

AN INTRODUCTION TO

HUMAN MACHINE INTERFACE

CONVERSATION TAKEN FROM “HER”

Samantha: Is that weird? You think I'm weird?

Theodore: Kind of.

Samantha: Why?

Theodore: Well, you seem like a person but you're just a voice in a computer.

Samantha: I can understand how the limited perspective of an unartificial mind might perceive it that way. You'll get used to it.

[Theodore laughs]

CONVERSATION TAKEN FROM “HER”

Samantha: Is that weird? You think I'm weird?

Theodore: Kind of.

Samantha: Why?

Theodore: Well, you seem like a person but you're just a voice in a computer.

Samantha: I can understand how the limited perspective of an unartificial mind might perceive it that way. You'll get used to it.

[Theodore laughs]

NEVER FORGET



1. **People** tend to "humanise" **things**.
2. **People** have a limited perspective when perceiving **things**.
3. **People** get used to **things**.

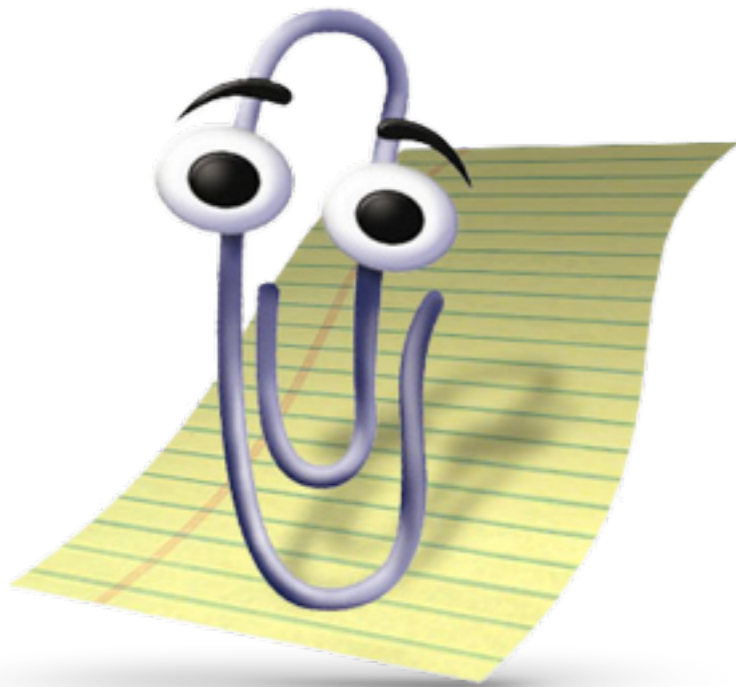


People tend to "humanise" things.





People tend to “humanise” things.

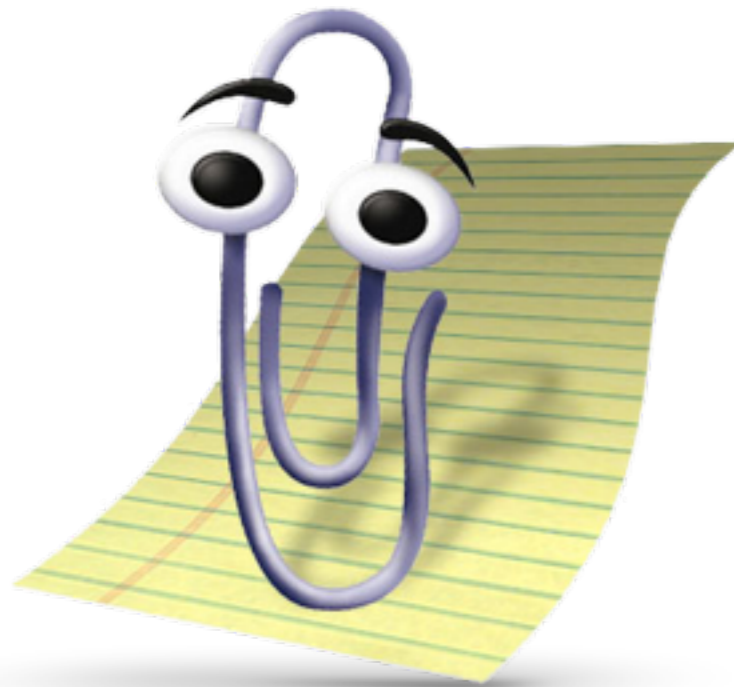


“Famous for being one of the worst user interfaces ever deployed to the mass public.”

“He stopped users to ask them if they needed help with basic tasks, like writing a letter or making a spreadsheet.”



People tend to “humanise” things.

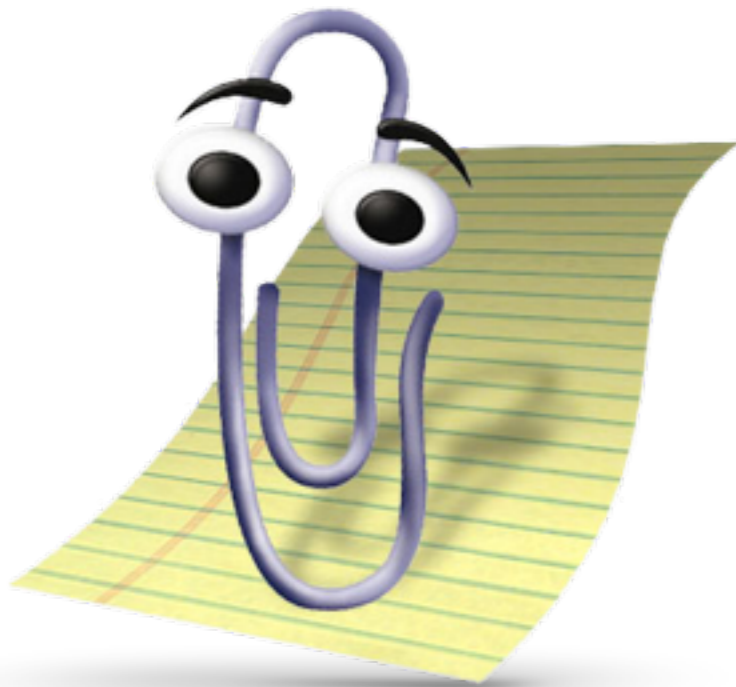


“As the Microsoft employee Chris Pratley has written, Clippy was “optimized for first use”: amusing the first time you encountered him, and frustrating after that. ”

“He was a puppet who only knew one script and kept repeating it, at you, throughout the workday.”

People ←→ things

People tend to "humanise" things.



"We did a bunch of focus-group testing, and the results came back kind of negative. Most of the women thought the characters were too male and that they were leering at them."



People have a limited perspective when perceiving **things**.

People can perceive just few **things** at a time.



People have a limited perspective when perceiving things.

People can perceive just few things at a time.

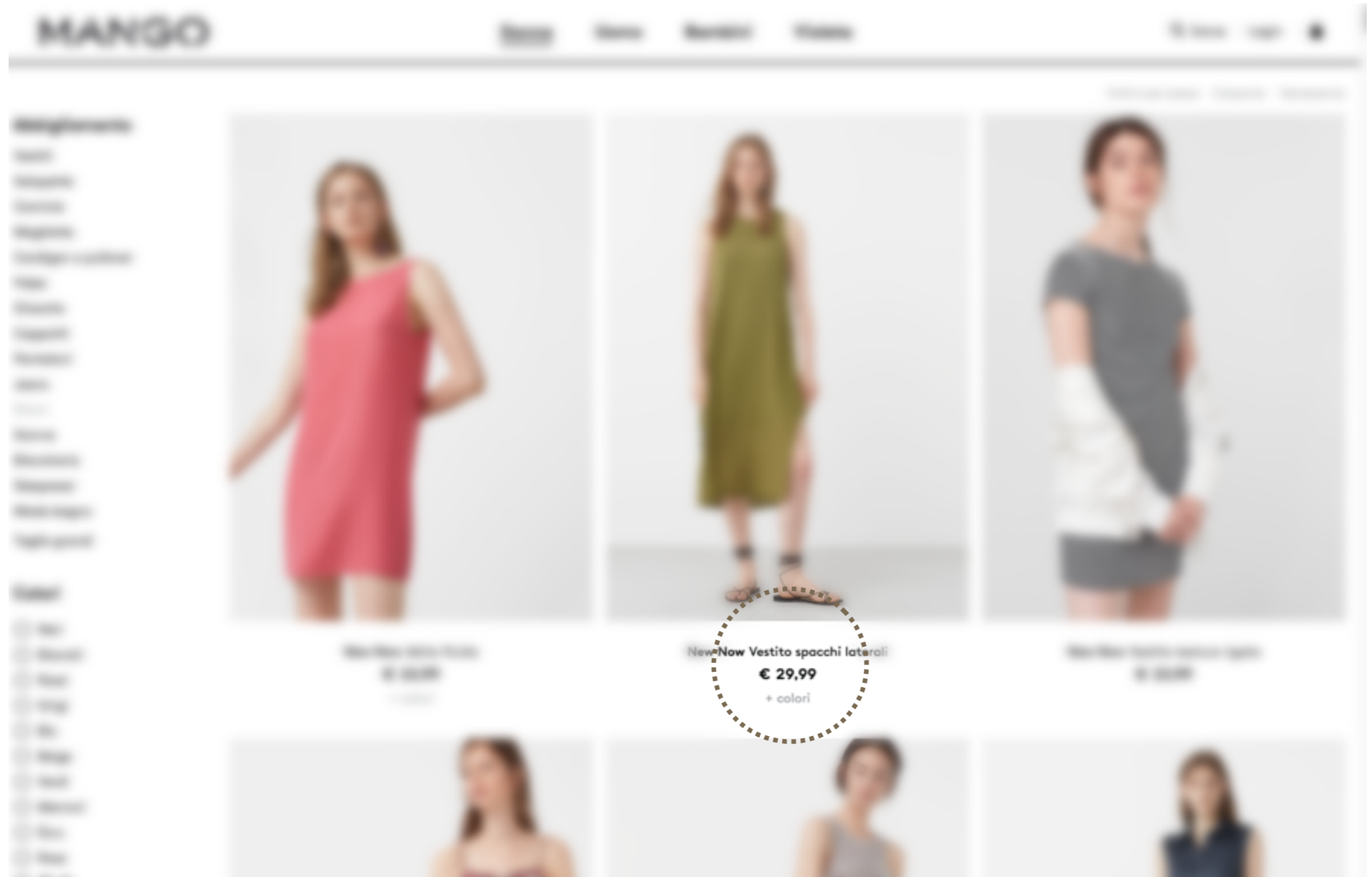
I II III IV V VI

I II III IIIII IIIIIII IIIIIIIII



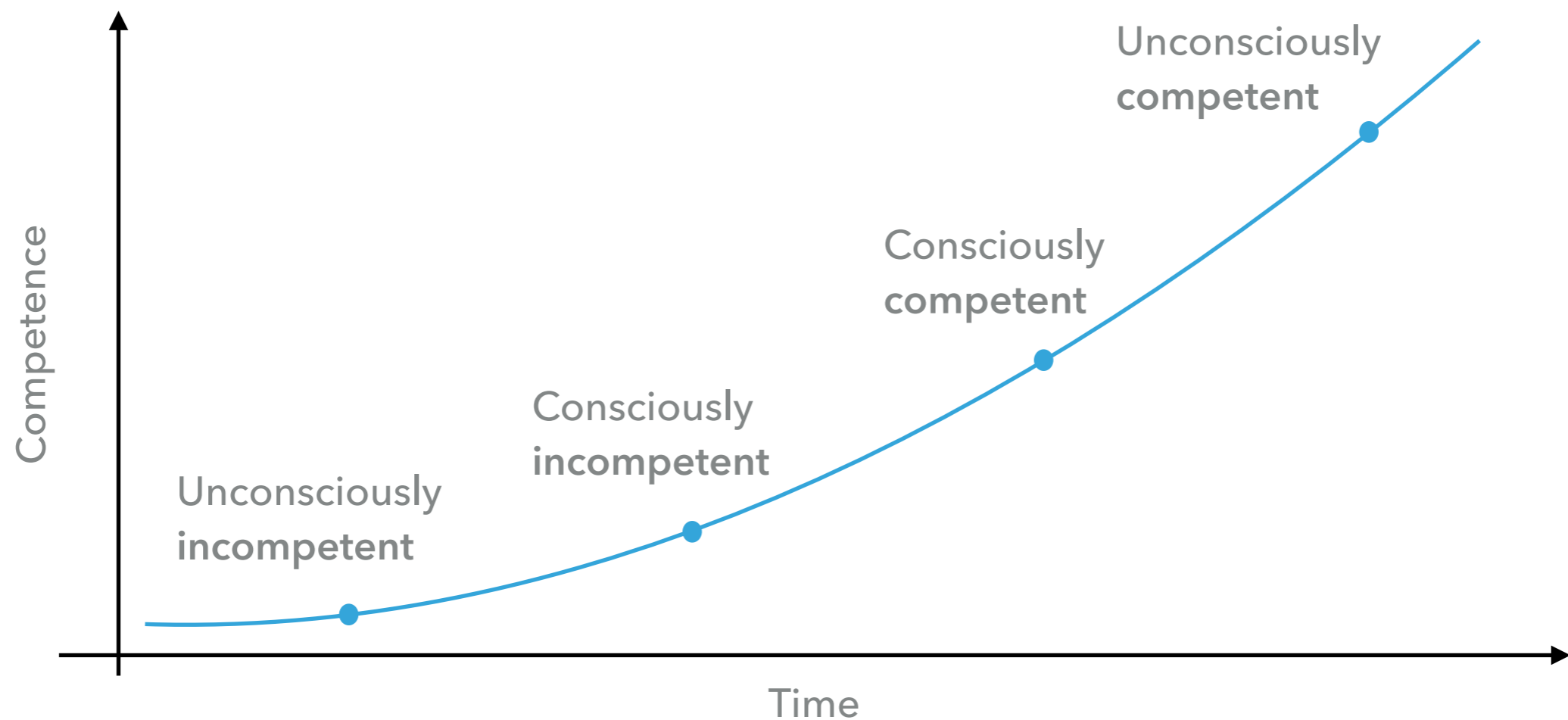
People have a limited perspective when perceiving **things**.

There's a small portion of **people** eyesight that actually sees sharp image called "**FOEVAL VISION**".

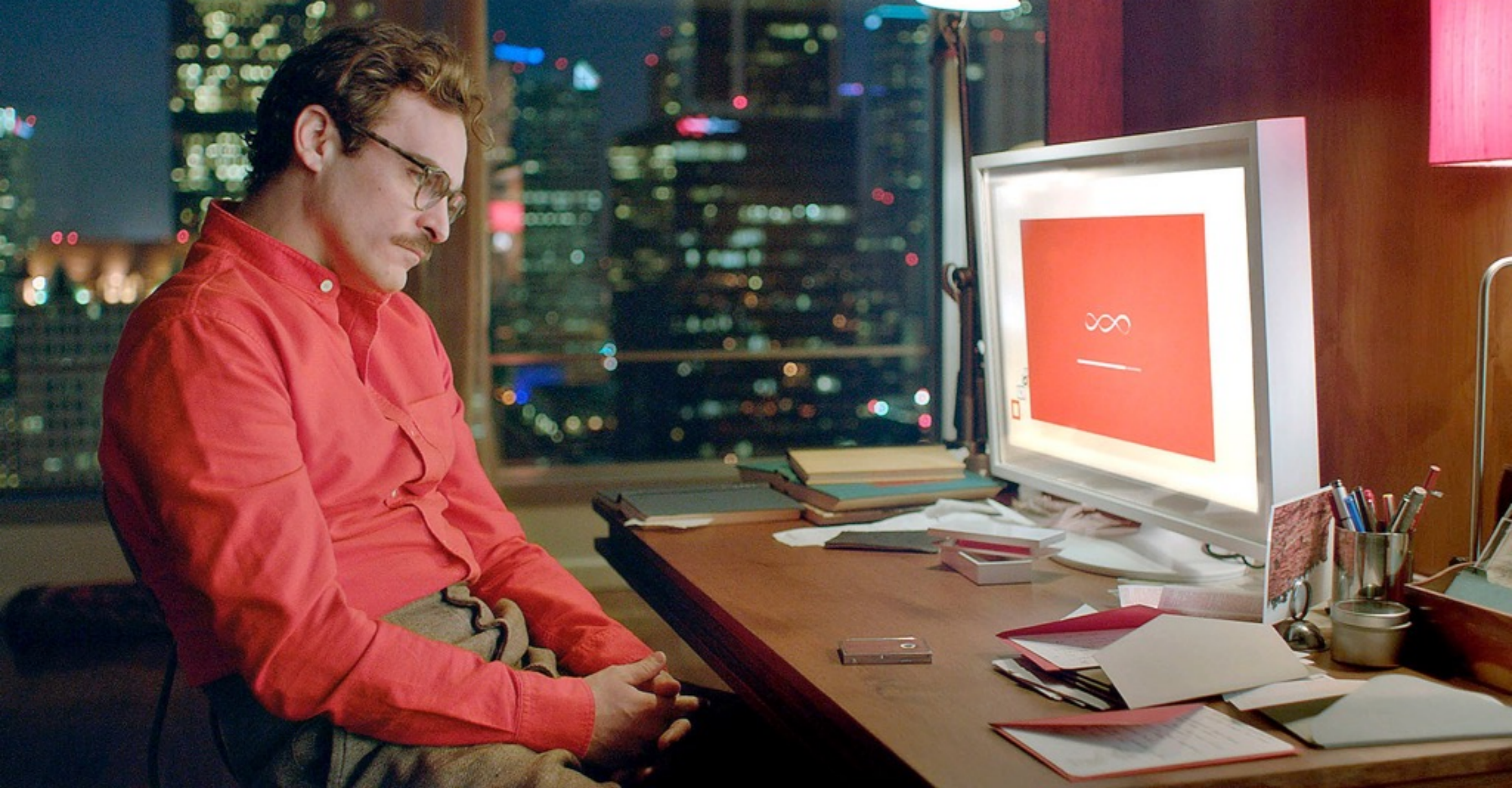




People get used to things.



Use granny as beta tester



HMI: MOBILE APPLICATION

TIPS AND EXAMPLES

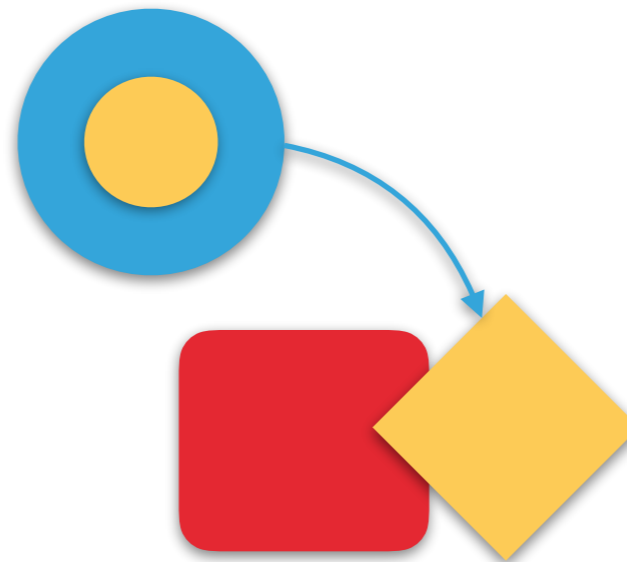
KEY CONCEPTS

"Physic"



Space & Color

"Logic"



Evolution

"Emotive"



Feeling

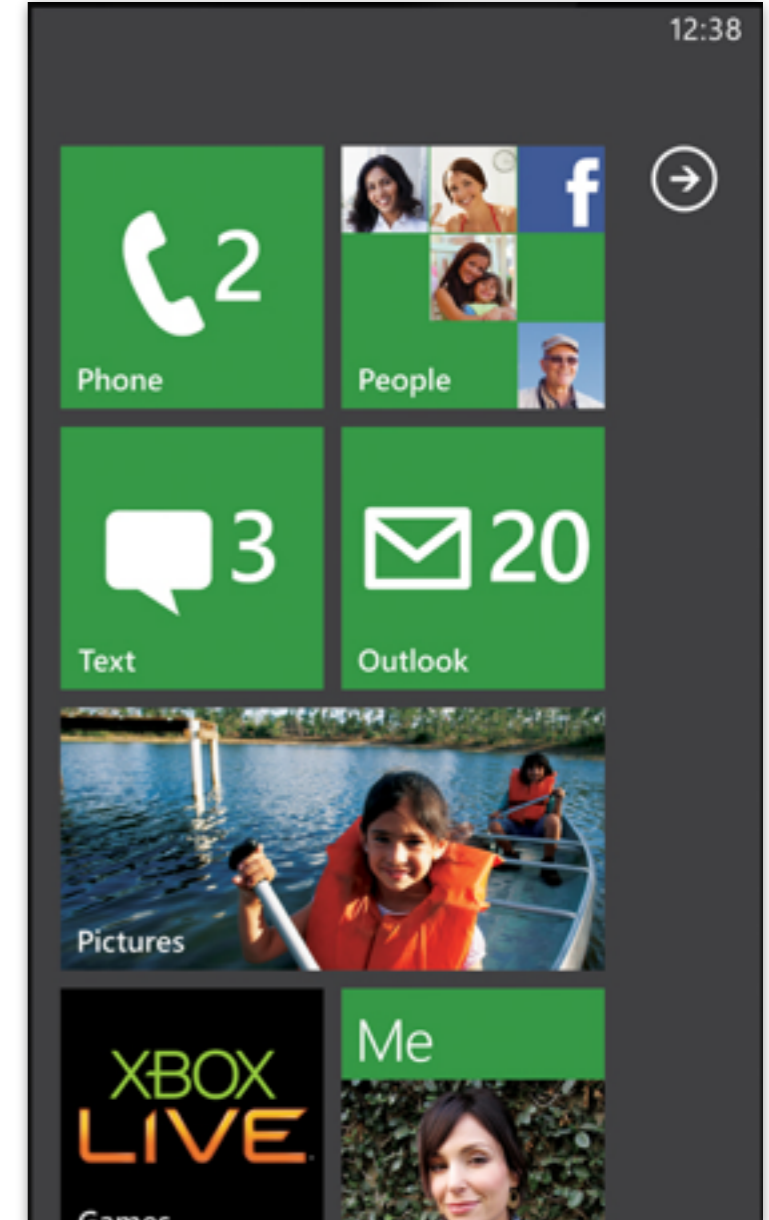
SPACE - EVERY PIXEL COUNTS



iOS



Android



Windows Phone

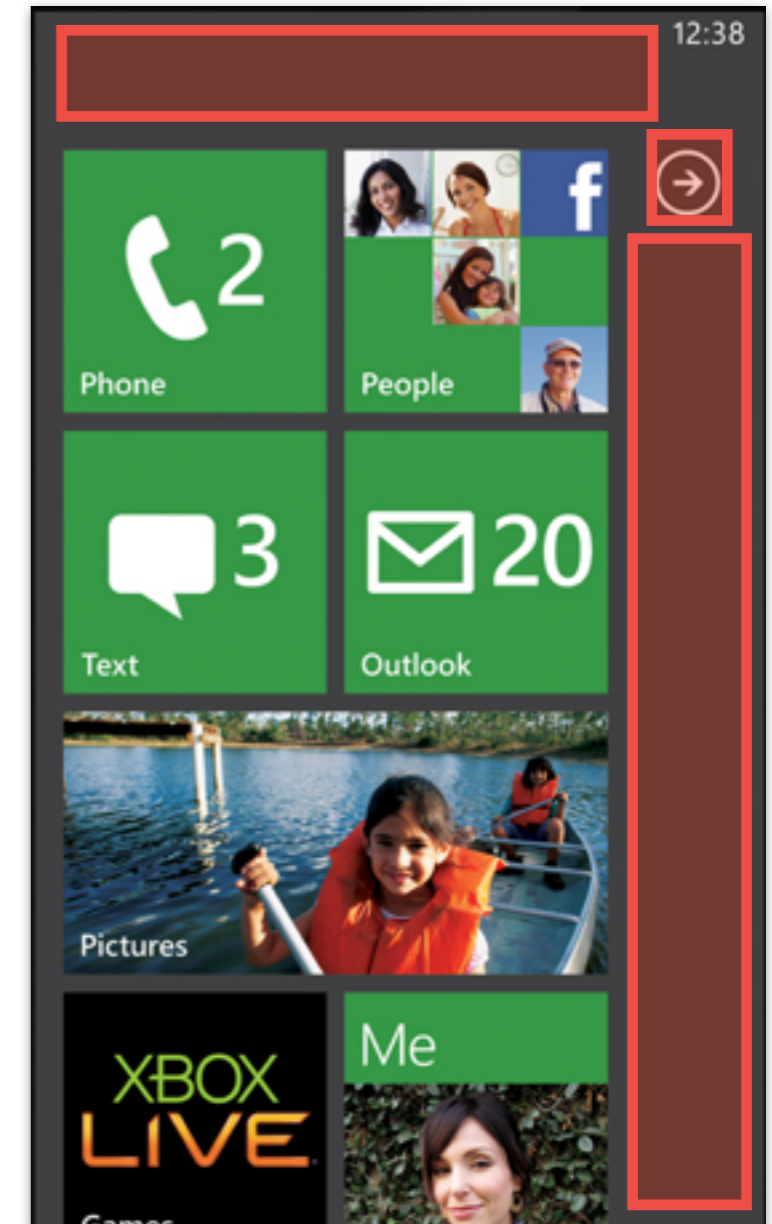
SPACE - EVERY PIXEL COUNTS



iOS

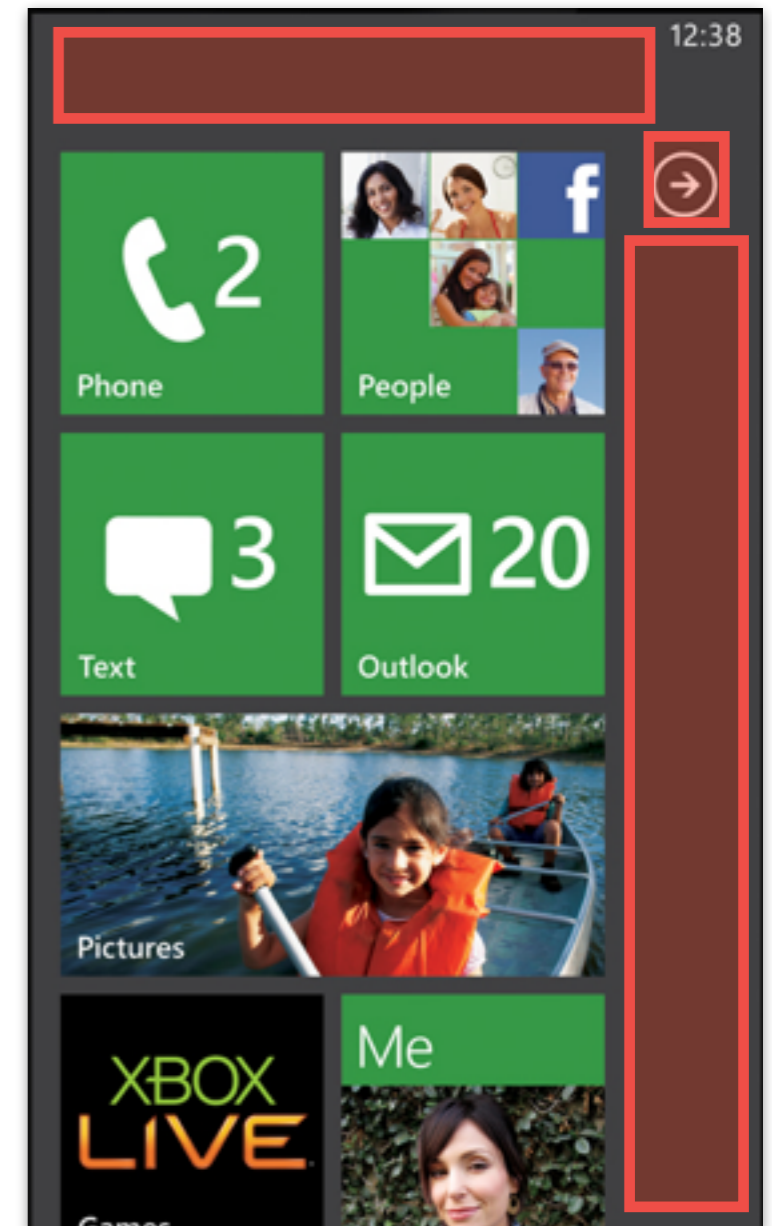


Android



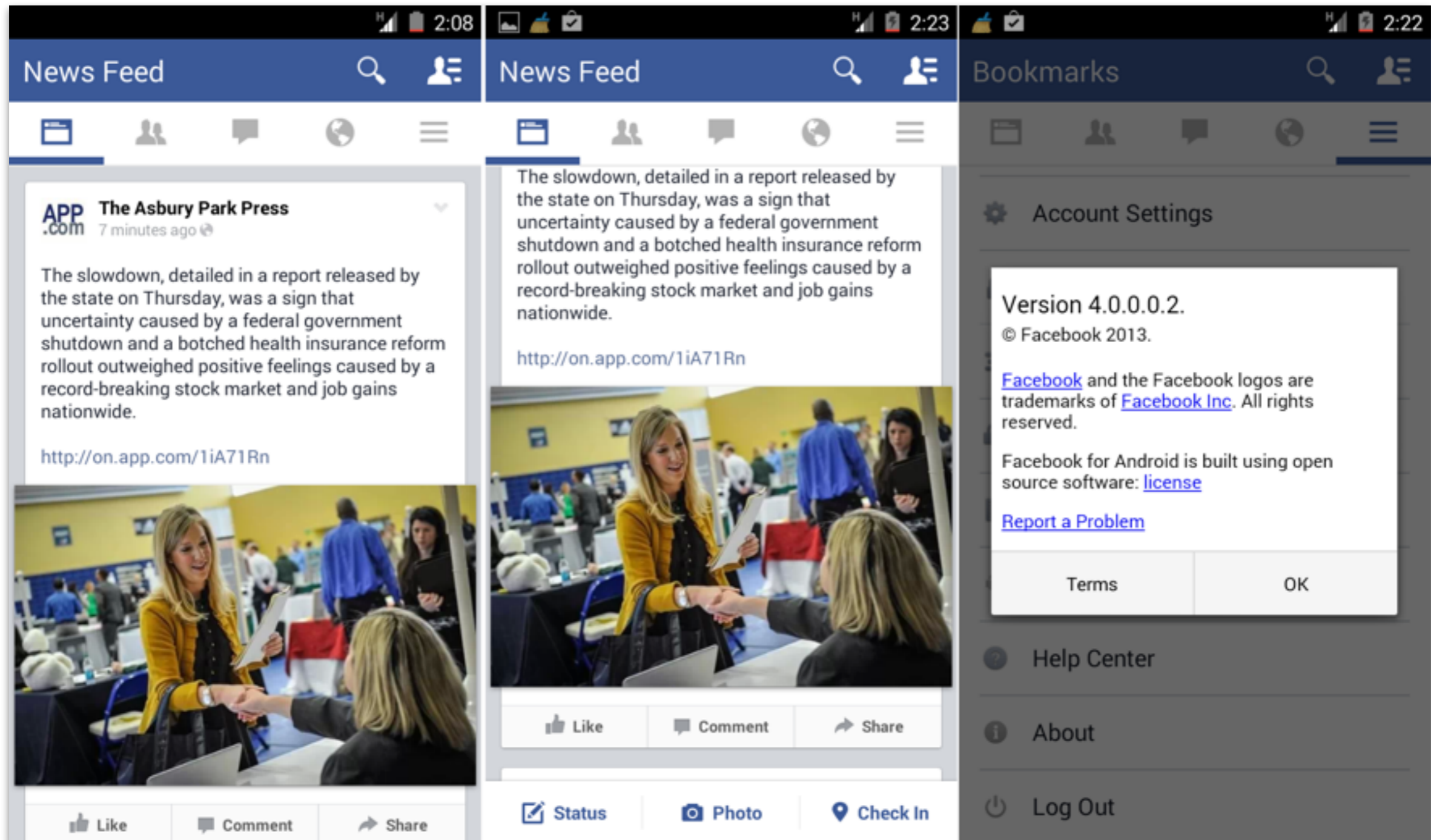
Windows Phone

SPACE - EVERY PIXEL COUNTS



Windows Phone

SPACE - EVERY PIXEL COUNTS - FACEBOOK



SPACE - EVERY PIXEL COUNTS - TWITTER

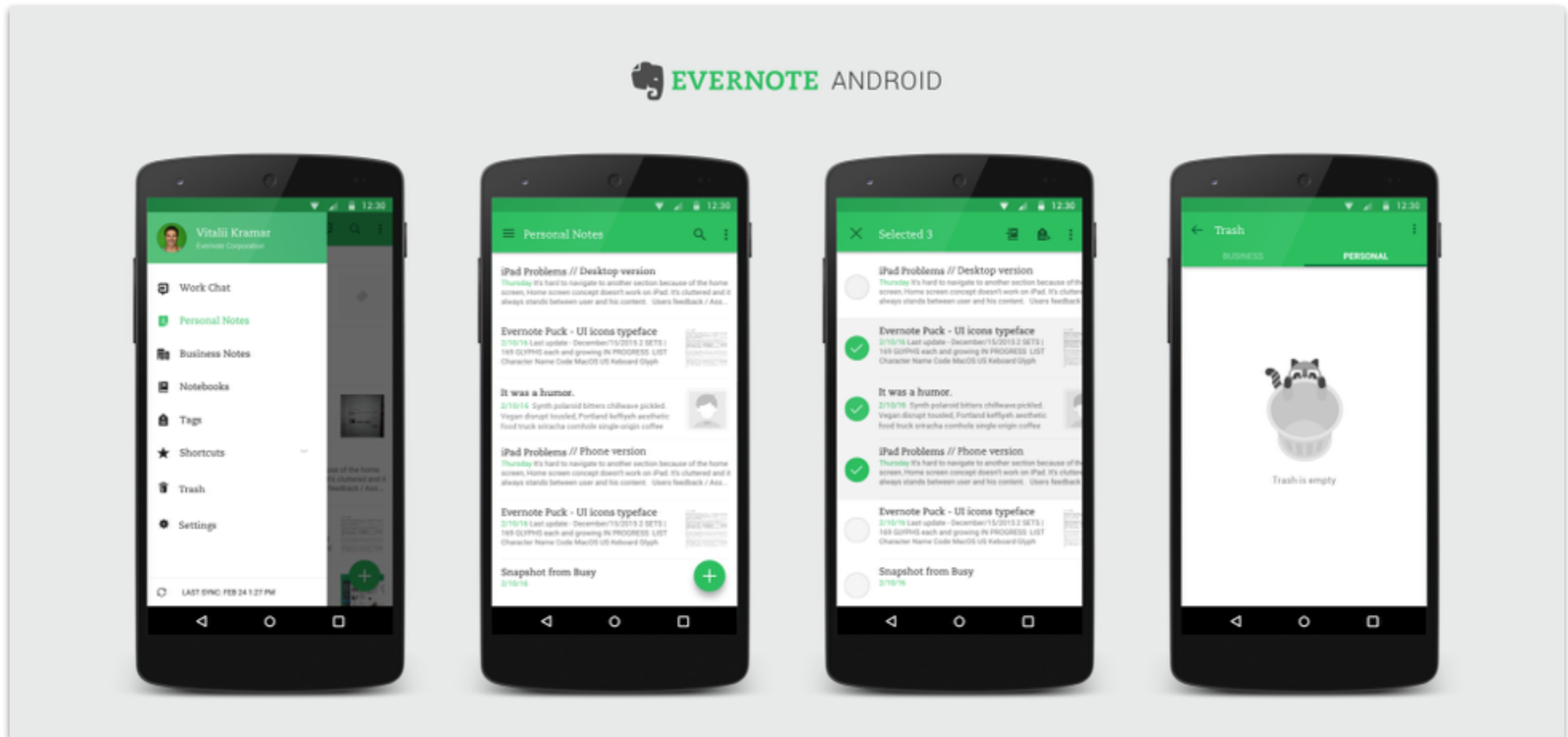
The image displays three screenshots of the Twitter mobile application interface, illustrating how space is utilized in different views. Each screenshot shows a status bar at the top with the time 18:01 and various icons. Below the status bar is a blue header with the Twitter logo and the view title, and a black navigation bar with icons for Home, Mentions, Hashtags, and Profile.

Startseite (Home): This view shows a list of tweets. The first tweet is from Stefan Keuchel (@frischkopp) posted 42 seconds ago, mentioning a ZDF Hangout On Air. The second is from Prof. Dr. clit. (@Menschette) posted 1 minute ago. The third is a sponsored tweet from Siemens Industry (@siemensindustry) posted 1 hour ago. The fourth is from Kamal Nicholas (@HerrNicholas) posted 1 minute ago. The fifth is from dennyf (@dennyf) posted 3 minutes ago.

Verbinden (Connect): This view shows a list of tweets. The first is from Neu-Ulm followed by the user 16 hours ago. The second is from Peeter (@OrderOfTheStars) favorited by Sebastian 1 day ago. The third is from herrpunkt (@herrpunkt) posted 1 day ago. The fourth is from Donau-Ries and 2 others followed by the user 1 day ago.

Entdecken (Discover): This view shows a grid of profile pictures and a list of tweets. The top row includes profile pictures and a list of hashtags: #rtw, #ttot, and #travel. Below this are sections for 'Aktivität' and 'Trends'. The first tweet in the 'Trends' section is from Ronny Kraak retweeting Nicolas Semak (@nsemak) posted 7 hours ago. The second is from Lars followed by Telekom erleben (@telekomerleben) posted 7 hours ago. The third is from anne wizorek and 2 others followed.

SPACE - EVERY PIXEL COUNTS



COLOR - BASIC RULES

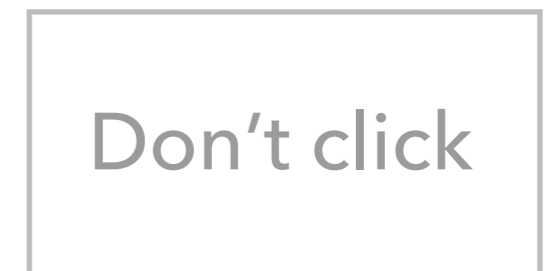
Uniform color palette



High contrast for
text over background

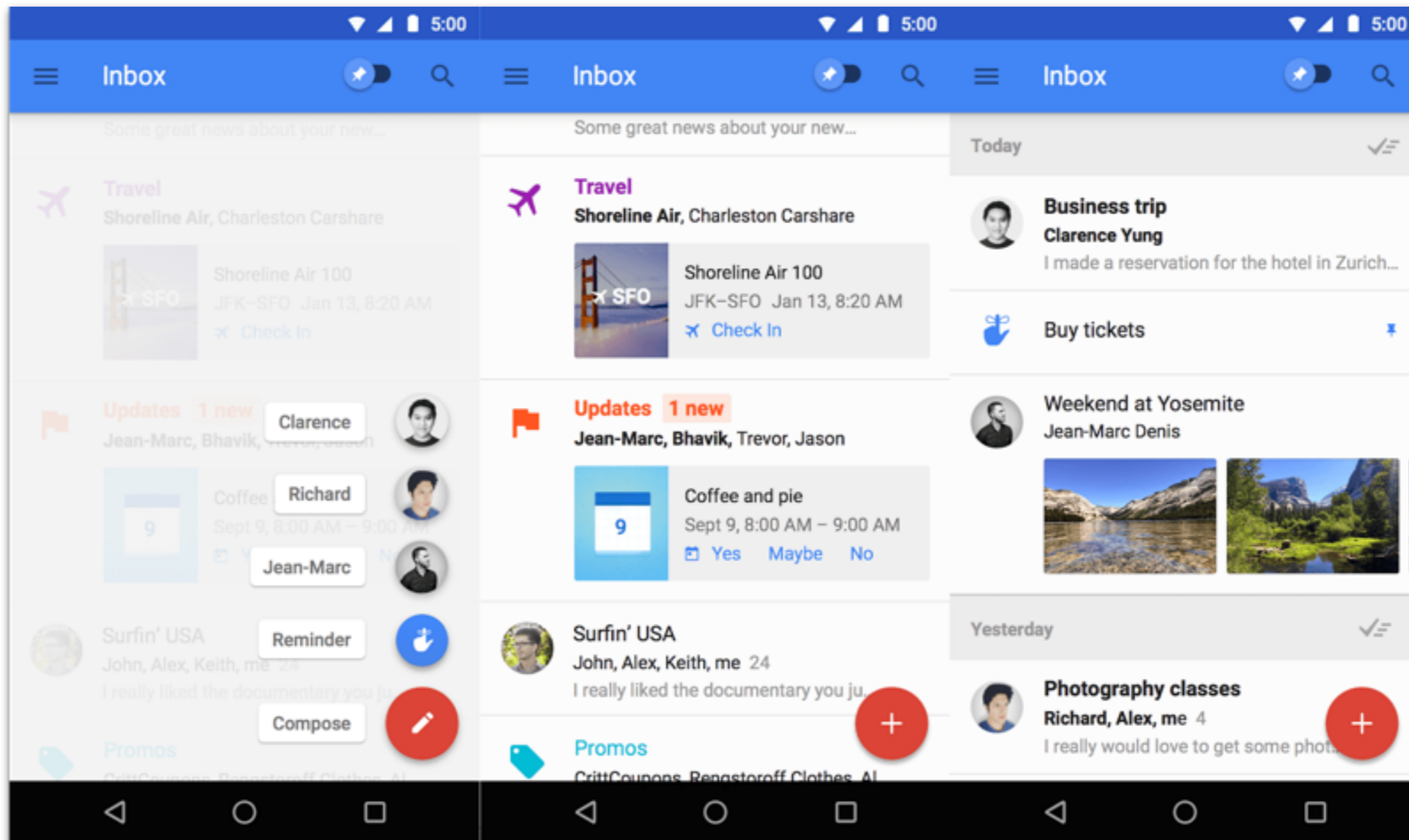


Use colours to
express intentions



COLOR - BASIC RULES

Colors help the user to understand how the space is arranged



MOBILE APPLICATION EXAMPLE



Cool Photo Effects

Cool Photo Apps Photography

★★★★★ 52,329

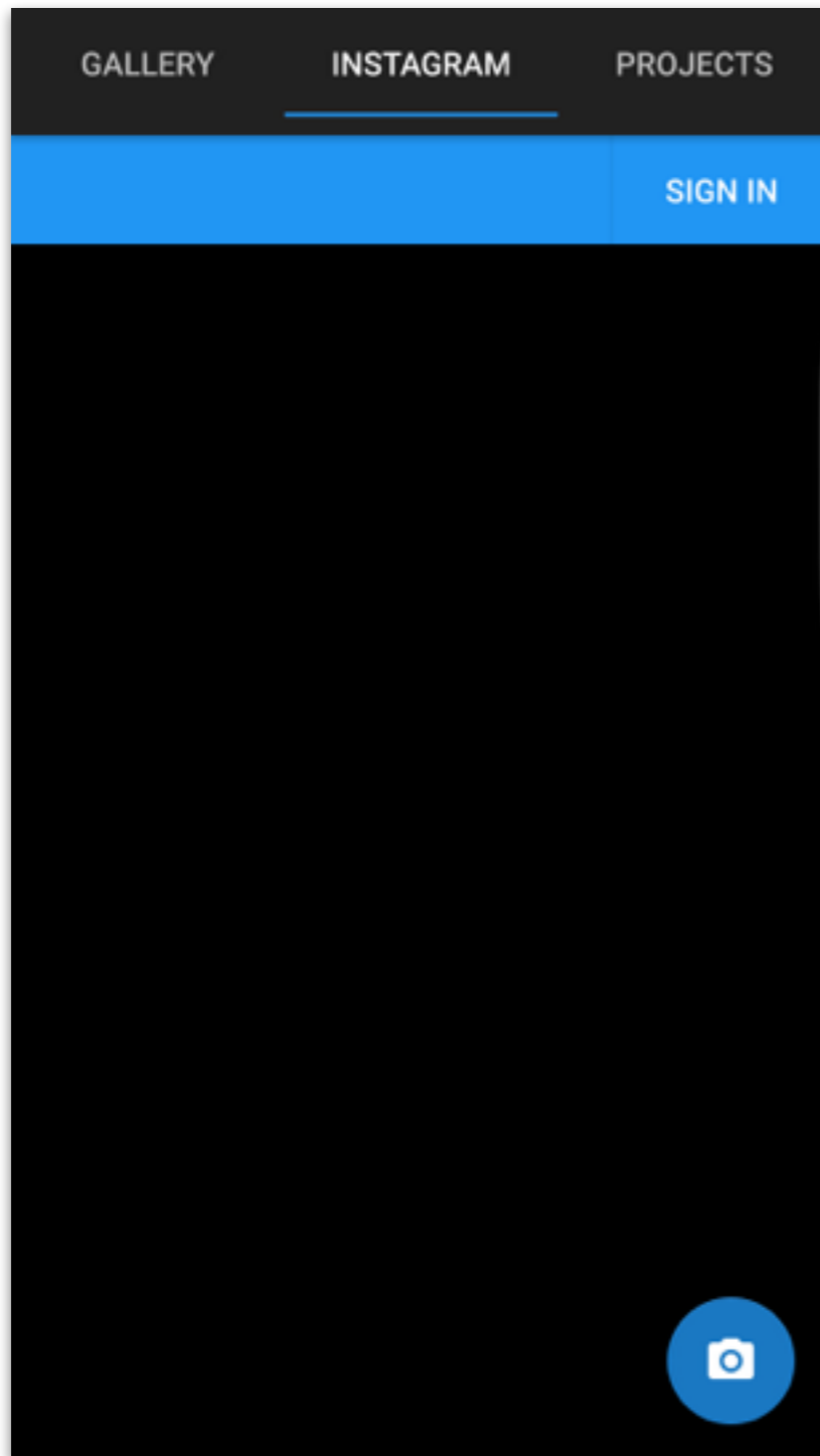
3 PEGI 3

Offers in-app purchases

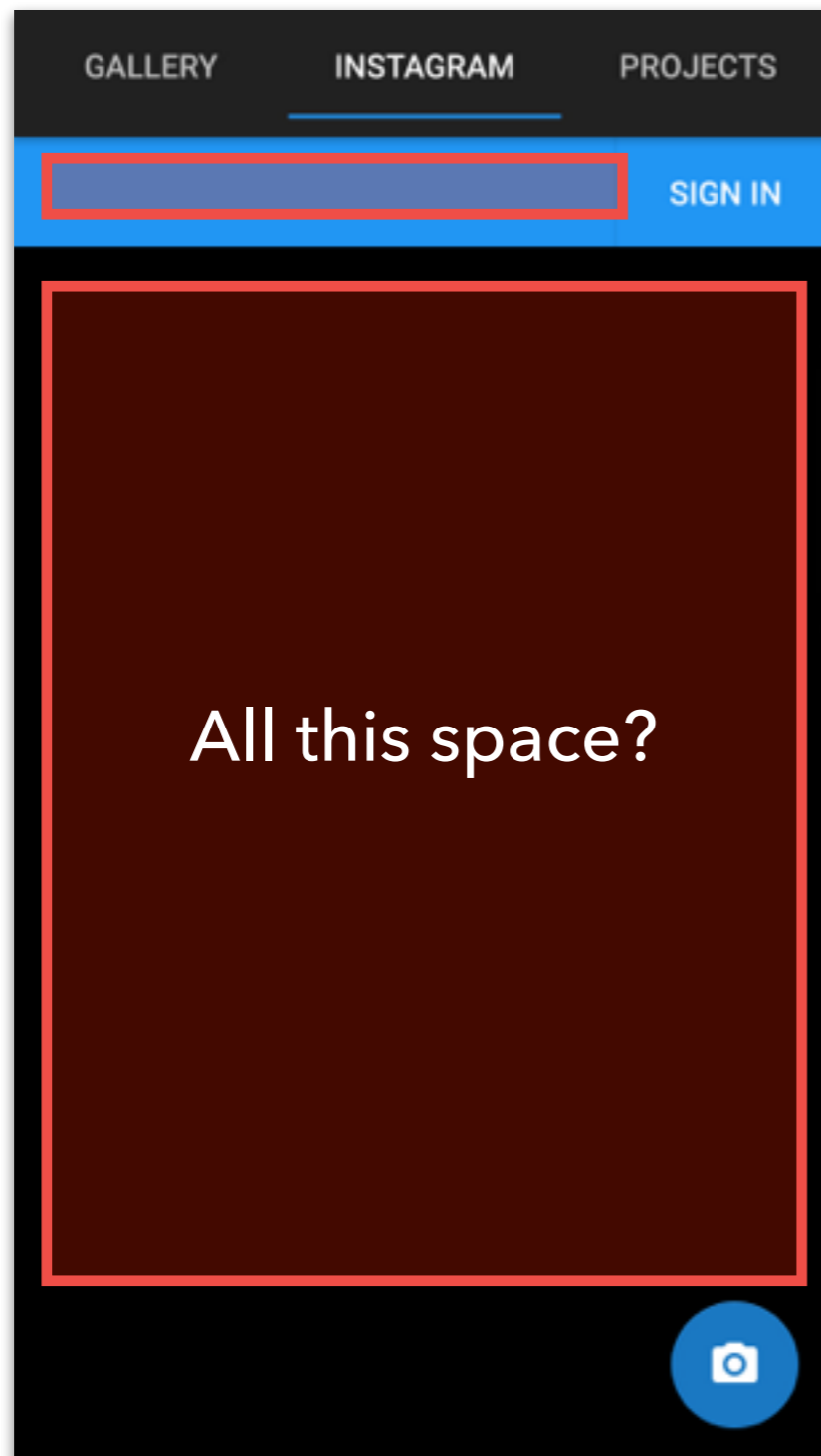
i This app is compatible with all of your devices.

Installed

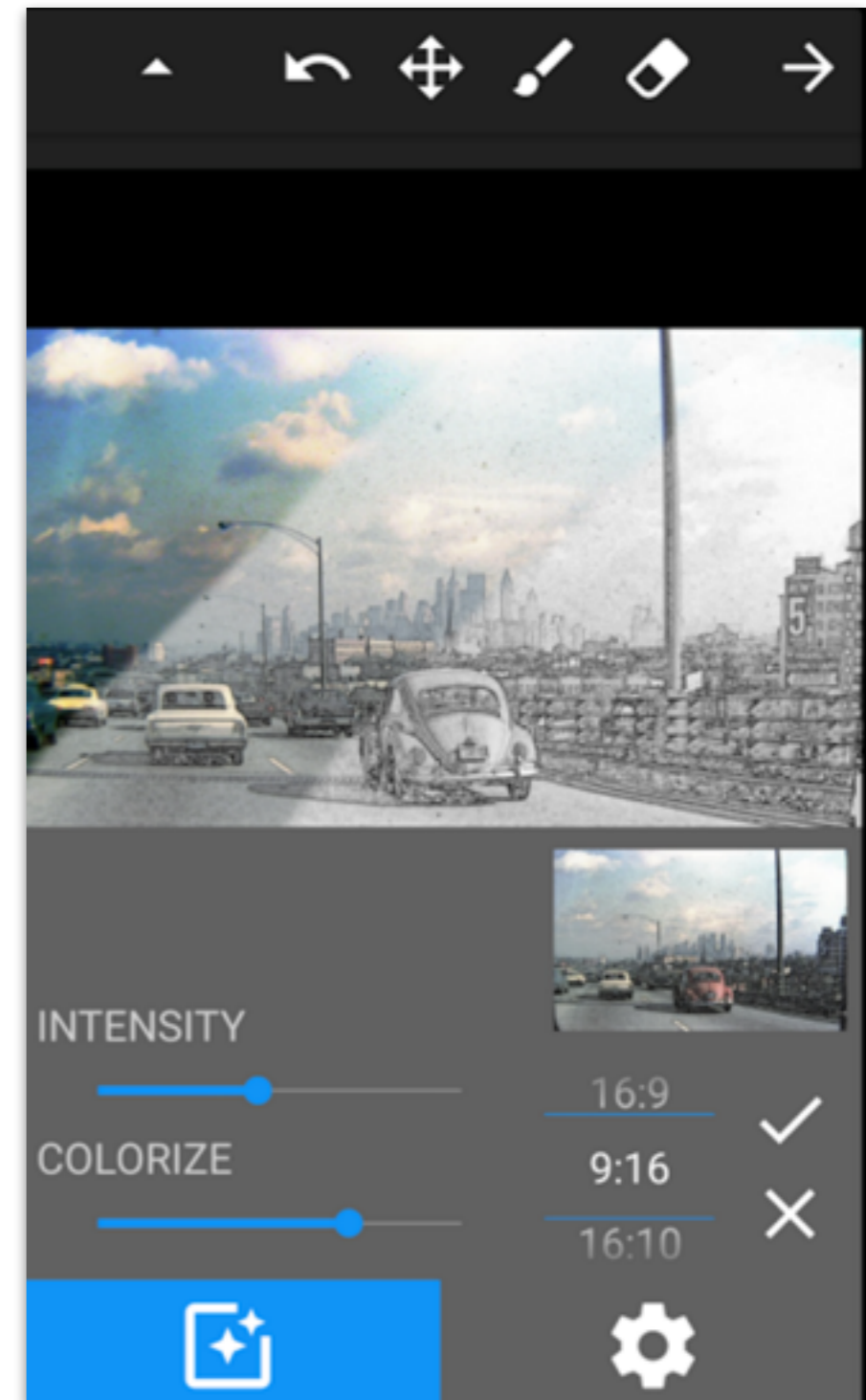
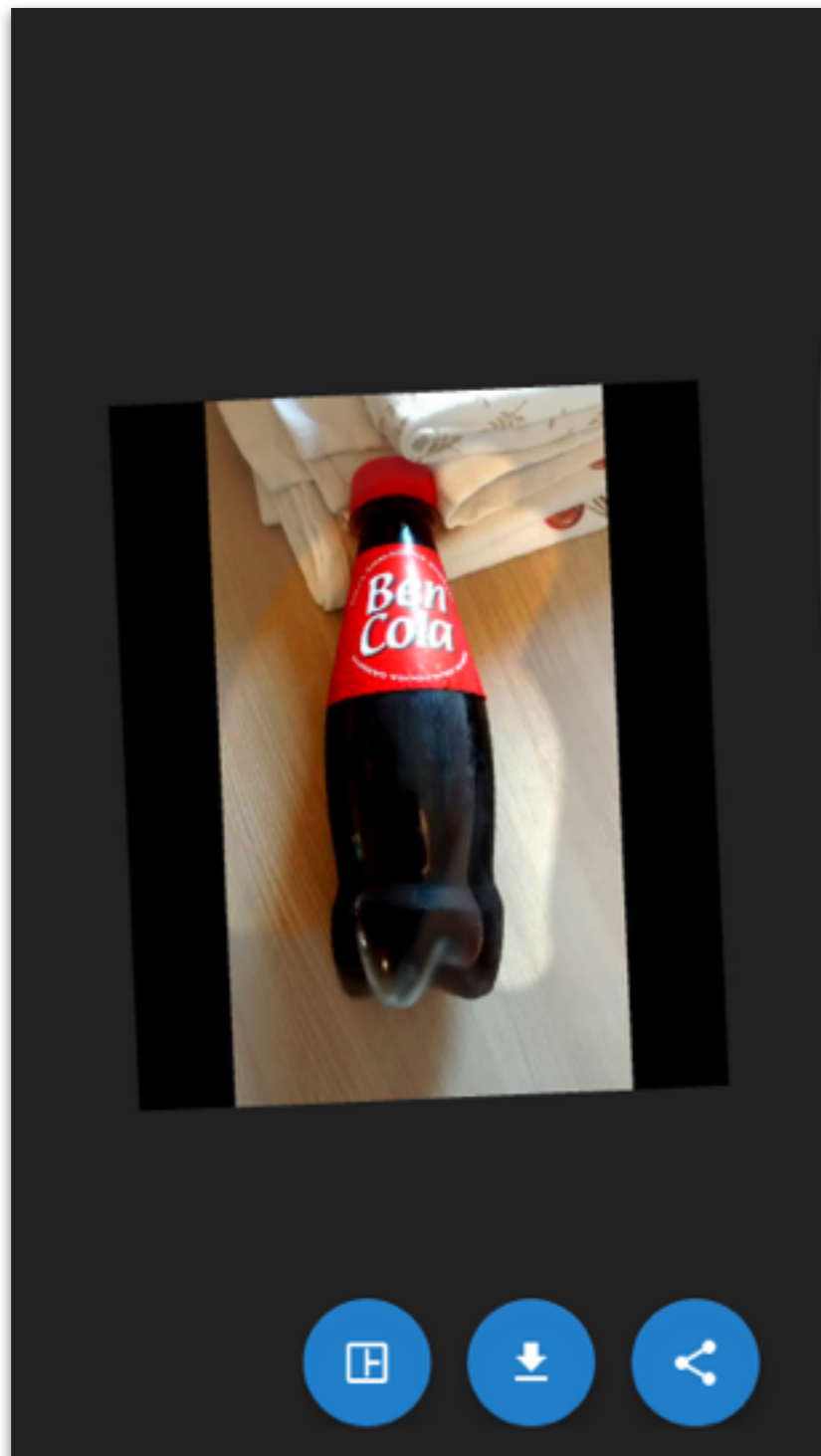
MOBILE APPLICATION EXAMPLE



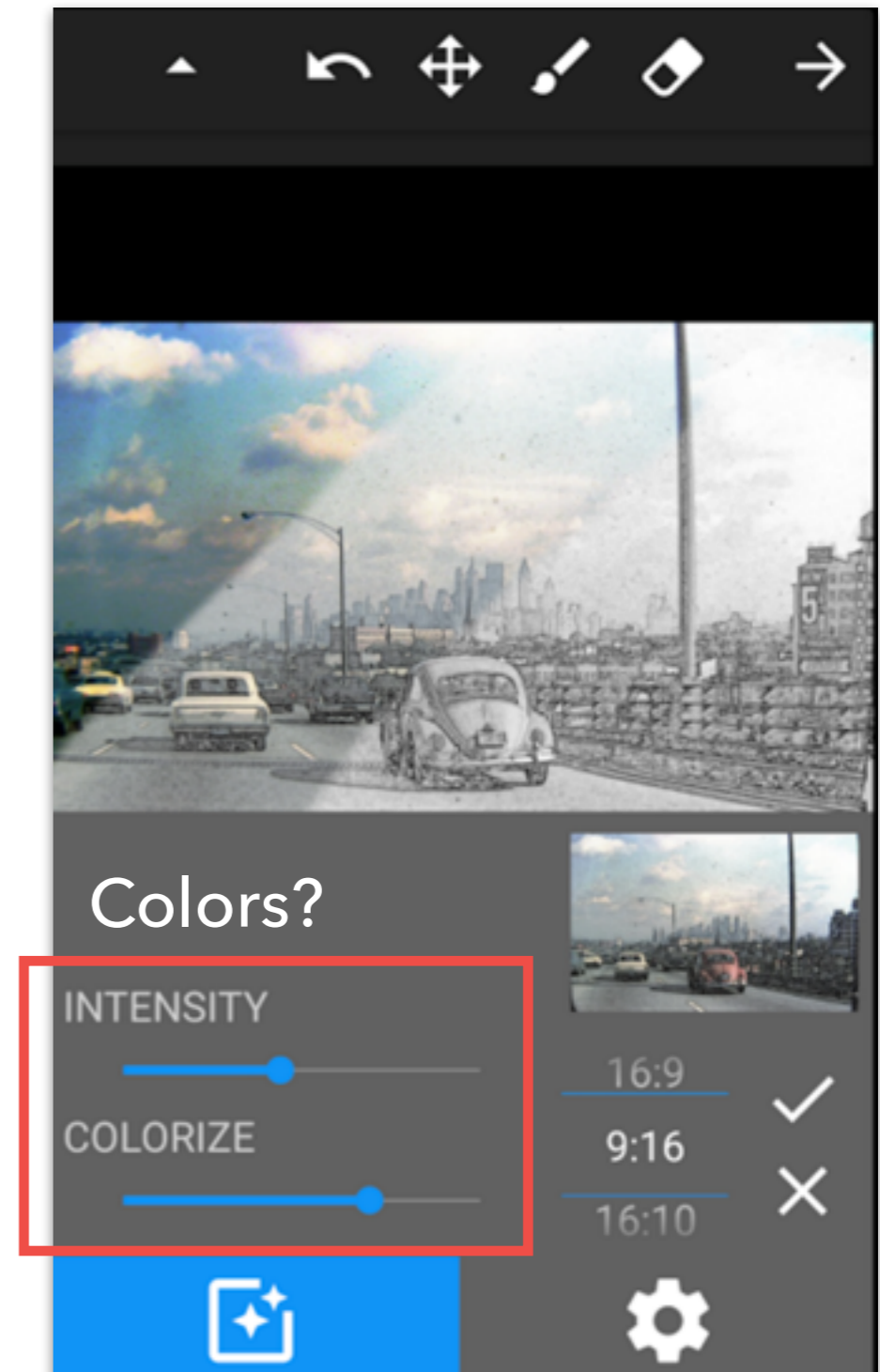
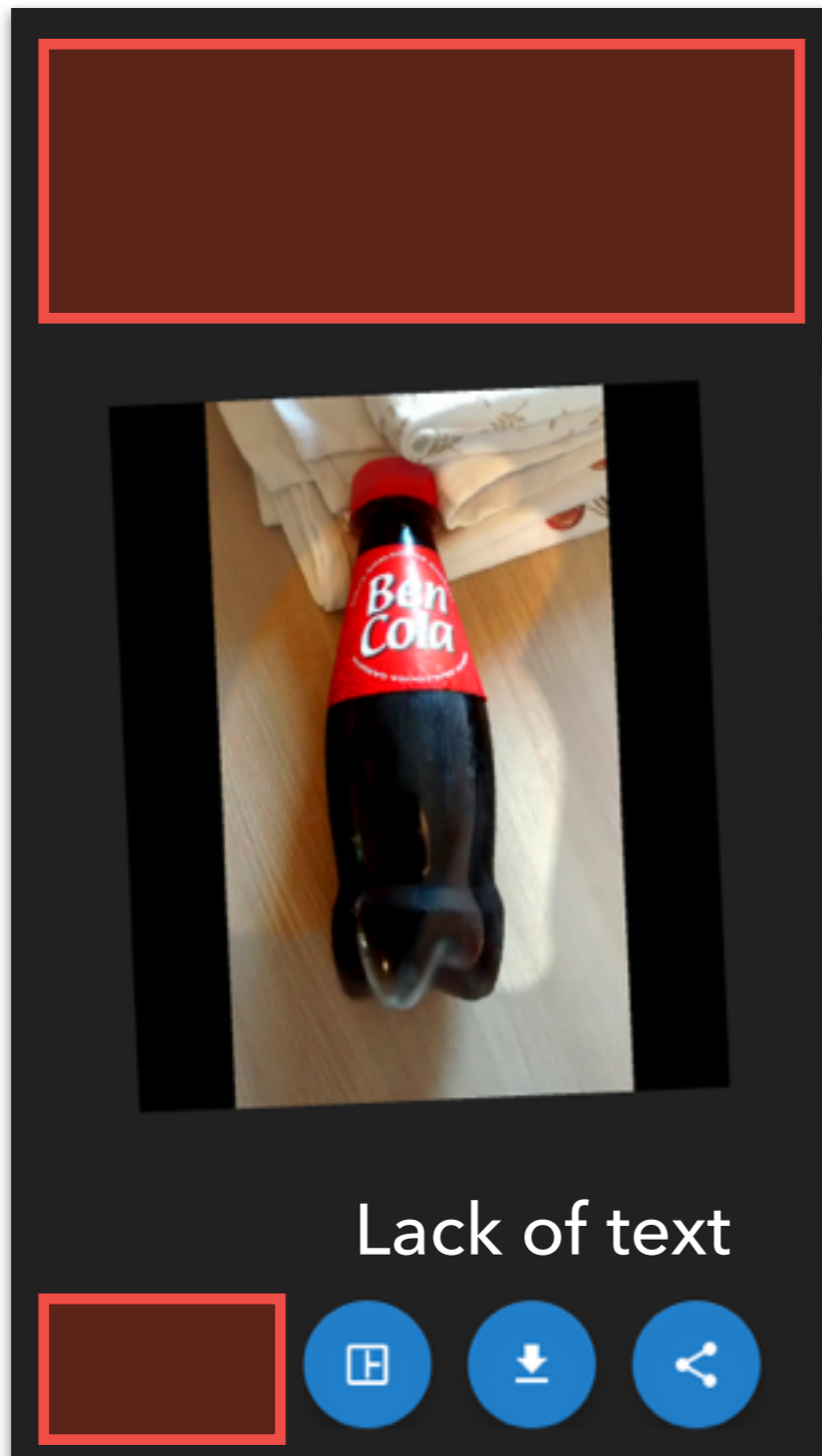
MOBILE APPLICATION EXAMPLE



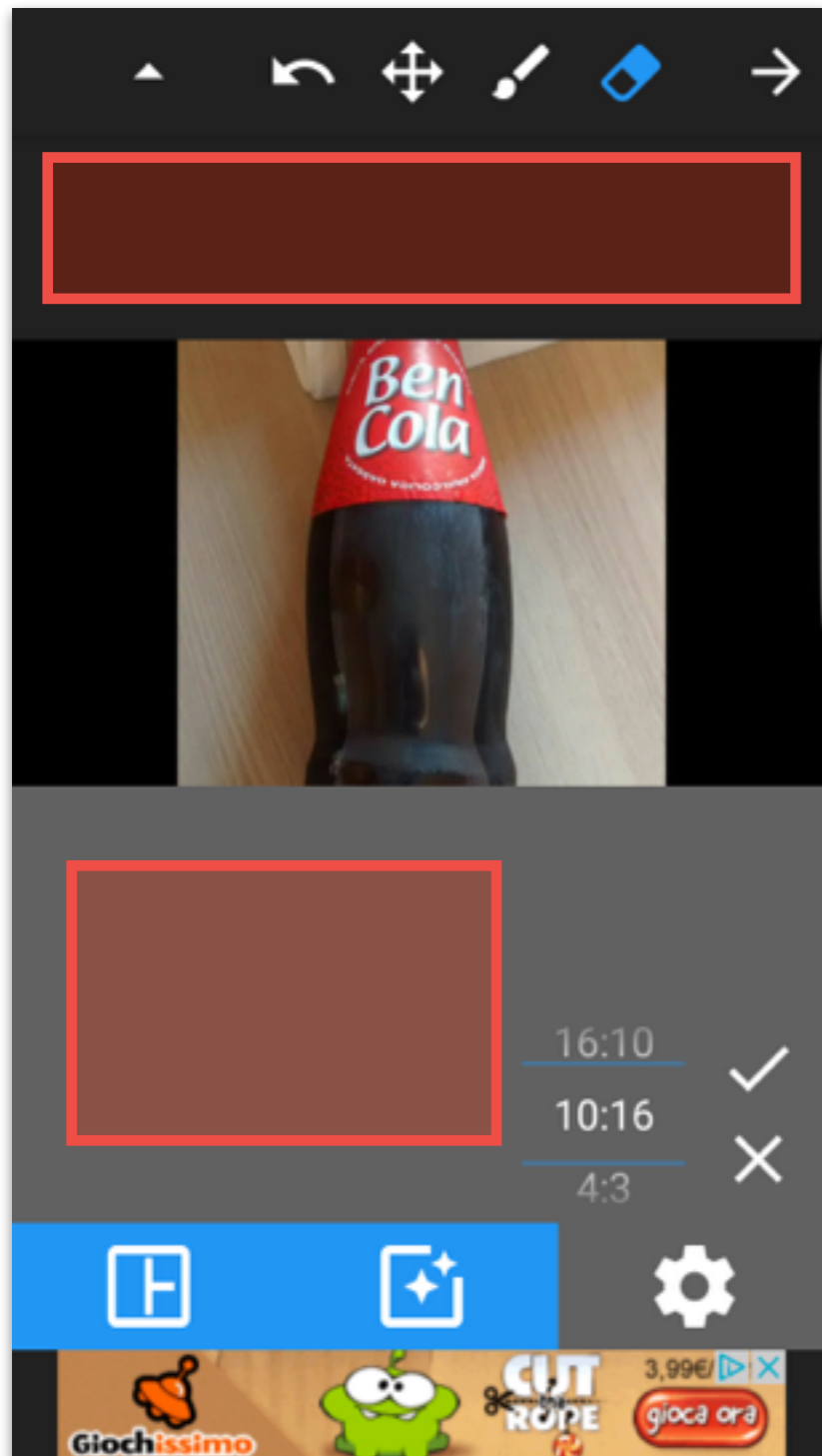
MOBILE APPLICATION EXAMPLE




MOBILE APPLICATION EXAMPLE



MOBILE APPLICATION EXAMPLE



1. It doesn't exit the "settings" section if you press out of the settings frame.
2. You need to press another tab in order to change layout.
3. After pressing  the tab still doesn't close.
4. Maybe upper and bottom bars should be one in the position of the other.

MOBILE APPLICATION EXAMPLE



Reagin Jones March 3, 2015



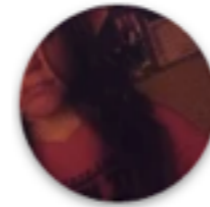
Horrible I could not figure out how to work it and what ever i clicked it did the total opposite



Lala Smith October 18, 2014



Dum app It wouldn't apply the effect I choose for my picture and its not easy to use and the picture your editing is very small to even see what to do with it... dont download this app.



stevini russell June 8, 2014



Takes for ever to load Your picture takes for ever to load and the app is slow it needs a fix up really bad it doesn't have directions to tell u wats wat and how you use it it is all confusing hope this advise help don't download you will wast your time ;-)

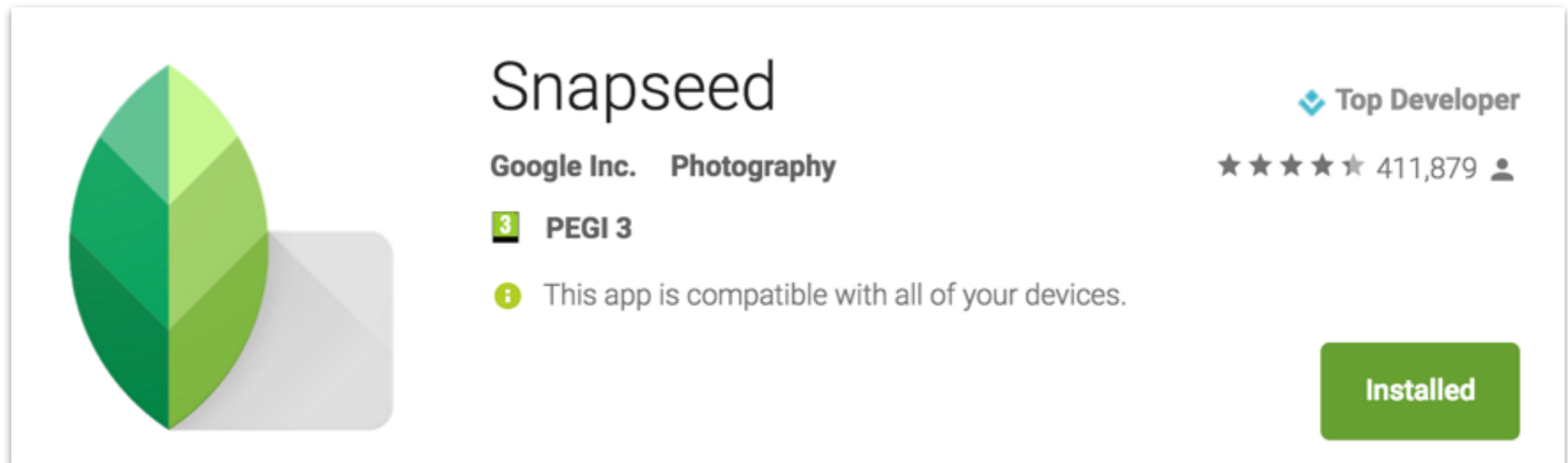


Erin Koch December 19, 2013



Same as the rest Don't like it. Doesn't do anything special to stand out from the other photo editing apps

MOBILE APPLICATION EXAMPLE



The image shows a screenshot of the Snapseed app listing on the Google Play Store. On the left is the app icon, a stylized green leaf. To the right of the icon, the app name 'Snapseed' is displayed in a large font. Below the name, it says 'Google Inc. Photography'. Further down, there is a PEGI 3 rating icon and a note stating 'This app is compatible with all of your devices.' On the right side of the card, there is a 'Top Developer' badge, a 5-star rating, and the number of reviews '411,879'. At the bottom right, there is a green button labeled 'Installed'.

Snapseed

Google Inc. Photography

3 PEGI 3

This app is compatible with all of your devices.

Top Developer

★★★★★ 411,879

Installed

MOBILE APPLICATION EXAMPLE

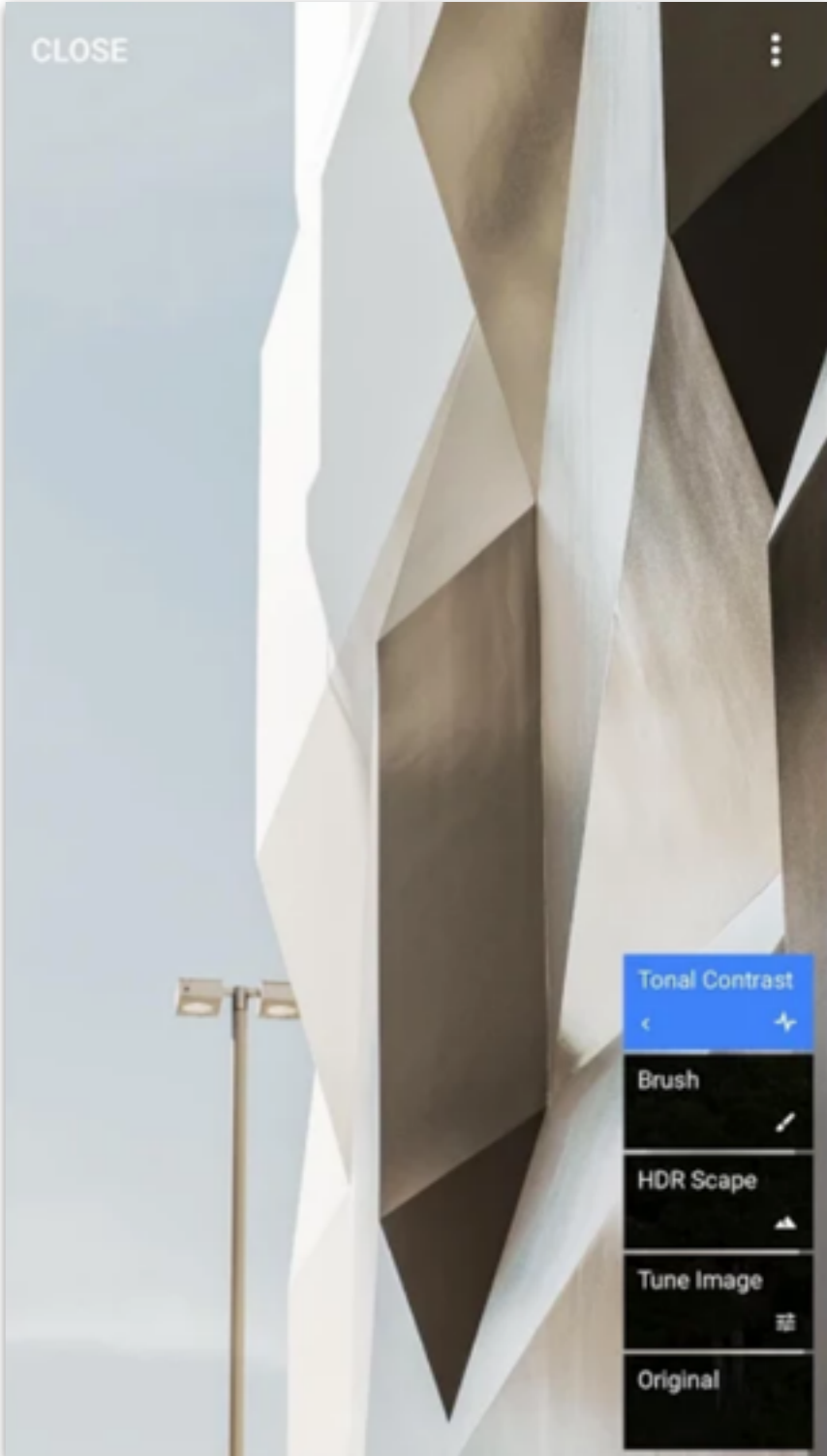
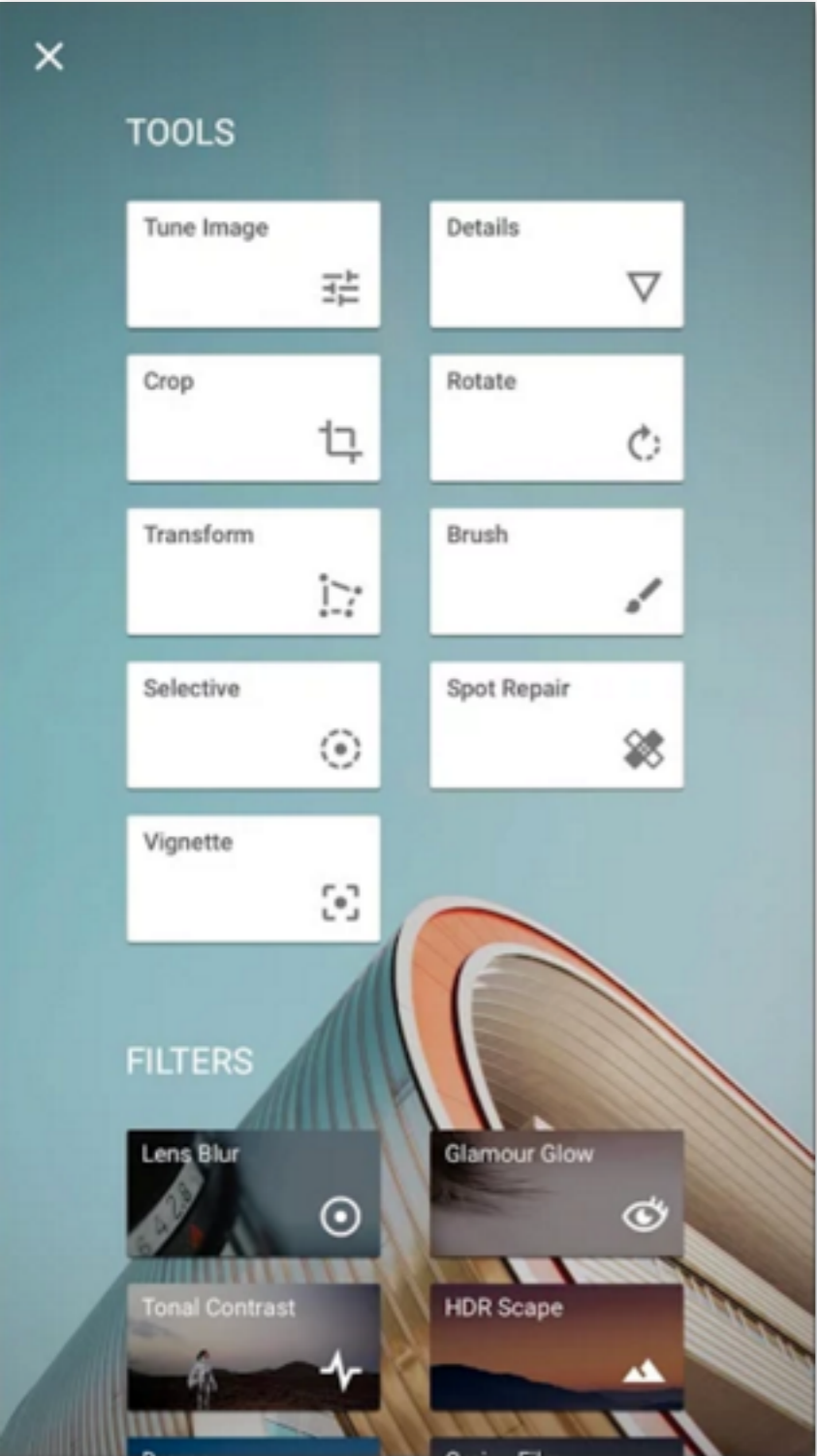


MOBILE APPLICATION EXAMPLE



1. Once-a-time operations on the top
2. Frequently asked operation on the bottom
3. Takes advantage of the whole screen
4. Hidden menu
5. Hidden controllers

MOBILE APPLICATION EXAMPLE



EVOLUTION – GUIDE THE USER

There must be a match between the purpose (what the user wants to do) and the interface (what the user can do).

The best way is to design the interface following the application logic flow.

Manage correctly space, color and animations to guide the user.

EVOLUTION – GUIDE THE USER

We already know what FOEVAL VISION is. **People** have a limited perspective when perceiving **things**.

If you want to communicate the user something happening logically in your application, it's not sufficient to write it as text.

You have to take advantage of space, color and animations.

EVOLUTION – GUIDE THE USER

If your application is frozen doing some busy stuff, make sure the user is aware that it's still working.



Warning! You cannot undo this action

✘ Warning! You cannot undo this action

⚠ Warning! You cannot undo this action

If you want to alert the user about something very important, use space and colours to make it evident.

EVOLUTION – GUIDE THE USER

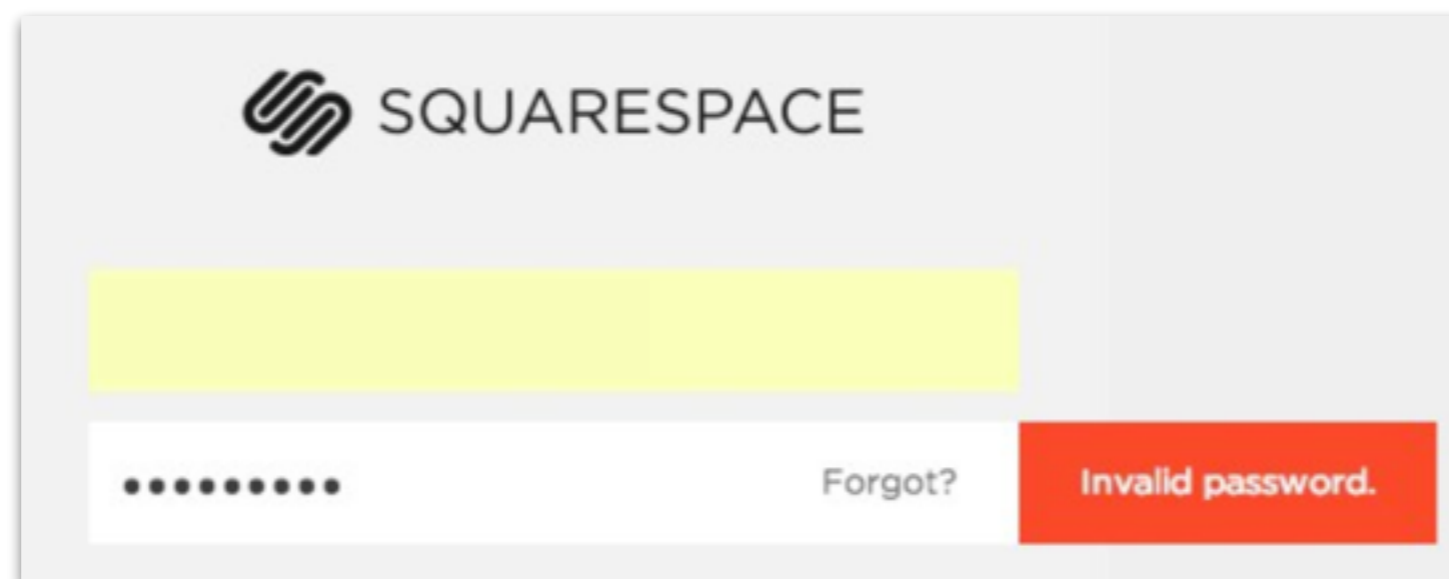
About animations, remember that

- ▶ The average visual reaction to unexpected event is from 600-900 milliseconds
- ▶ Depending on users concentration level blink rate varies from 3 to 50 blinks per minute
- ▶ average blink speed is about 300-400 milliseconds

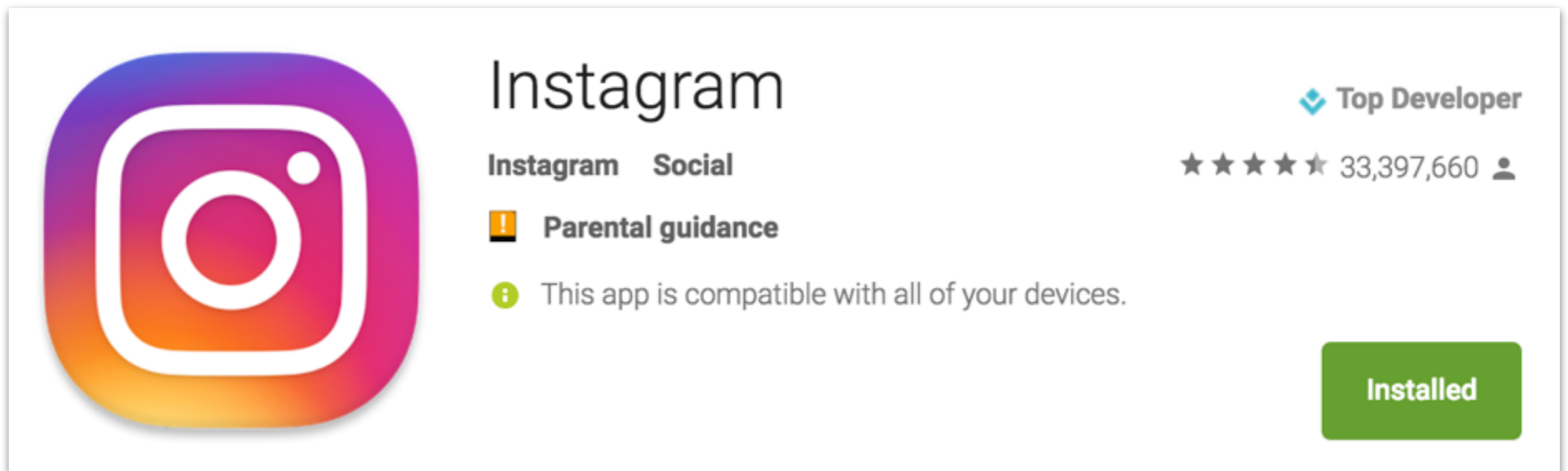
EVOLUTION – GUIDE THE USER

This means that, for visual reaction to unexpected events usually a human brain needs 600-900 milliseconds.

Make your animations longer than these to ensure that users won't miss it.



EVOLUTION – GUIDE THE USER



The image shows a screenshot of the Instagram app page on an app store. On the left is the Instagram logo, a camera icon with a purple-to-orange gradient. To the right of the logo, the word "Instagram" is displayed in a large, black, sans-serif font. Below the name, the category "Instagram Social" is shown. To the right of the category, there is a "Top Developer" badge with a blue checkmark icon. Below the badge, there are five stars and the number "33,397,660" followed by a person icon. Below the stars, there is a yellow warning icon and the text "Parental guidance". Below that, there is a green information icon and the text "This app is compatible with all of your devices." In the bottom right corner, there is a green button with the word "Installed" in white text.

Instagram

Instagram Social

Top Developer

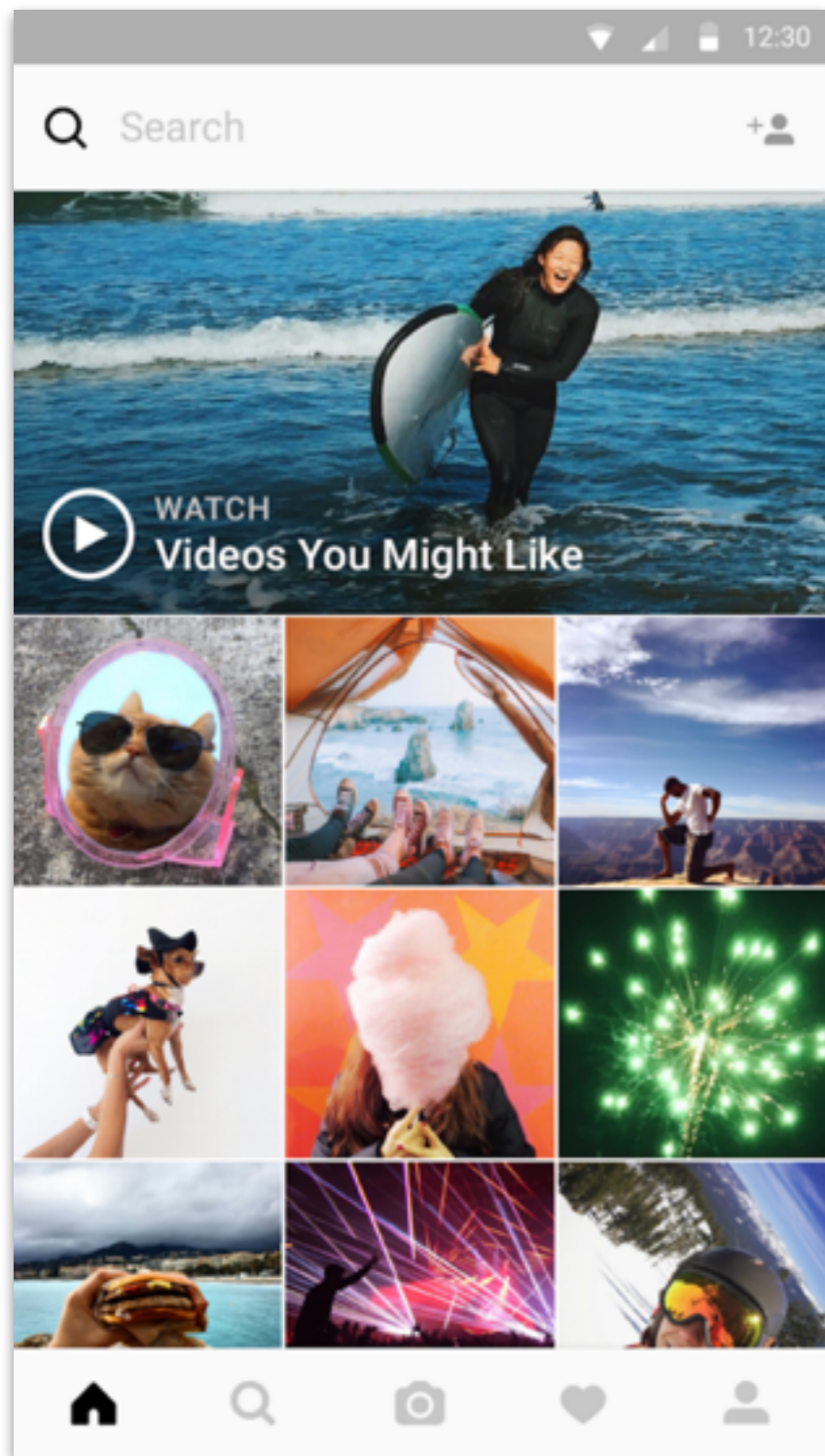
★★★★★ 33,397,660

Parental guidance

This app is compatible with all of your devices.

Installed

EVOLUTION - GUIDE THE USER



REST / ACTIVE



Three different designers?

ACCOUNT SUBMENU

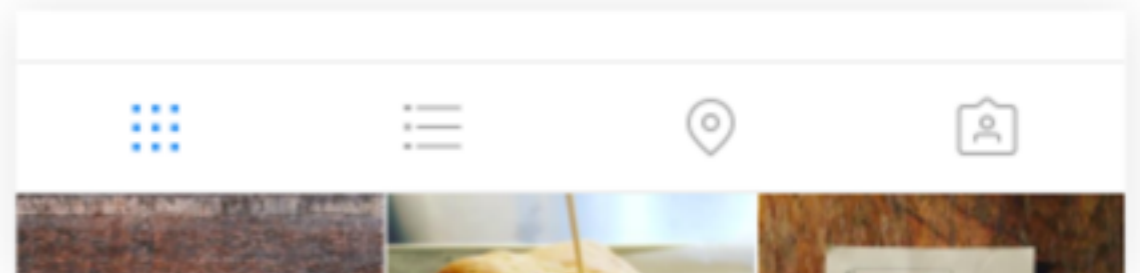
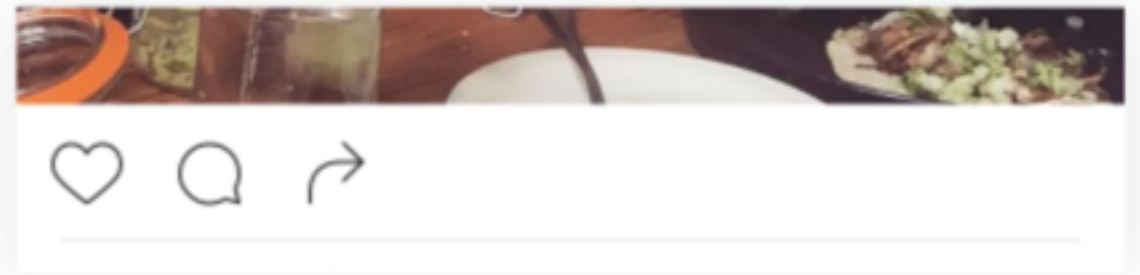
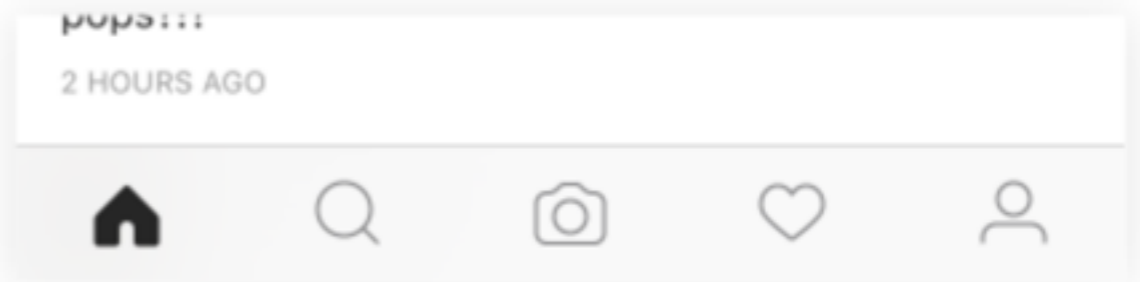


PHOTO ACTIONS



MAIN MENU



[Link to the article](#)

EVOLUTION – GUIDE THE USER

LINK



ACCOUNT DETAIL LINK

B-Tron

I have Memento-grade memory. Photos help.

ficuscreative.com

LOCATION LINK



sunbeam_vintage

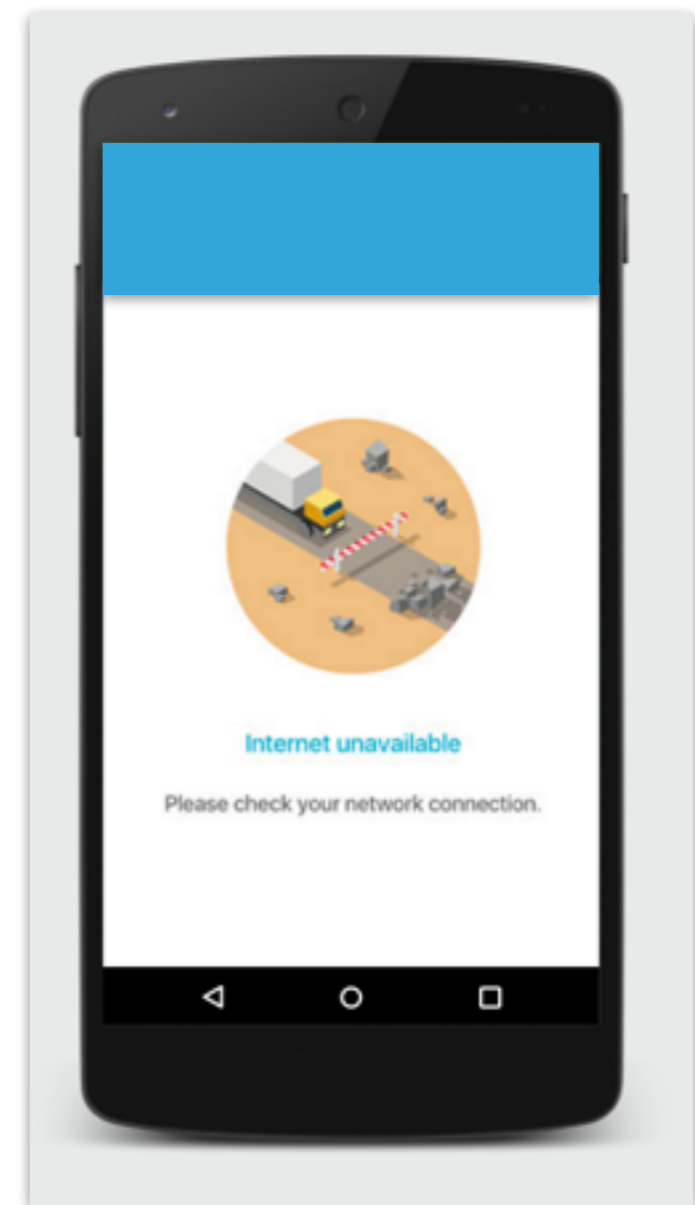
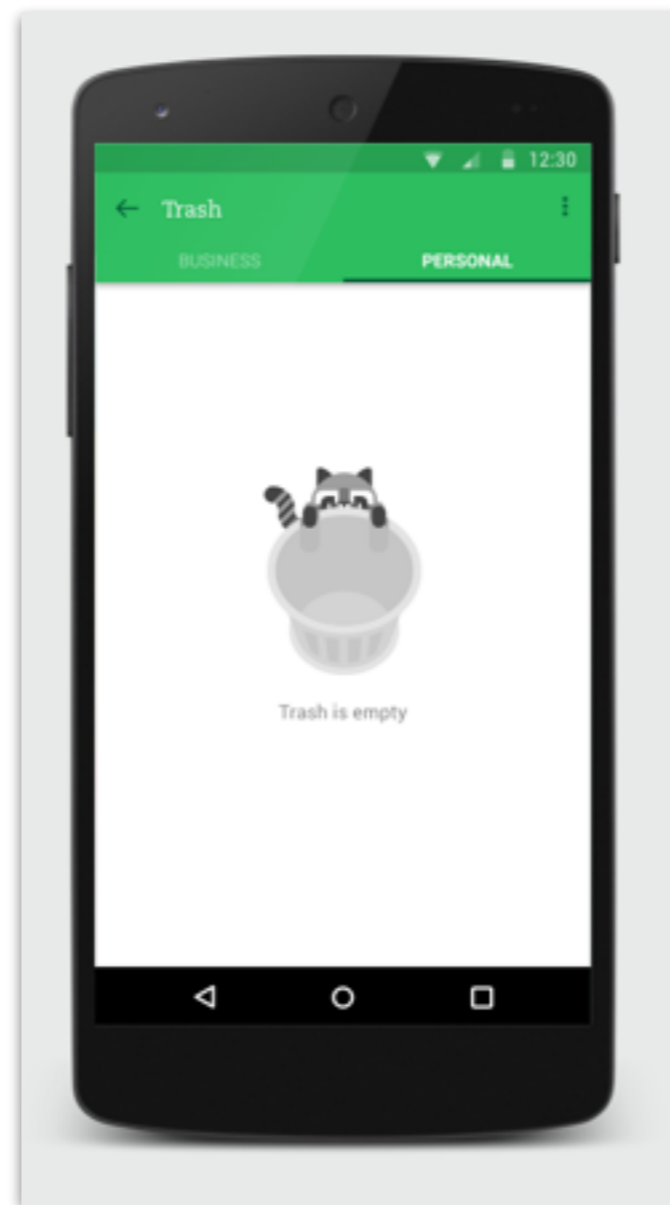
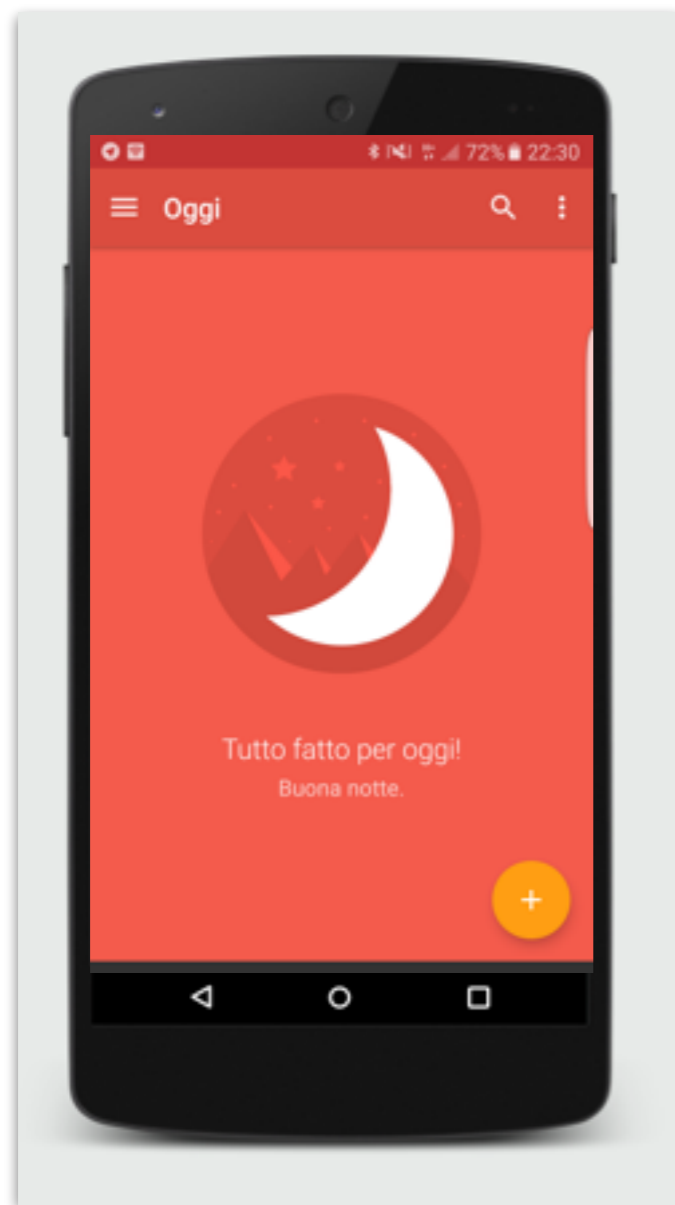
Sunbeam Vintage >



In the second example, link is black. So you need to put an arrow to suggest that it's a link. Why not the blue colour?

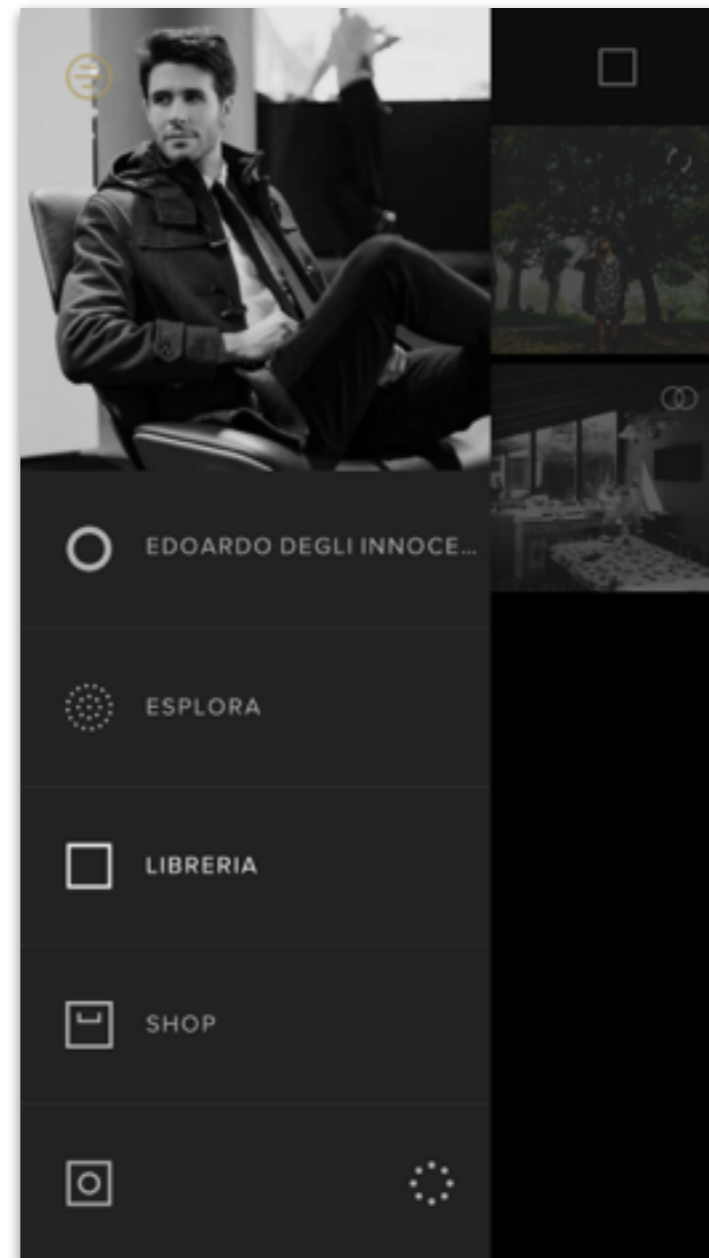
EMOTION – CREATE AN EMOTIONAL LINK

Make your interface expressive



EMOTION – CREATE AN EMOTIONAL LINK

Create a link with the user through his/her photo



EMOTION – CREATE AN EMOTIONAL LINK

Help the user in common situations. God bless UNDO button.

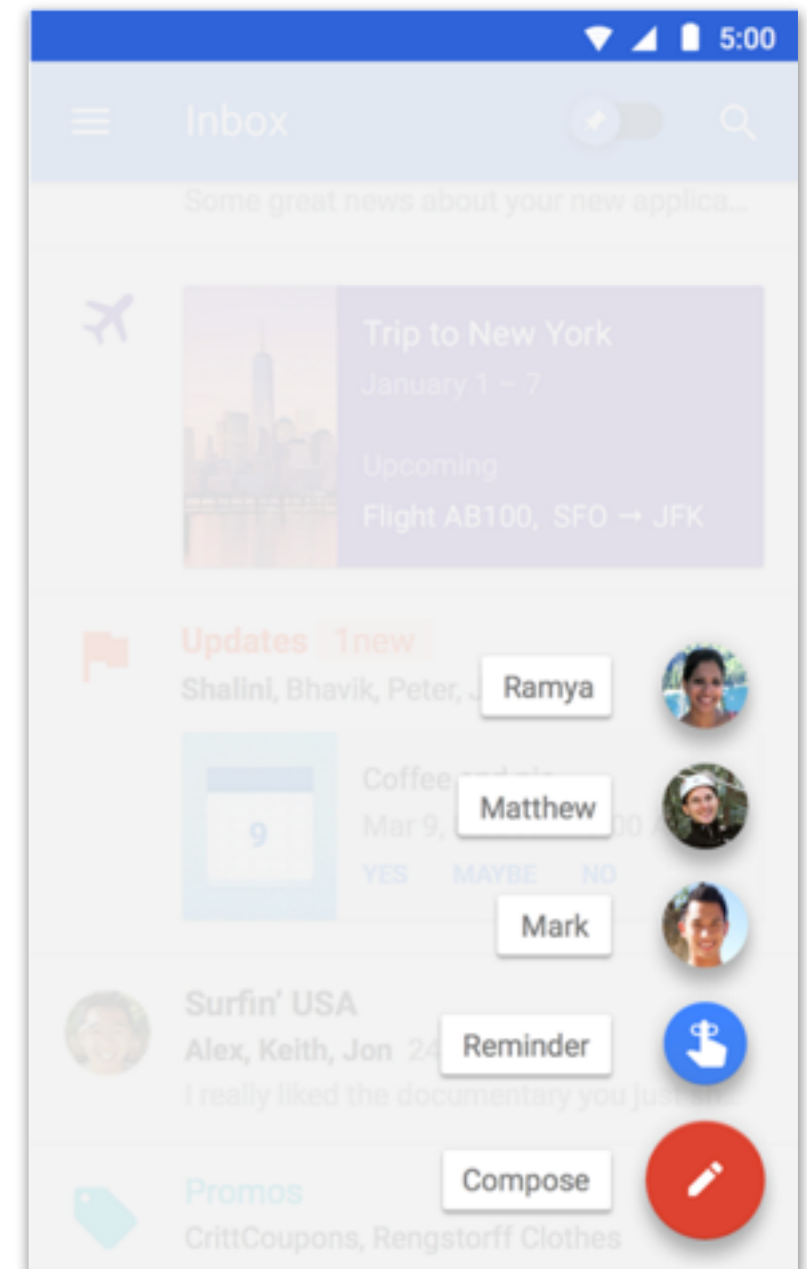
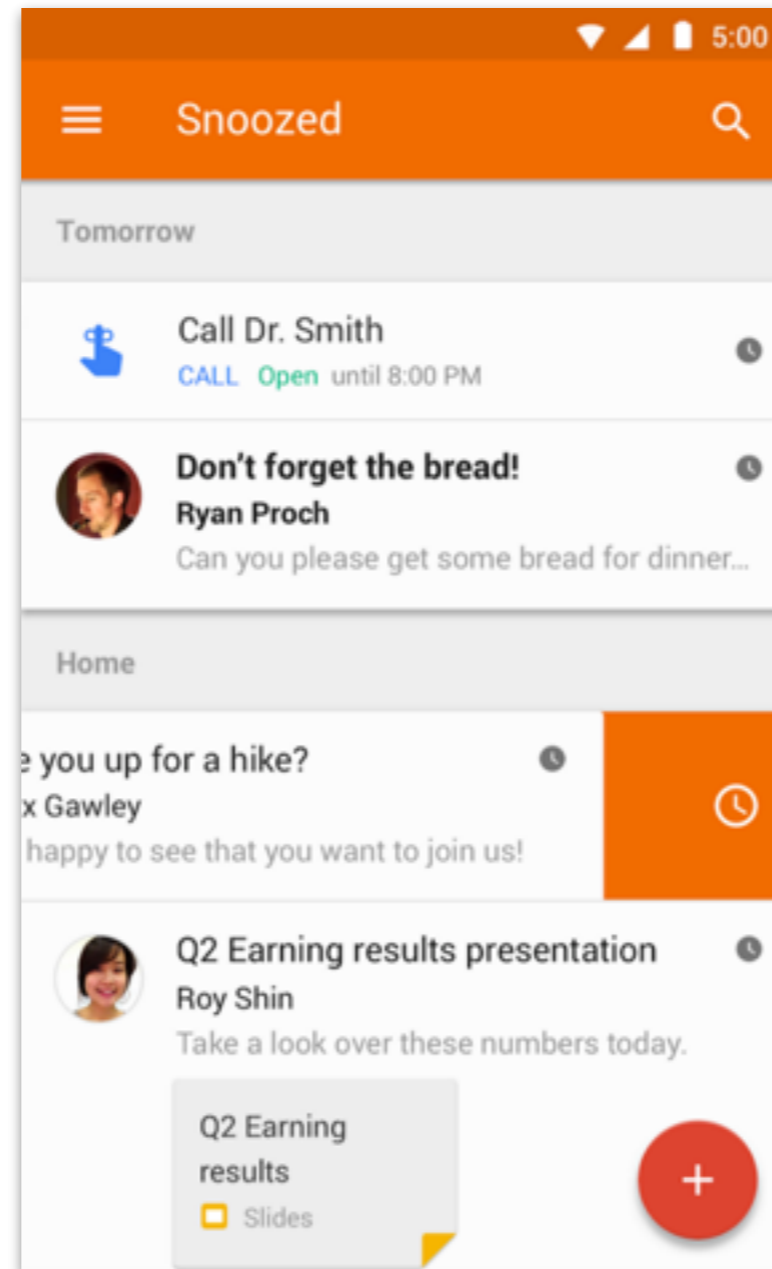
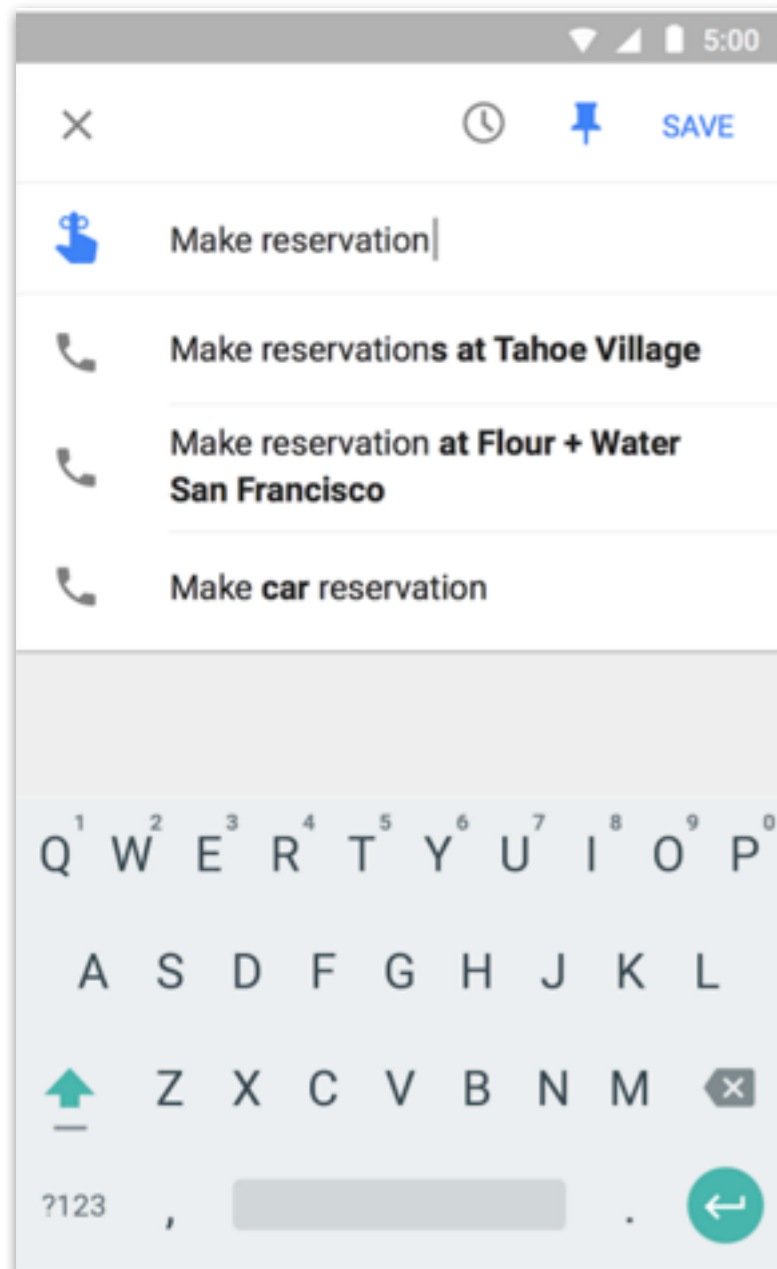


Swipes are not all the same:

RIGHT SWIPE is associated with something positive or forward

LEFT SWIPE is associated with something negative or backward

FINAL EXAMPLES - INBOX



FINAL EXAMPLES – STICKERS APP



Funny Stickers
Zittabyte



Giddylizer: stickers &
Volevi

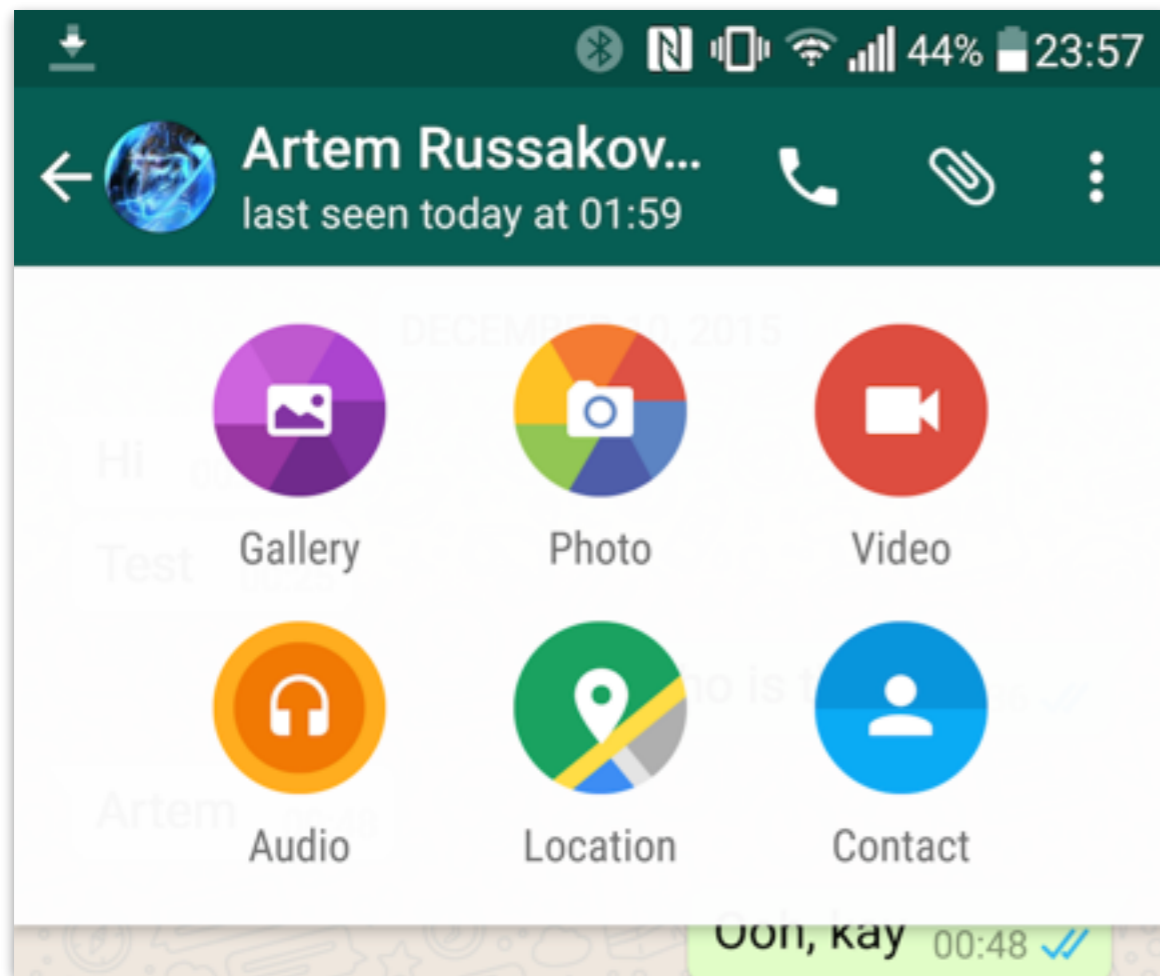


Thug life photo stick
AisErr Prod

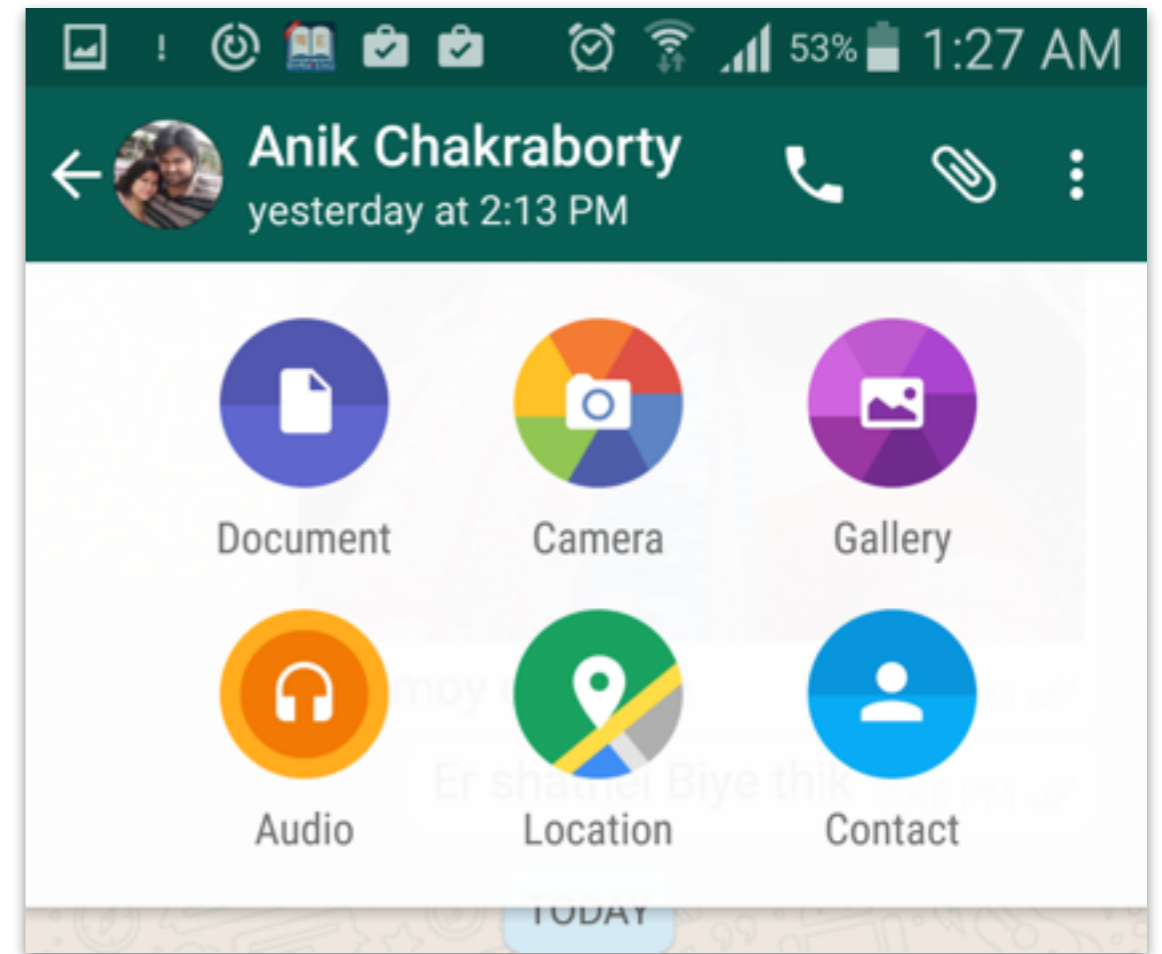
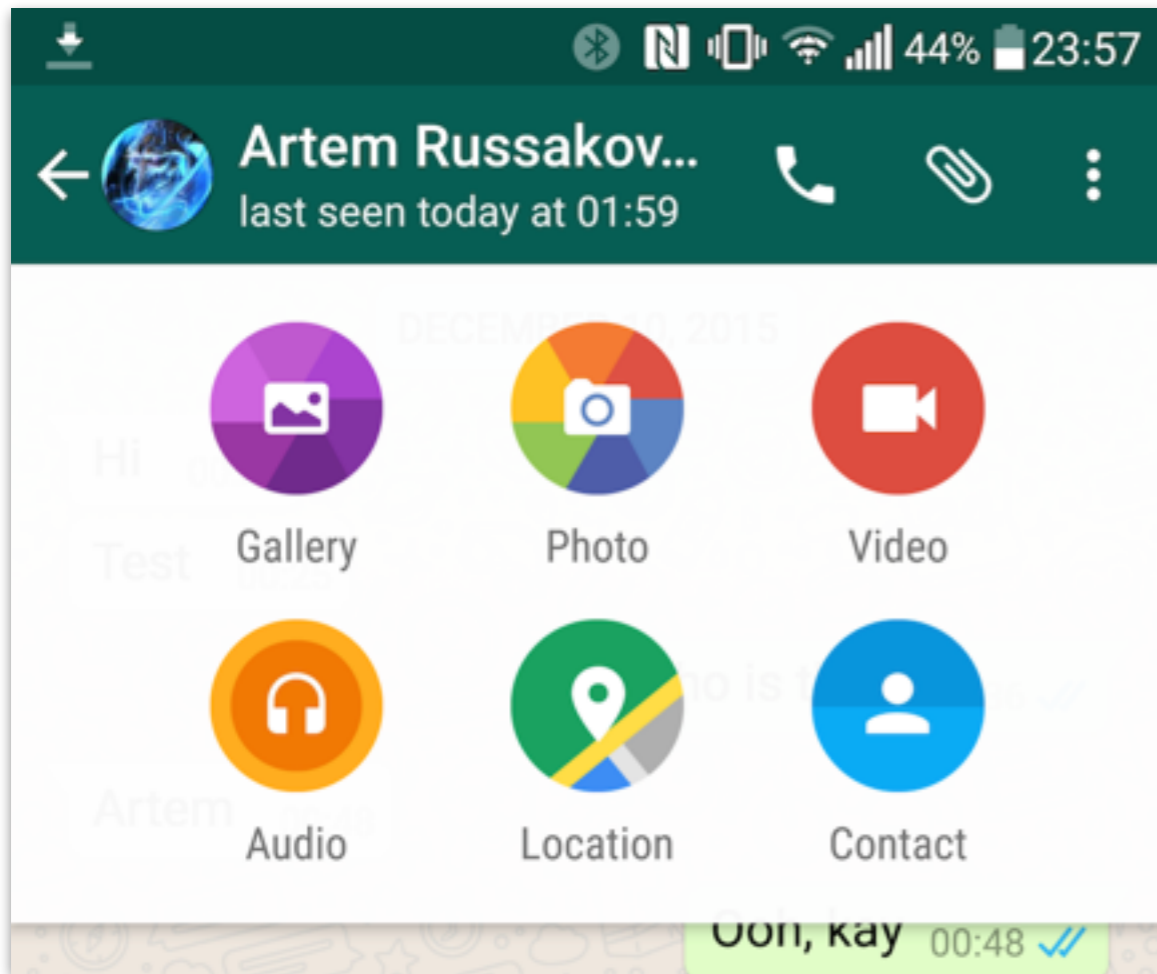
FINAL EXAMPLES - STICKERS APP



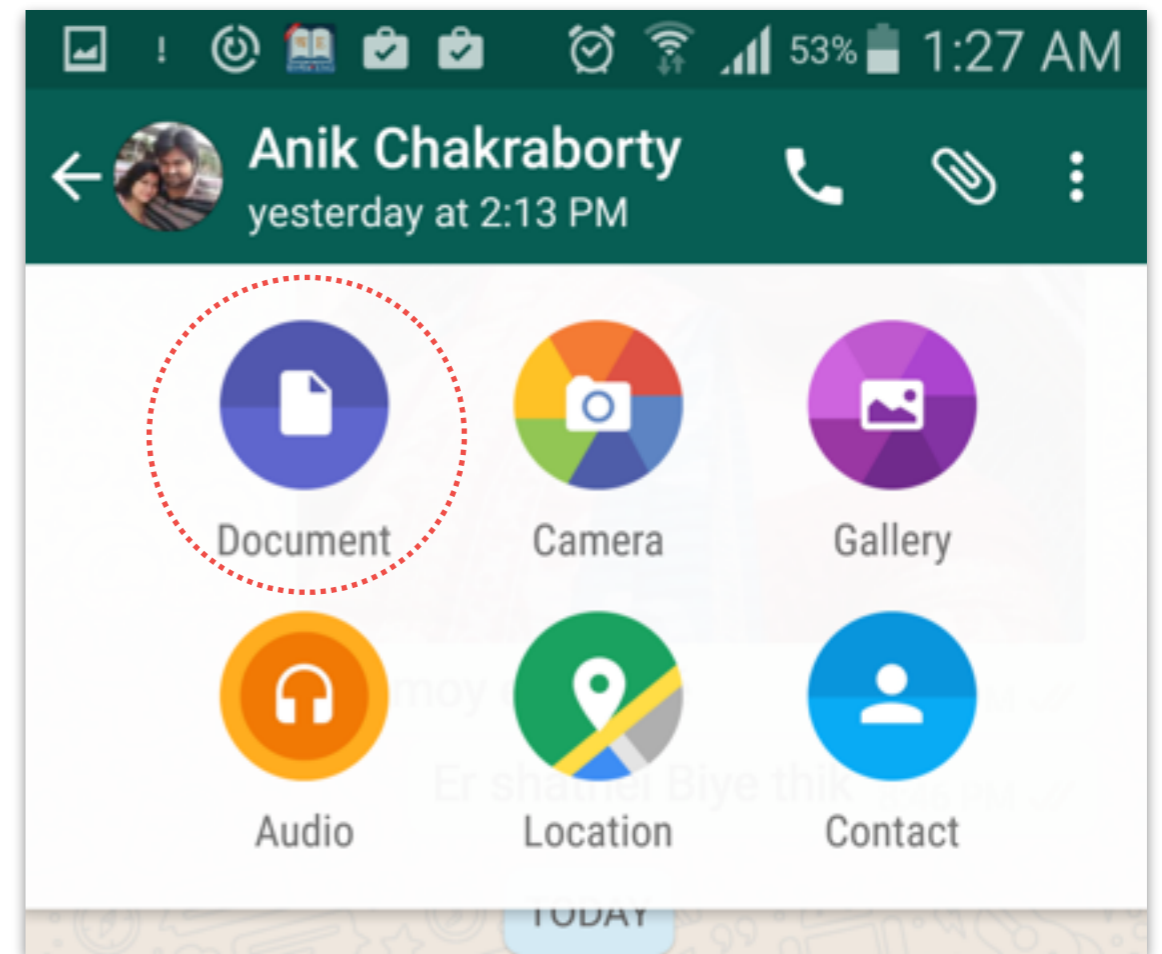
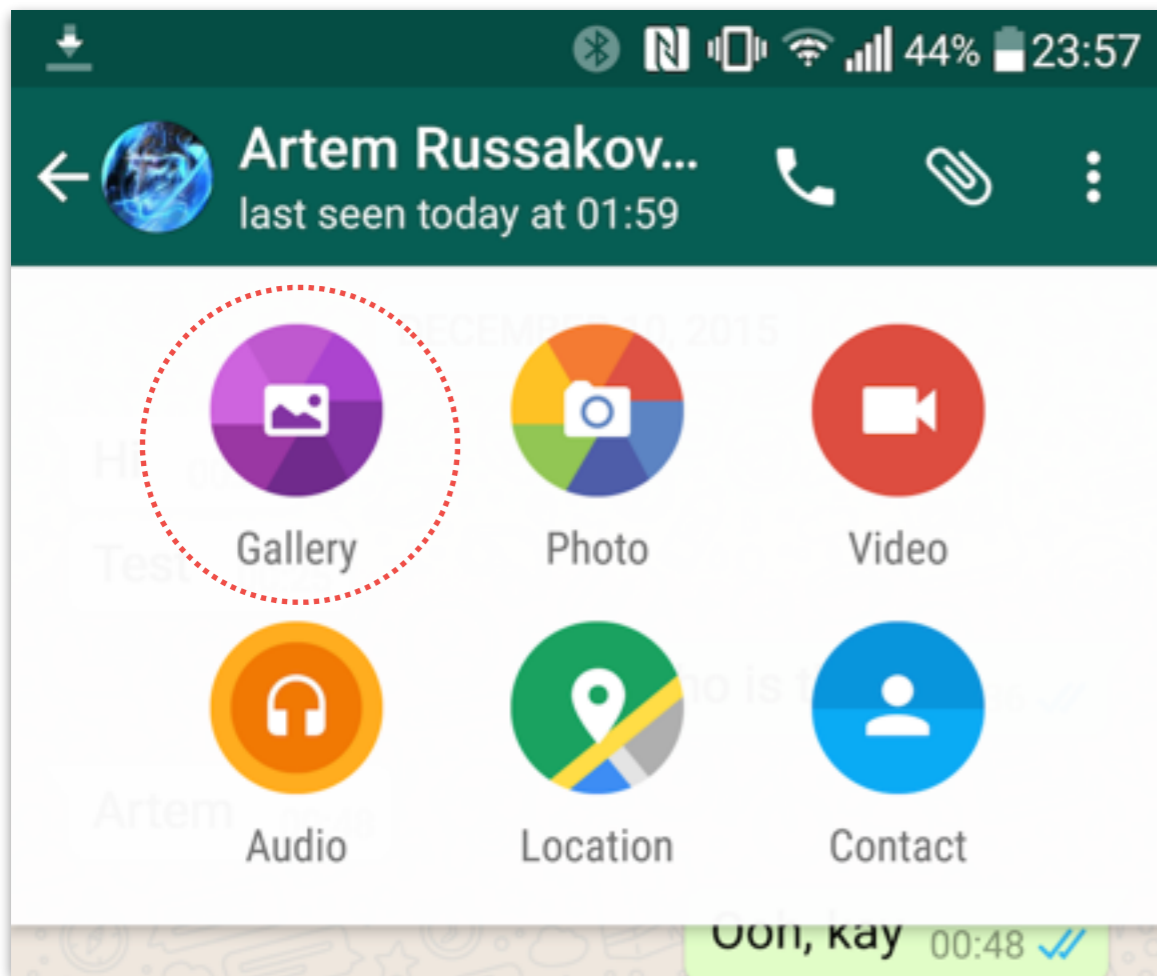
FINAL EXAMPLES - WHATSAPP



FINAL EXAMPLES - WHATSAPP



FINAL EXAMPLES - WHATSAPP



FINAL EXAMPLES – SMARTPHONE HTC



FINAL EXAMPLES – SMARTPHONE HTC



FINAL EXAMPLES – SMARTPHONE ONEPLUS X

