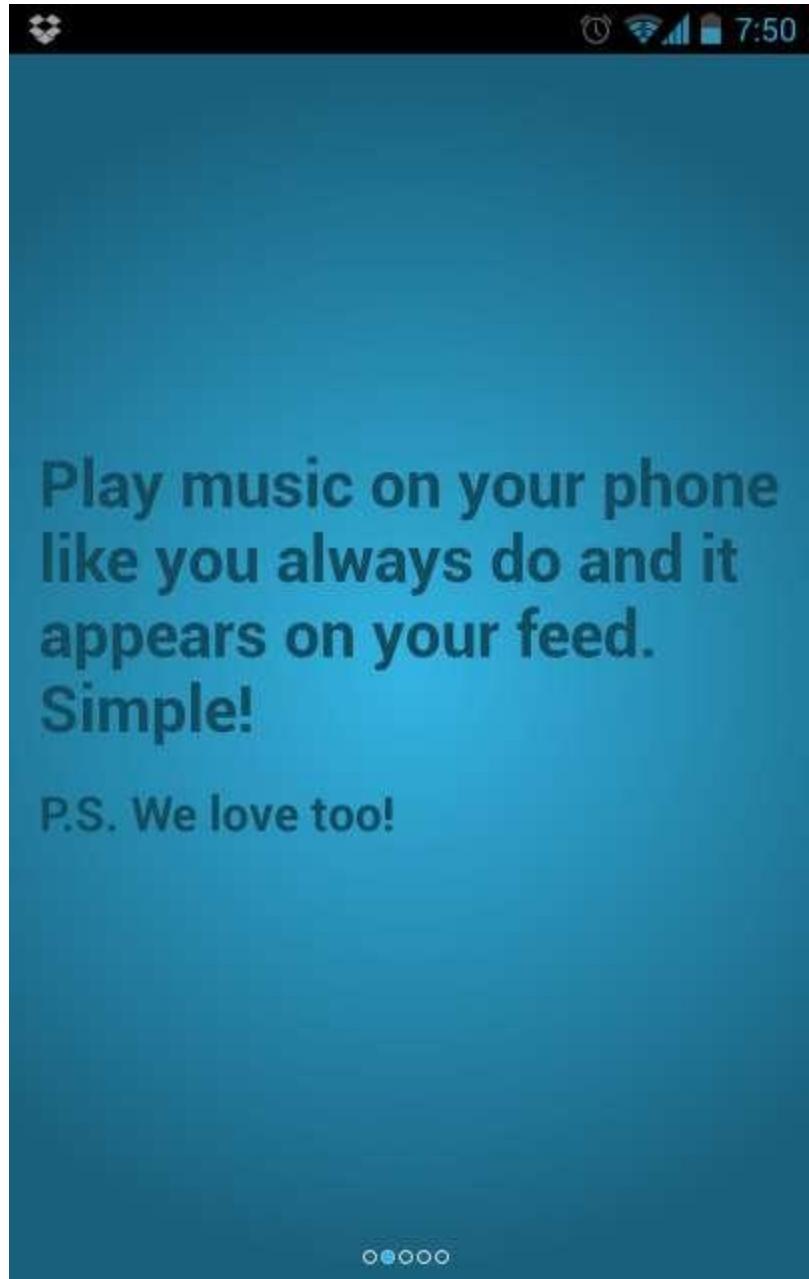


Quero UX!

Deixe-me descobrir o
aplicativo, mas quero algumas
dicas



Soundwave



ON 8+

07:29

X

TIGERS TRAINING: 1/2

VOTE!

Vote on this game

17:05

INDIANS
TIGERS

\$193,662 pool

Bet to see payout

Cleveland wins!

Detroit wins!

1 reaction

Nic Sybesma: Every game counts!

4h

1 0

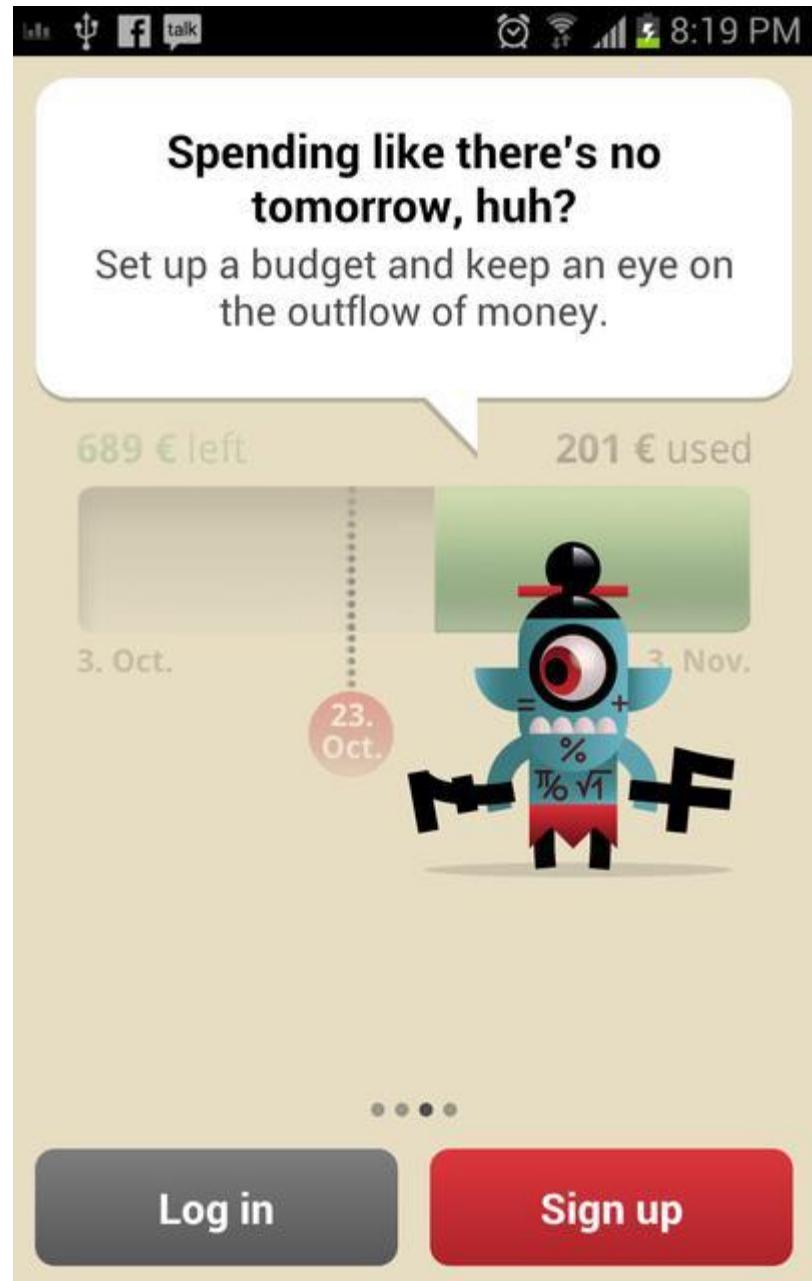
A yellow arrow points from the word 'VOTE!' at the top to the 'Cleveland wins!' option below.



Sports Bet



Toshl



Quero UX!

Dê feedback para minhas
ações!

androidpatterns.com

Android Design Principles

android-app-patterns.com

pttrns.com

**VAMOS
TIRAR
DO PAPEL!**





Cupcake
Android 1.5



Donut
Android 1.6



Eclair
Android 2.0/2.1



Froyo
Android 2.2



Gingerbread
Android 2.3



Honeycomb
Android 3.0



Ice Cream Sandwich
Android 4.0



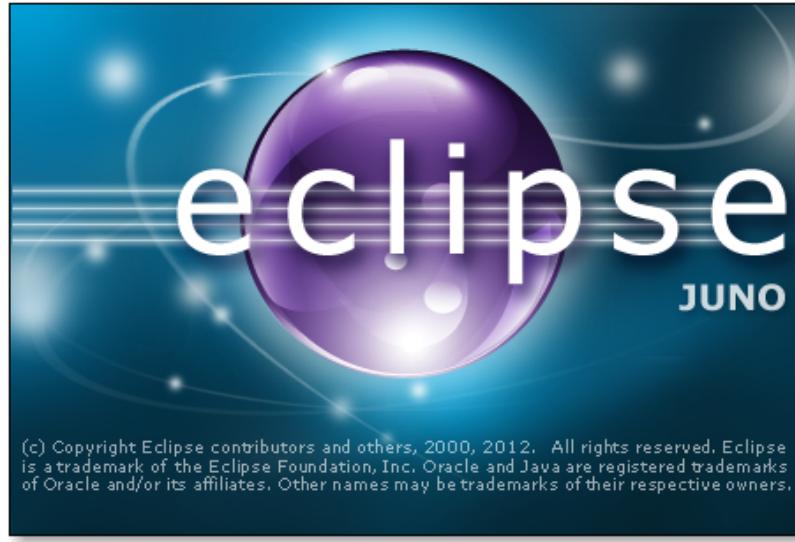
Jelly Bean
Android 4.1



What Next?

Android 4.4 - KitKat





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ADT plugin



Android Studio (IntelliJ)



NBAndroid

SDK Manager

Android SDK Manager Packages Tools

SDK Path: /Users/bernardorezende/android-sdk-macosx

Android SDK Manager

Packages

Name	API	Rev.	Status
Tools			
Android SDK Tools	22	22	Update available: rev. 22.2
Android SDK Platform-tools	16.0.2	16.0.2	Update available: rev. 18.0
Android SDK Build-tools	18.1	18.1	Installed
Android SDK Build-tools	18.0.1	18.0.1	Installed
Android SDK Build-tools	17	17	Installed
Android 4.3 (API 18)			
Documentation for Android SDK	18	1	Not installed
SDK Platform	18	2	Installed
Samples for SDK	18	1	Not installed
ARM EABI v7a System Image	18	2	Not installed
Intel x86 Atom System Image	18	1	Not installed
Google APIs	18	3	Not installed
Sources for Android SDK	18	1	Not installed
Android 4.2.2 (API 17)			
Android 4.1 (API 16)			
Android 4.0.3 (API 15)			
Android 4.0 (API 14)			
Android 3.2 (API 13)			
Android 3.1 (API 12)			
Android 3.0 (API 11)			
Android 2.3.3 (API 10)			
Android 2.2 (API 8)			
Android 2.1 (API 7)			
Android 1.6 (API 4)			
Android 1.5 (API 3)			
Extras			

Show: Updates/New Installed Obsolete Select [New](#) or [Updates](#)

Sort by: API level Repository Deselect All

Install 9 packages... Delete 7 packages...

Done loading packages.

AVD Manager

Android Virtual Device Manager (1:19) sáb 20:05 Bernardo...Rezende

Android Virtual Devices Device Definitions

List of existing Android Virtual Devices located at /Users/bernardorezende/

AVD Name	Target Name
✓ AVD_2_2	Android 2.2
✓ AVD_2_3_3	Android 2.3.3
✓ AVD_4_0_3	Android 4.0.3
✓ AVD_4_1	Android 4.1
✓ AVD_4_1_	Android 4.1
✓ AVD_4_1_WSVGA	Android 4.1
✓ AVD_4_1_WXGA720	Android 4.1
✓ AVD_4_1_WXGA800	Android 4.1
✓ avd_16	Android 4.1

Create new Android Virtual Device (AVD)

AVD Name:

Device:

Target:

CPU/ABI:

Keyboard:

Skin:

Front Camera:

Back Camera:

Memory Options:

Internal Storage:

SD Card:

Emulation Options: Snapshot Use Host GPU

Override the existing AVD with the same name

✗ AVD Name cannot be empty

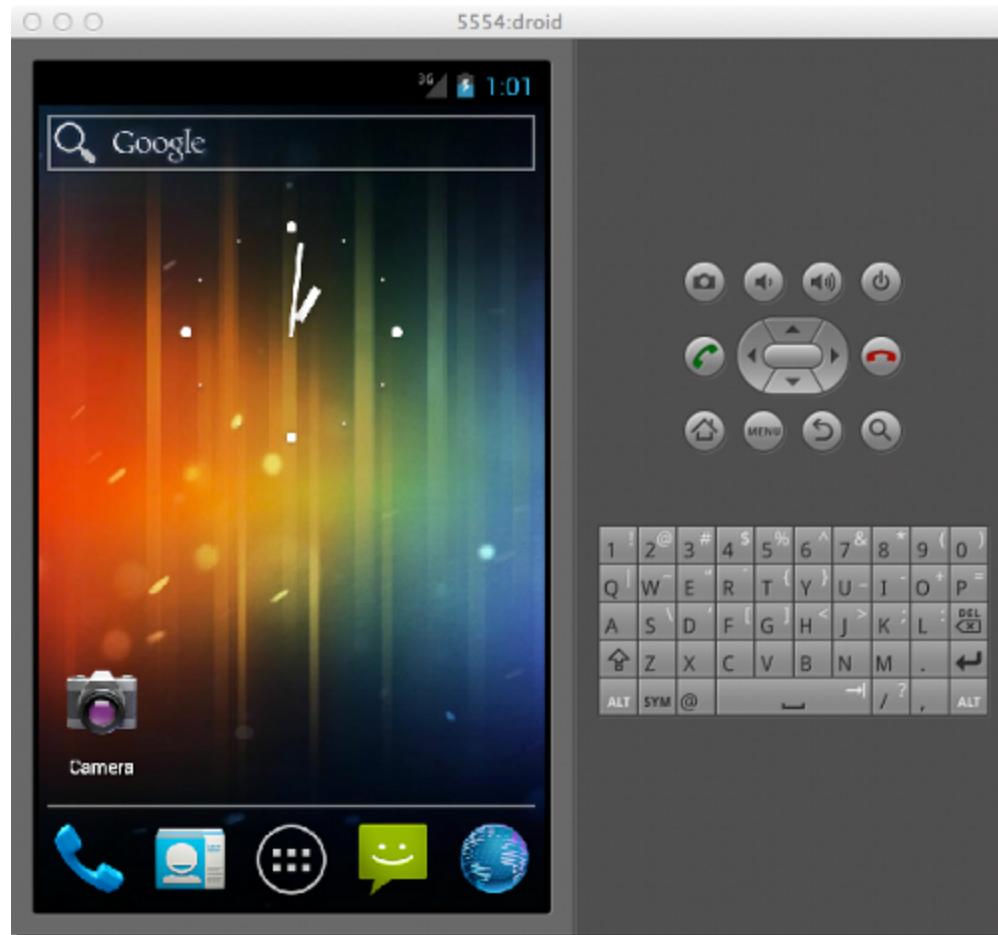
New... Edit... Delete... Repair... Details... Start... Refresh

Cancel OK

✓ A valid Android Virtual Device. ✎ A repairable Android Virtual Device.

✗ An Android Virtual Device that failed to load. Click 'Details' to see the error.

Android emulator



```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    android:paddingBottom="@dimen/activity_vertical_margin"
    tools:context=".MainActivity">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/hello_fae"
        android:textSize="50sp"/>

</RelativeLayout>
```

tela_principal.xml



Dp = dip = Define tamanho de elementos na tela.

Sp = Define tamanho de textos de acordo com preferências do usuário

Dpi (dots per inch) = Quantidade de pixels por área física da tela

Ldpi – Resources para ~ 120dpi

Mdpi – Resources para ~ 160dpi

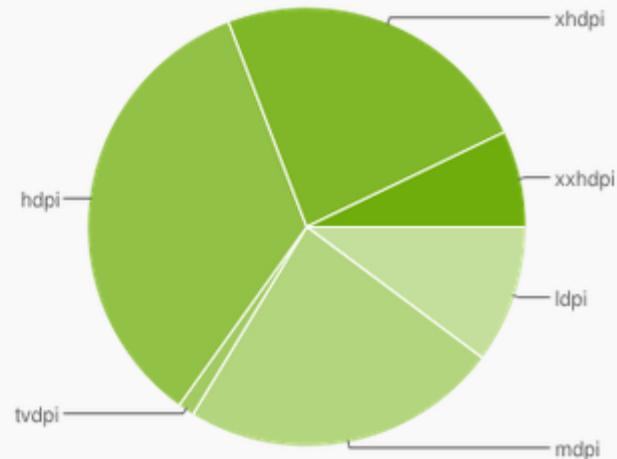
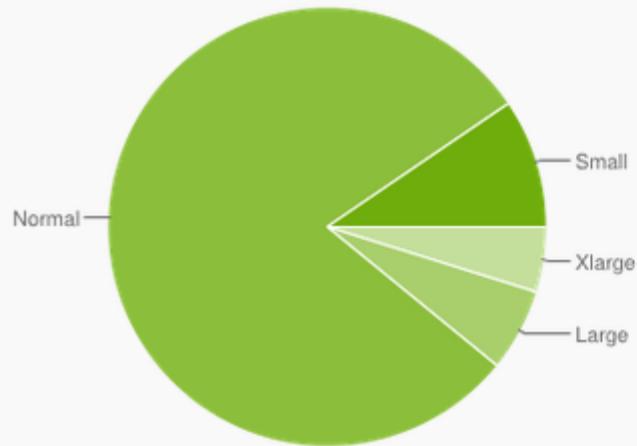
Hdpi – Resources para ~ 240dpi

Xhdpi – Resources para ~ 320dpi

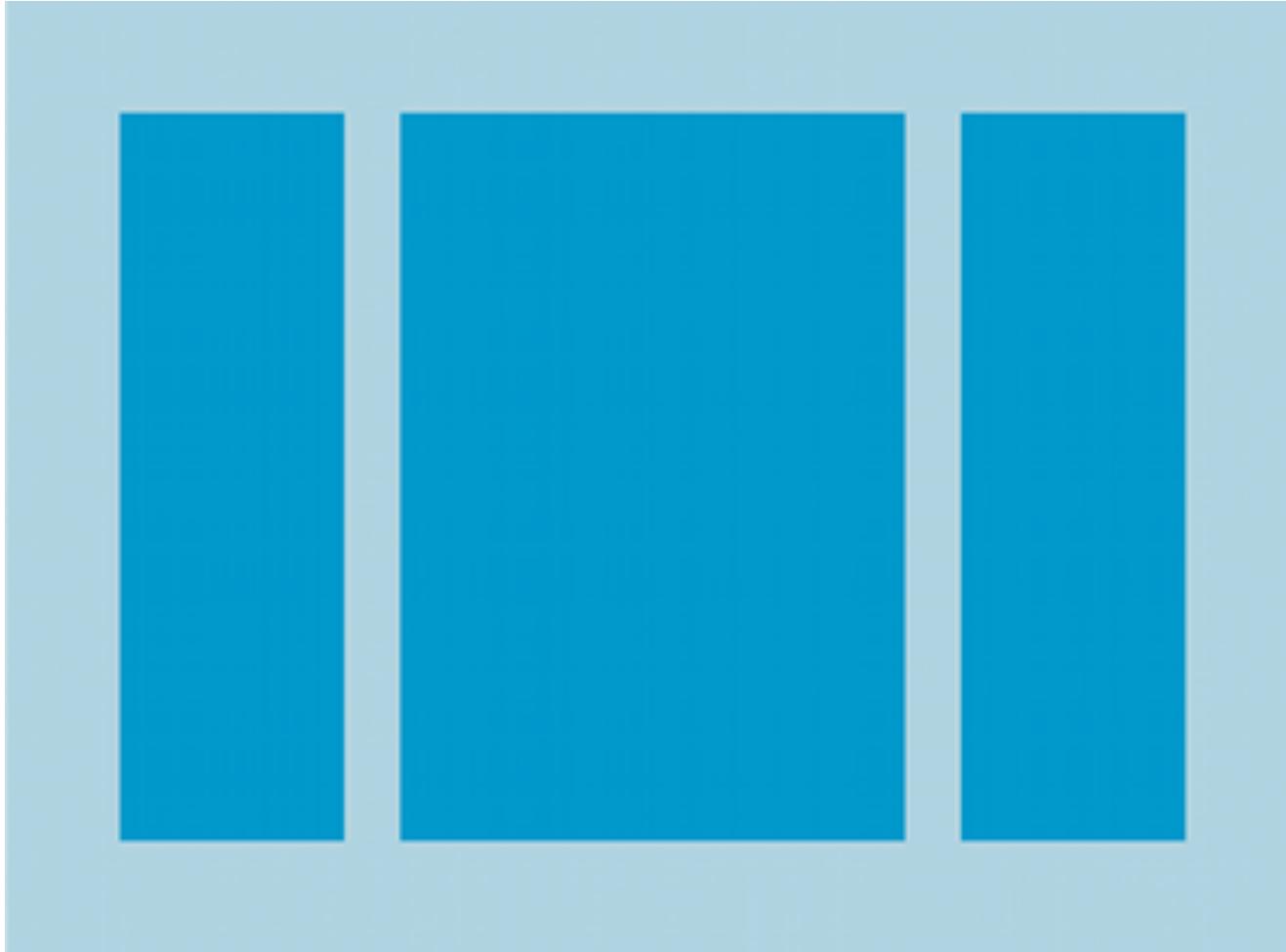
Fonte:

http://developer.android.com/guide/practices/screens_support.html

	ldpi	mdpi	tvdpi	hdpi	xhdpi	xxhdpi	Total
Small	9.5%						9.5%
Normal	0.1%	15.7%		33.6%	23.1%	7.1%	79.6%
Large	0.6%	3.4%	1.2%	0.4%	0.5%		6.1%
Xlarge		4.4%		0.3%	0.1%		4.8%
Total	10.2%	23.5%	1.2%	34.3%	23.7%	7.1%	



LinearLayout



RelativeLayout



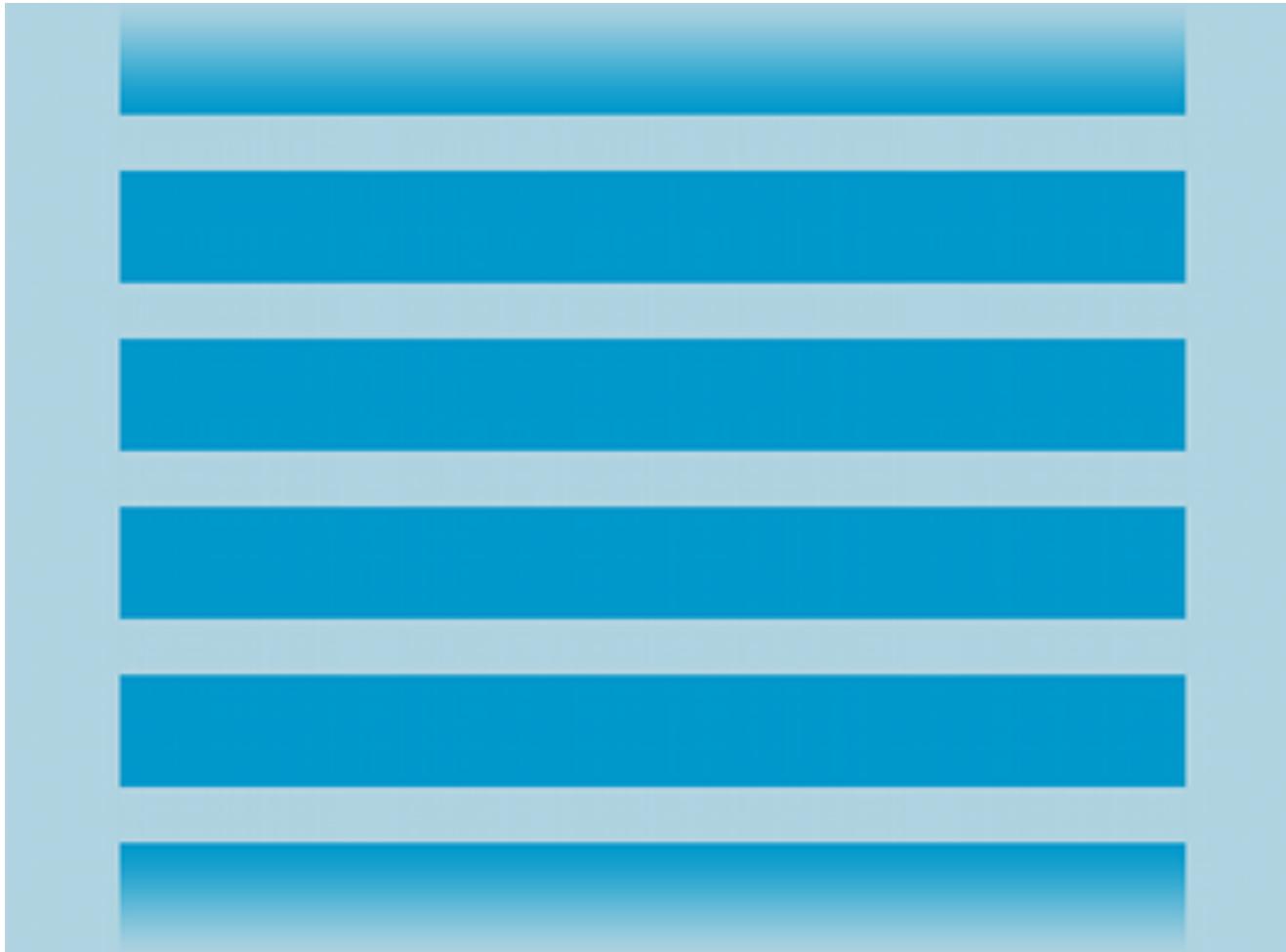
WebView

```
<html>
```

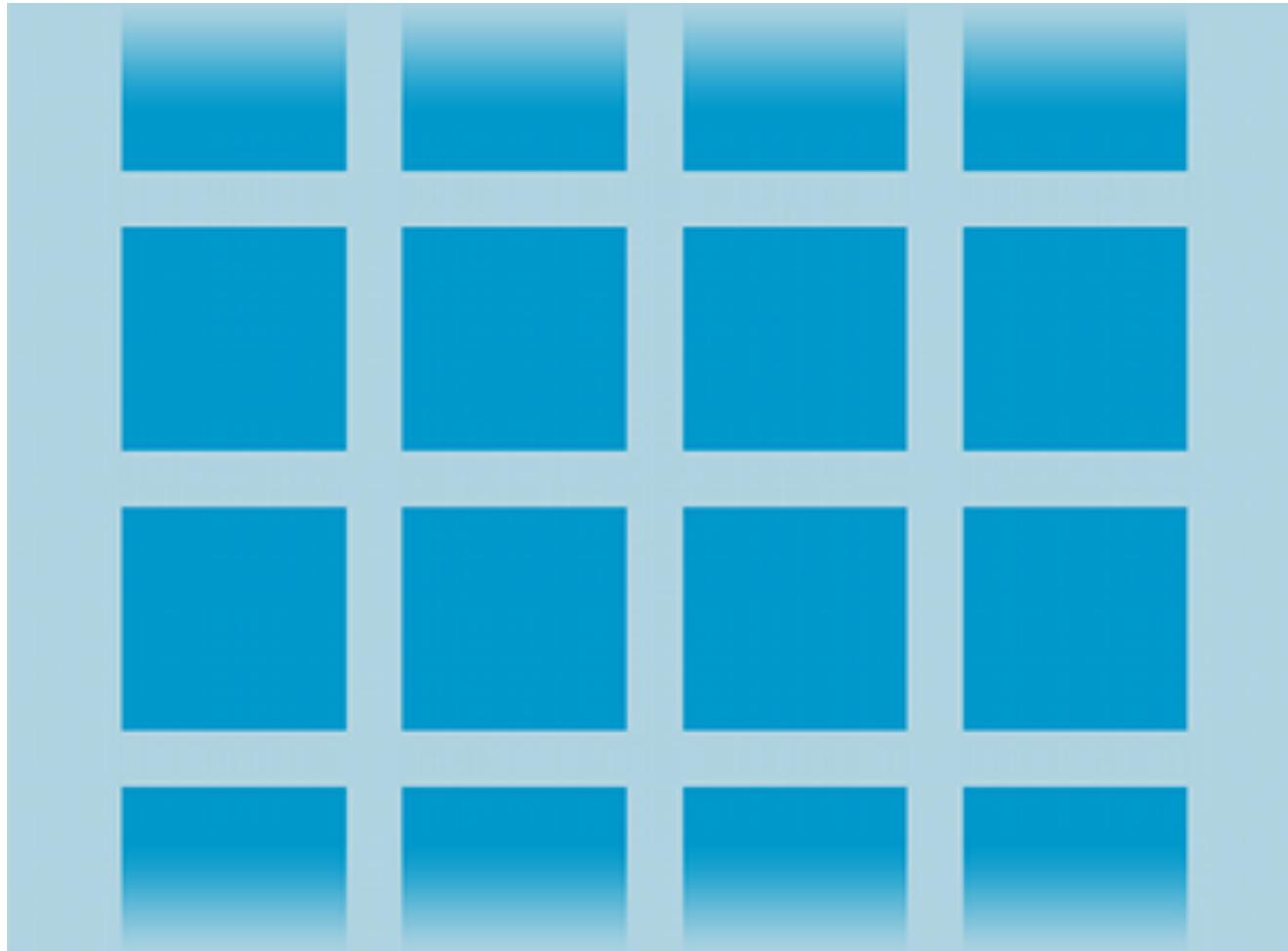
```
<!-- web page -->
```

```
</html>
```

ListView



GridView

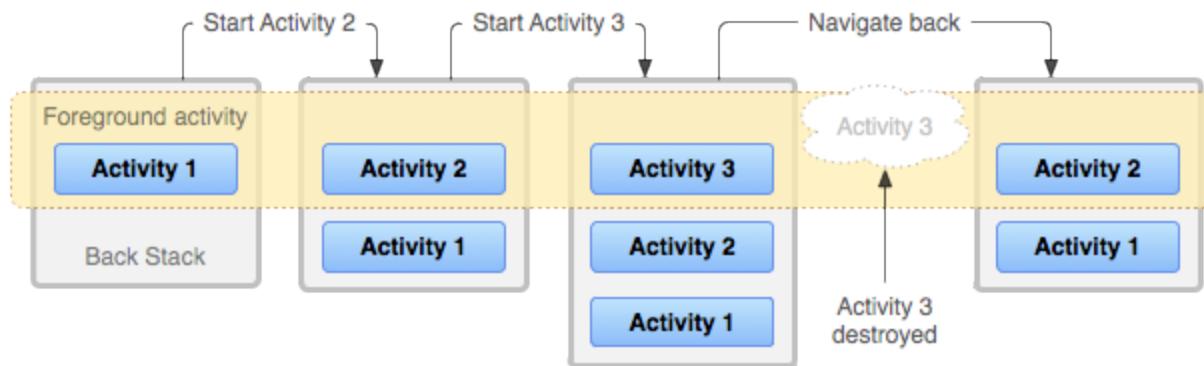


Activity

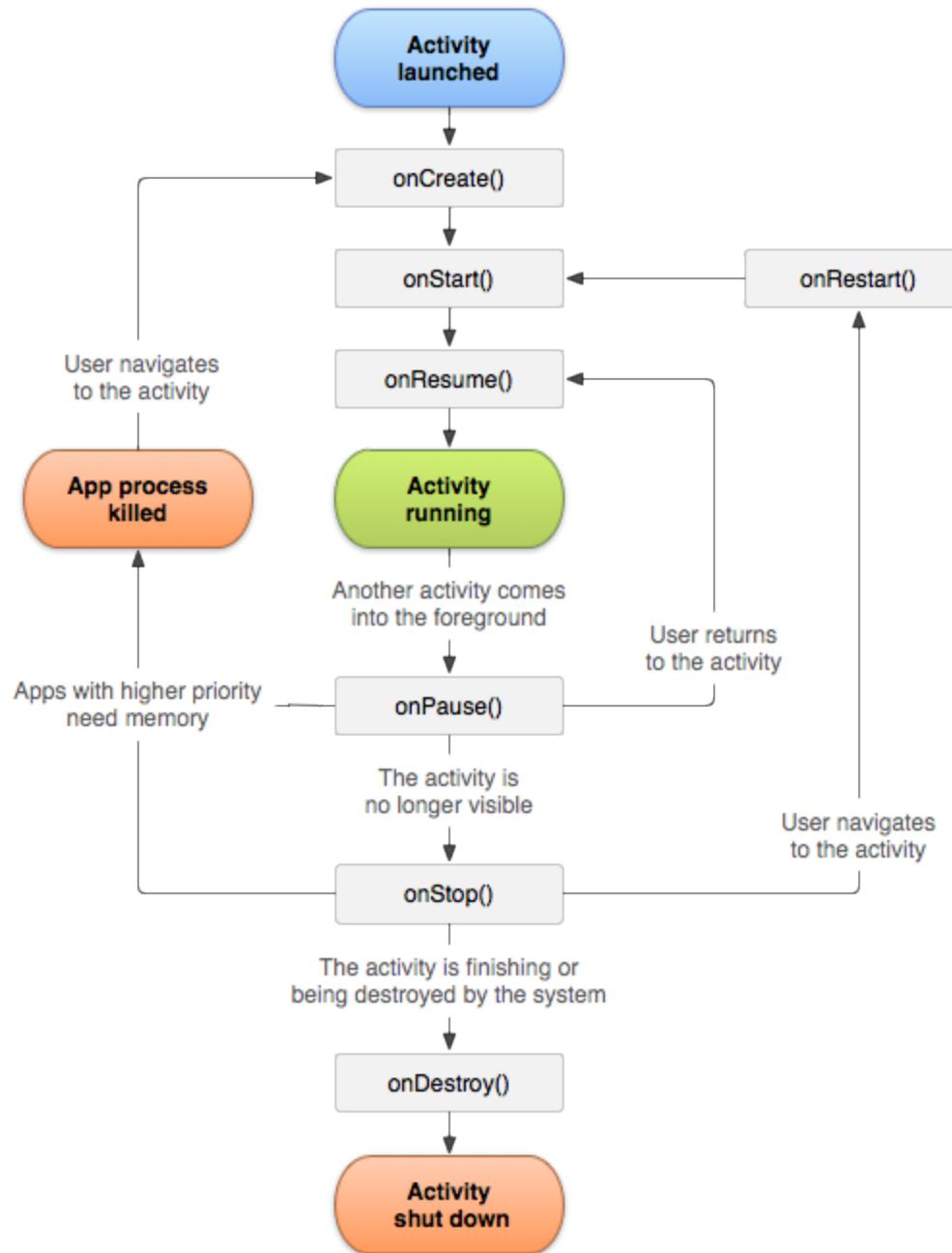
Abstrai a interação do usuário com a tela.

Activity

Navegação "back-stack"



```
public class TelaPrincipalActivity extends Activity {  
    @Override  
    public void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.tela_principal);  
    }  
    @Override  
    protected void onRestart() {  
        super.onResume();  
        // Código para quando a tela for re-ativada.  
    }  
}
```



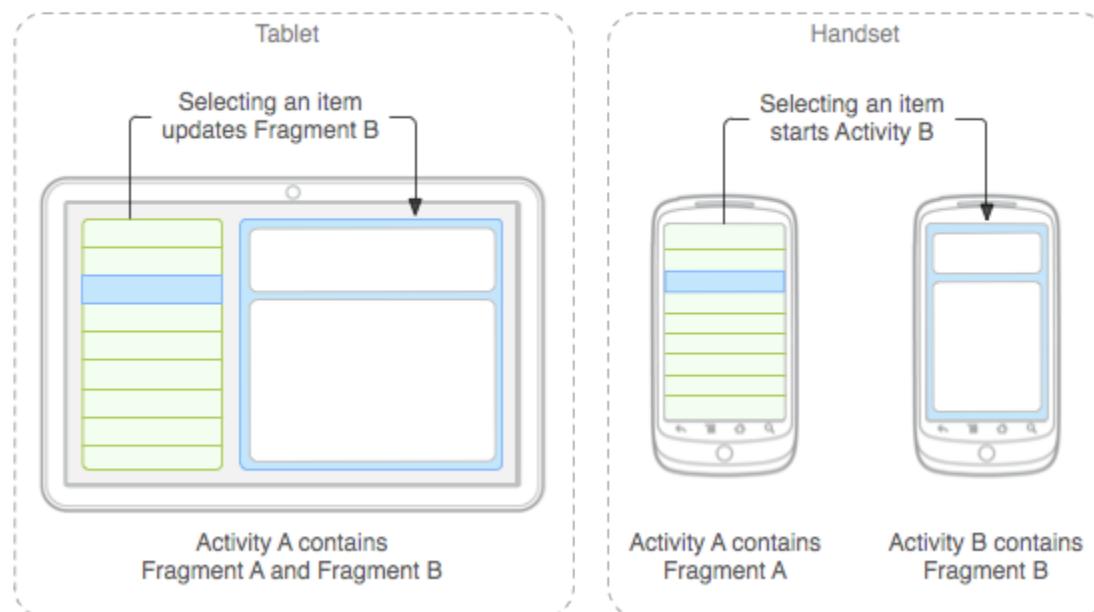
Fragment

“Sub-activity” que pode ser reutilizada.

Fragment

Conceito introduzido no Android 3.0

Fragment



Armazenamento

SharedPreferences

```
> s.putString("chave", "valor");
```

```
> s.getString("chave"); // retorna "valor"
```

Armazenamento

FileOutputStream

```
> FileOutputStream fos = openFileOutput("dados.  
txt");
```

```
> fos.write("valor sendo escrito".getBytes());
```

```
> fos.close();
```

Armazenamento

Diretórios públicos ou cartão SD

> File p = Environment.

```
getExternalStoragePublicDirectory();
```

Armazenamento

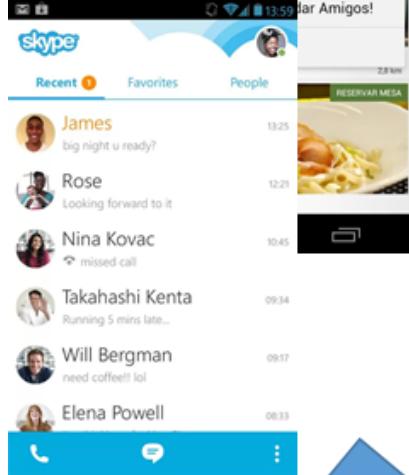
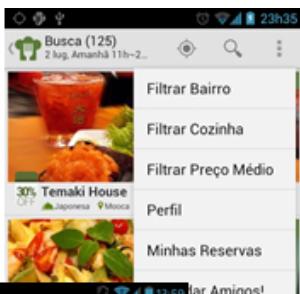
SQLite3

```
> db.execSQL("SELECT * FROM tabela");
```

Armazenamento

HttpClient

```
> httpclient.execute(new HttpPOST("url"));
```



AsyncTask / Loaders



Activity

Semi-POJOs

HTTP



API
facebook

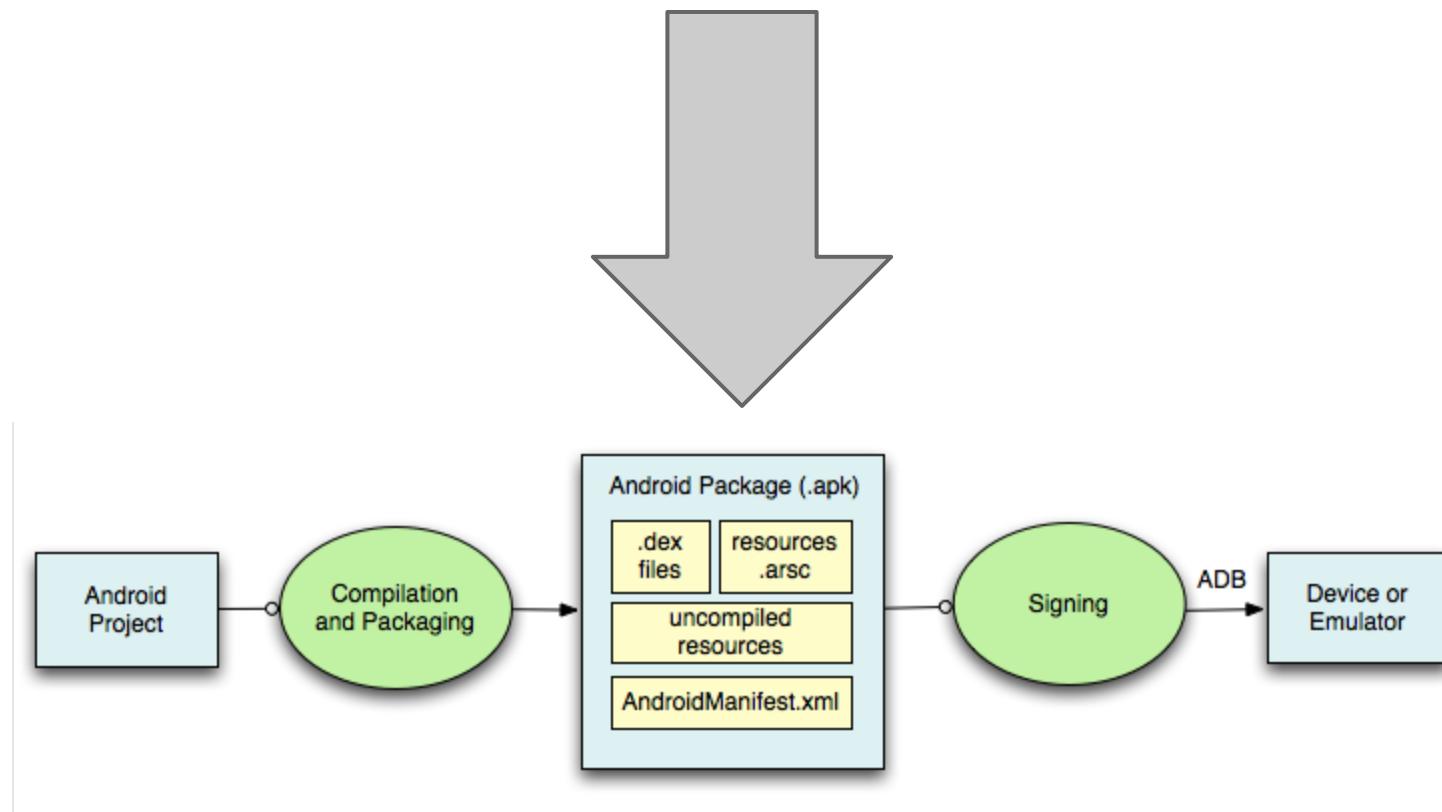
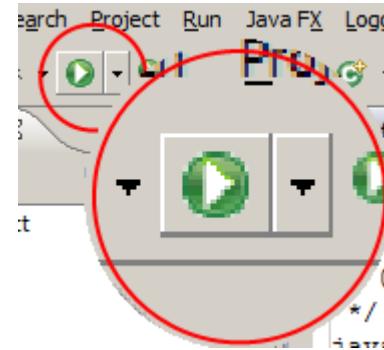


JSON
JavaScript Object Notation

androidbootstrap.com



ant release ou





Quando preciso testar um aplicativo Android...



Como eu gostaria que fosse



Como realmente é

Quando preciso testar um aplicativo Android...



Como eu gostaria que fosse



Como realmente é

APKudo.com

APKUDO
User

analysis run results

Manufacturer	Android	State	Name	Model	Result	Failure Type
Acer	2.1	Completed	Liquid E	S100	Failure: install	install
	2.2	Completed	beTouch E210	E210	Failure: install	install
		Completed	beTouch E140	E140	Success	
		Completed	Liquid Metal	S120	Failure: install	install
		Completed	Acer Stream	S110	Failure: install	install
Alcatel	2.1	Completed	One Touch	OT-980	Failure: install	install
	2.2	Completed	One Touch 990S	990S	Success	
		Completed	One Touch 890D	OT-890D	Failure: install	install
		Completed	One Touch 908	908	Success	
		Completed	One Touch	990M	Success	
ASUS	4.0	Completed	Padfone 2	A68	Success	
Coolpad	2.2	Completed	W721	W721	Failure: install	install

Apps & Analyses

VERSION: 8

ANALYSIS 2 COMPLETE

176 DEVICES SUCCEEDED
75 DEVICES FAILED
5 FAILURE MODES

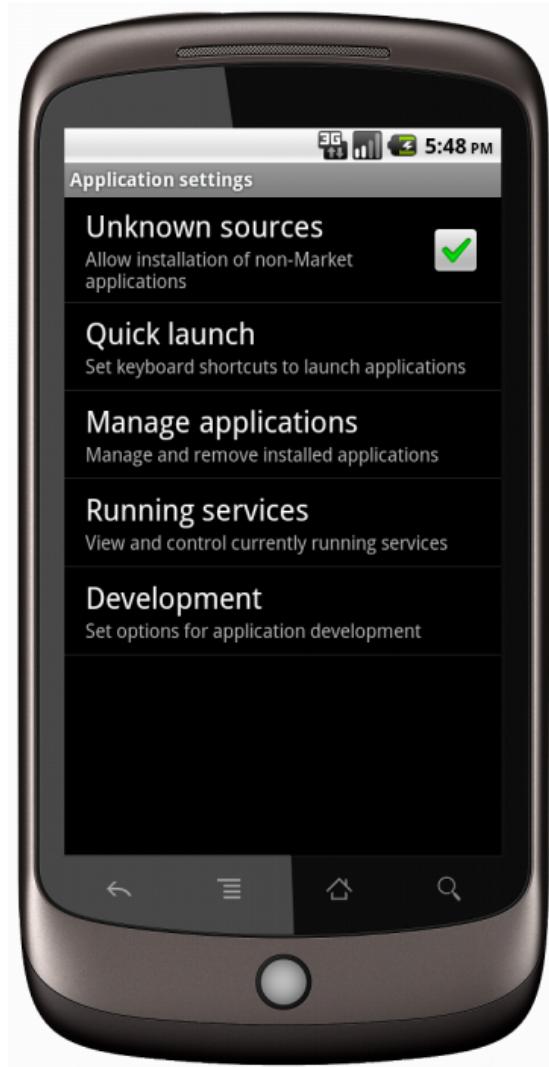
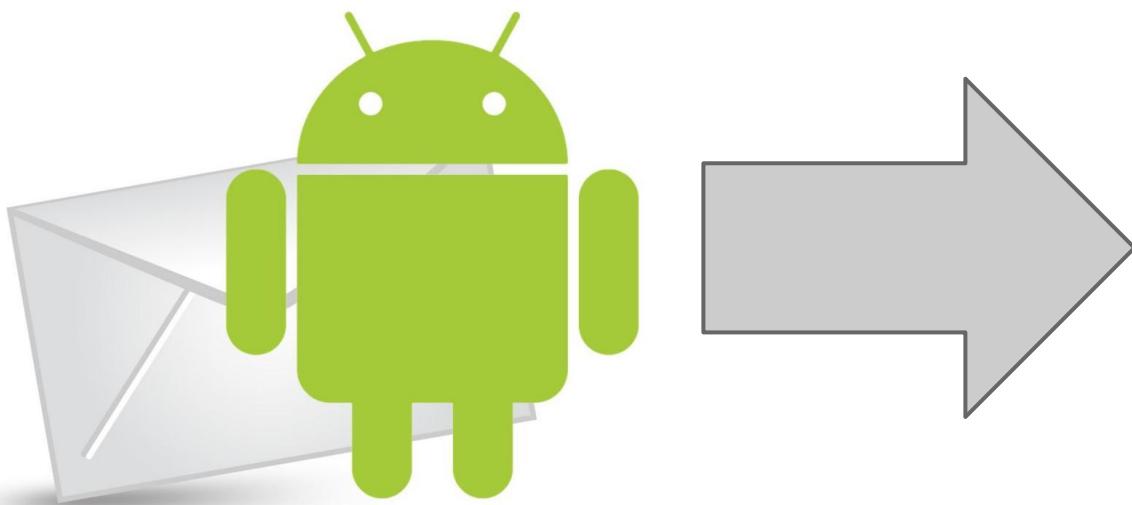
256 of 259 devices were analyzed.
(3 unavailable at the time of this analysis.)

FILTERS 0 of 232 filtered (clear all)

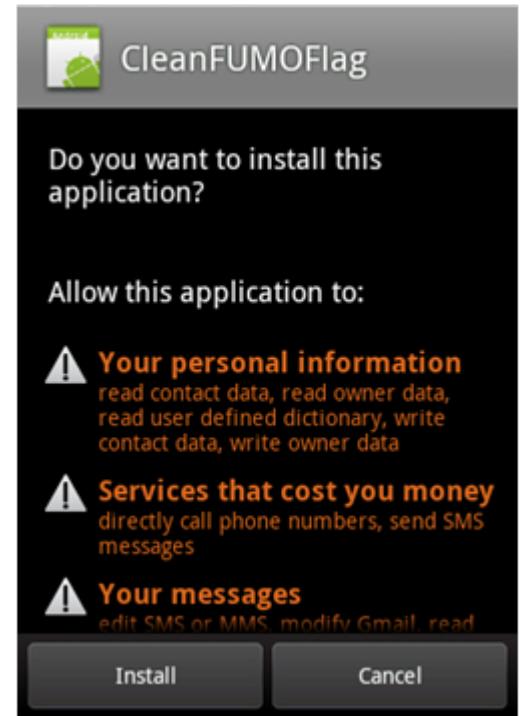
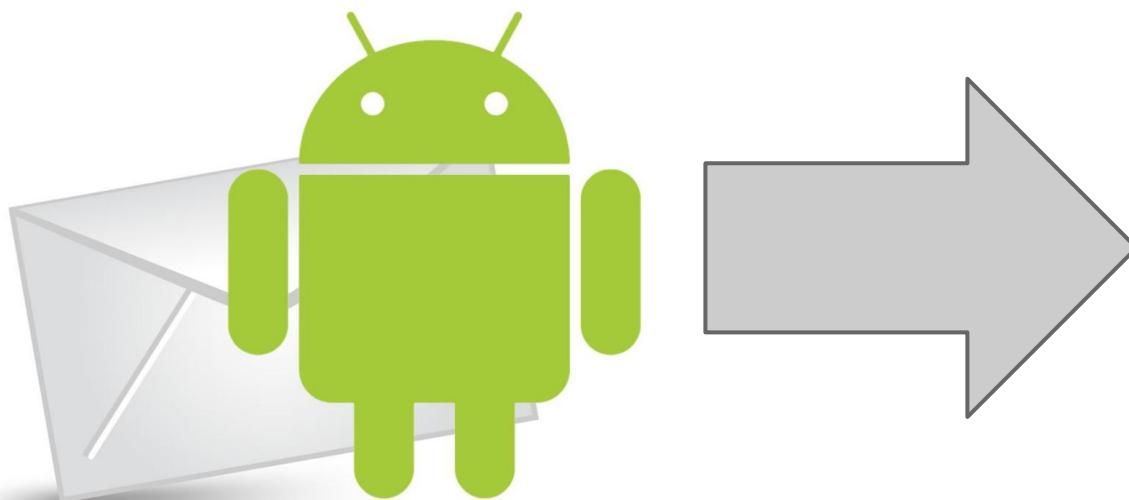
Manufacturer	
Android Version	
State	Completed (232)
Name	
Model	
Result	



Enviar APK por email



Enviar APK por email





TestFlight

Beta Testing On The Fly



Share



Tweet

TestFlight welcomes **Android** to the crew.

Available to all TestFlight users.

[Login to start](#)

Not a TestFlight user yet?
[Sign Up Here!](#)

[Read More about Android on TestFlight](#)



Google play

APK

Advanced Mode

PRODUCTION

Version

2

BETA TESTING

Set up Beta testing for
your app

ALPHA TESTING

Version

4

ALPHA CONFIGURATION

[Upload new APK](#)

CURRENT APK published on May 16, 2013 1:36:44 PM

Supported devices

1397

[See list](#)

Excluded devices

0

[Manage excluded devices](#)

Alpha testers

[Manage list of testers](#)

▼ VERSION

UPLOADED ON

STATUS

ACTIONS

4 (4.0)

May 16, 2013

in Alpha

[Promote... ▾](#)

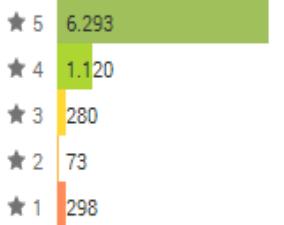




Google play

Resenhas

4,6
★★★★★
8.064 total



Falta controle de qualidade dos taxistas Hoje tive uma corrida com um taxista super maleducado. Tentei

Marcelo Quintella ★★★★★



A idéia é boa Depois de várias tentativas sem sucesso, finalmente consegui usar. Sempre buscava um

Sergio Stender ★★★★★



Em Recife vale! Já utilizei 3x em Recife e fiquei muito satisfeito. Só não leva as 5 estrelas pq precisa acurar mais esse Rogerio Vasconcelos Jr. ★★★★★



Insatisfeito Na primeira utilização fiquei decepcionado, pois ao solicitar o taxi depois de esperar alguns minutos o

Leandro Grossi ★★★★★

Escrever um comentário



Valeu!