

Ice Cream Sandwich

Android User Experience Design, Google

developer.android.com/design/

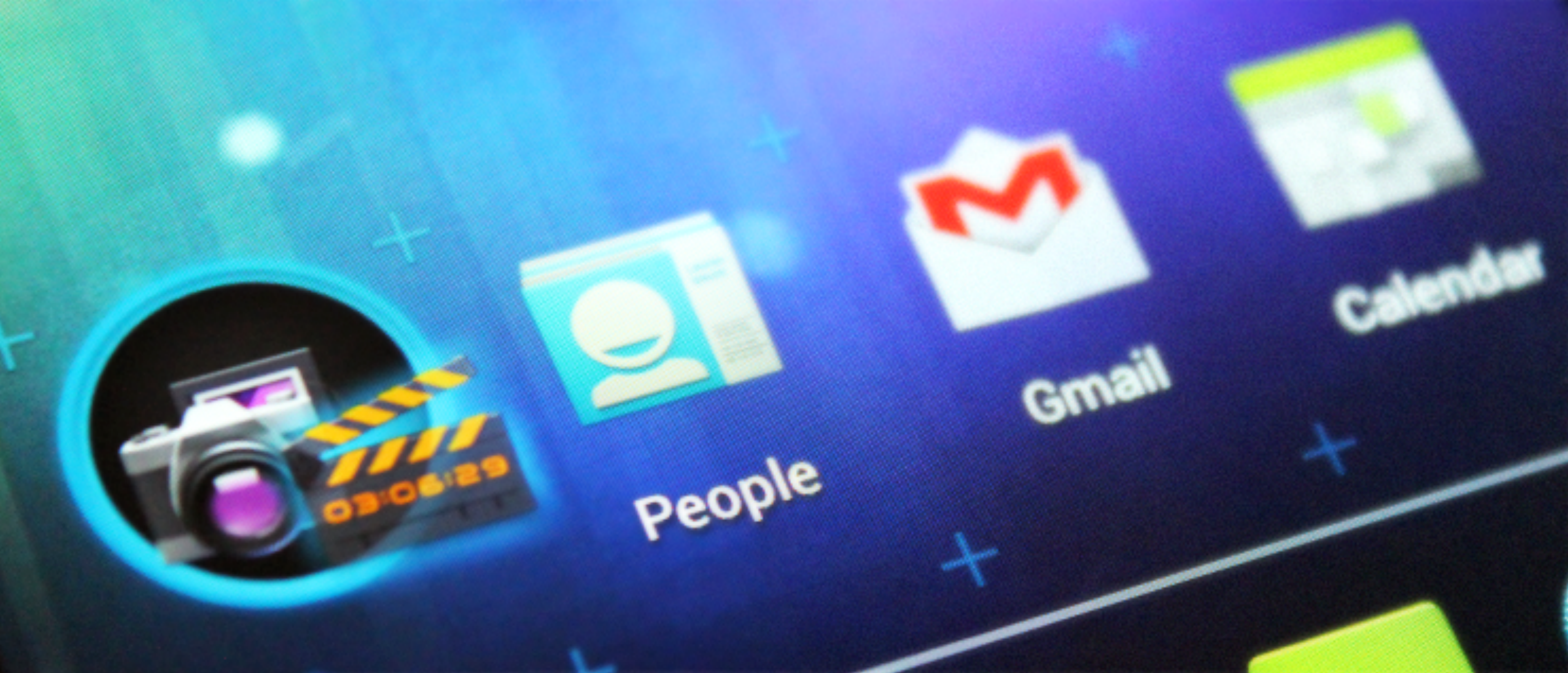
Purpose

Design the soul of an
intelligent machine

Target Audience

Humanity





Description

Ice Cream Sandwich (Android 4.0) marks a major milestone for Android design. We touched nearly every pixel of the system as we expanded the new design approaches introduced in Honeycomb tablets to all types of mobile devices. Starting with the most basic elements, we introduced a new font, Roboto, designed for high-resolution displays. Other big changes include framework-level action bars on phones and support for new phones without physical buttons.

Design Principles

1. Enchant me

Beauty is more than skin deep. Enchanting design is sleek and aesthetically pleasing on multiple levels. Transitions are fast and clear; layout and typography are crisp and meaningful. App icons are works of art in their own right. Just like a well-made tool, each app strives to combine beauty, simplicity and purpose to create a magical experience that is effortless and powerful.

2. Simplify my life

Android apps make life easier and are easy to understand. When people use Android for the first time, they should intuitively grasp the most important features. The design work doesn't stop at the first use, though. Android apps remove ongoing chores like file management and syncing. Simple tasks never require complex procedures, and complex tasks are tailored to the human hand and mind. People of all ages and cultures feel firmly in control, and are never overwhelmed by too many choices or irrelevant flash.

3. Make me amazing

It's not enough to make an app that is easy to use. Android apps empower people to try new things and to use apps in inventive new ways. Android lets people combine applications into new workflows through multitasking, notifications, and sharing across apps. At the same time, it feels personal, giving people access to superb technology with clarity and grace.

Enchant Me

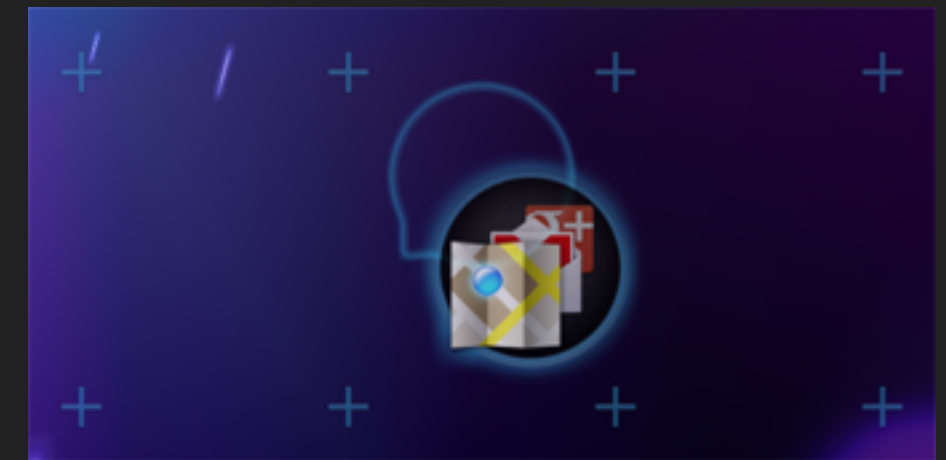
Delight me in surprising ways

A beautiful surface, a carefully-placed animation, or a well-timed sound effect is a joy to experience. Subtle effects contribute to a feeling of effortlessness and a sense that a powerful force is at hand.



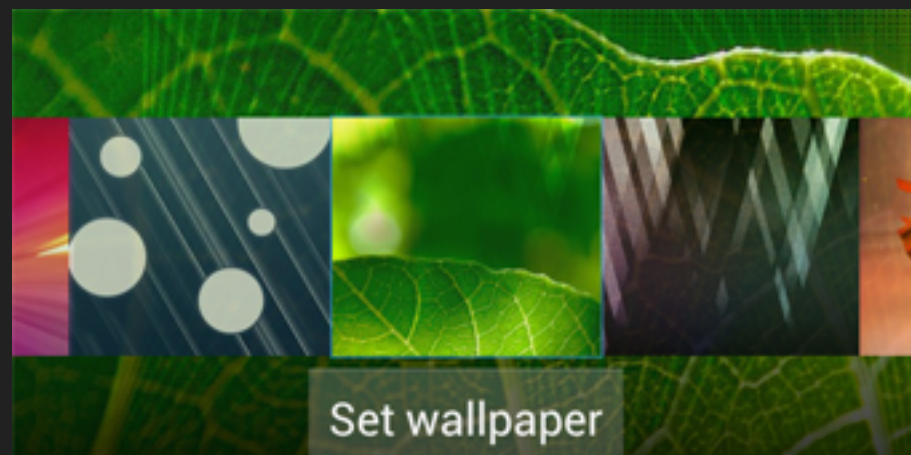
Real objects are more fun than buttons and menus

We allow people to directly touch and manipulate objects. It reduces the cognitive effort needed to perform a task while making it more emotionally satisfying.



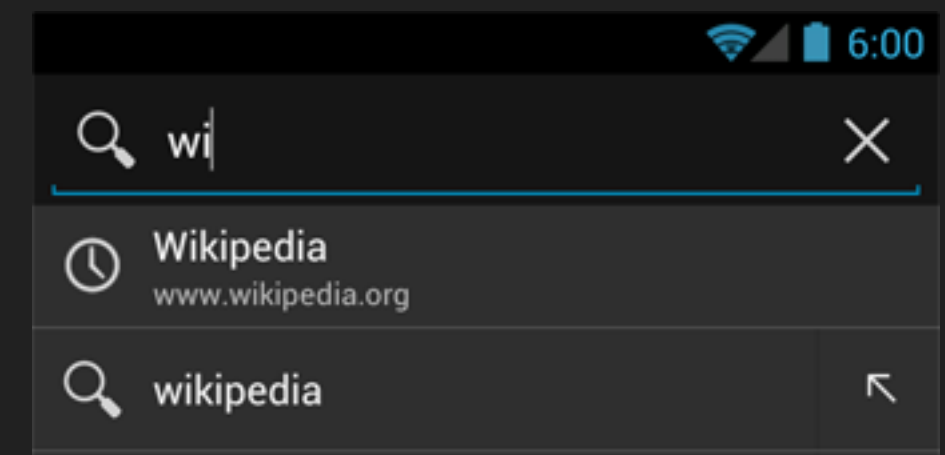
Let me make it mine

People love to add personal touches because it helps them feel at home and in control. Android provides sensible, beautiful defaults, but also includes fun, optional customizations that don't hinder primary tasks.



Get to know me

Android learns peoples' preferences over time. Rather than asking them to make the same choices over and over, previous choices are placed within easy reach.



Simplify My Life

Keep it brief

We use short phrases with simple words.

Decide for me but let me have the final say

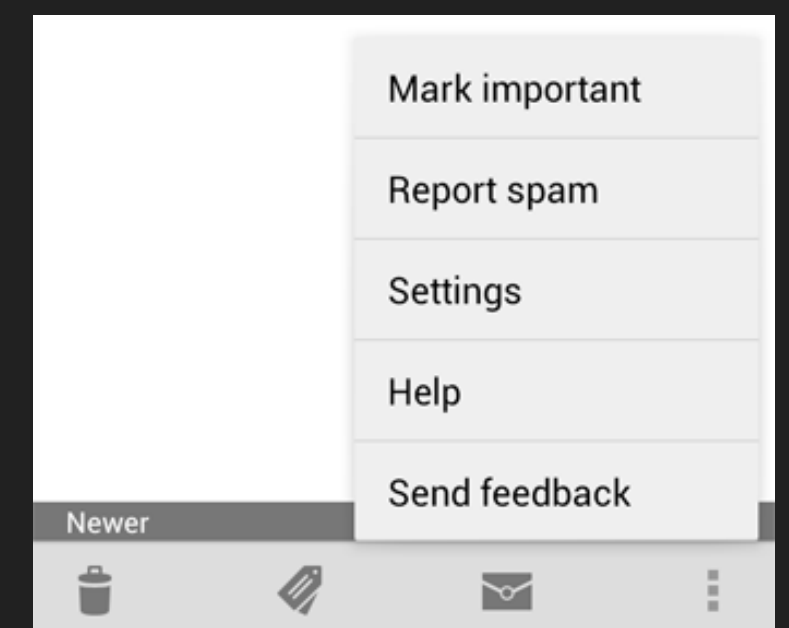
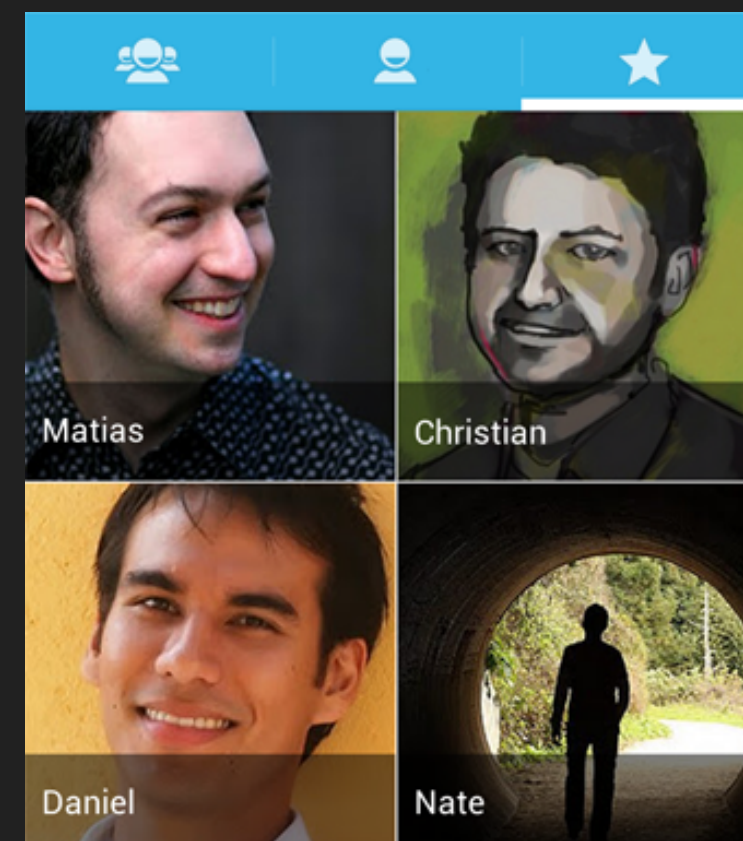
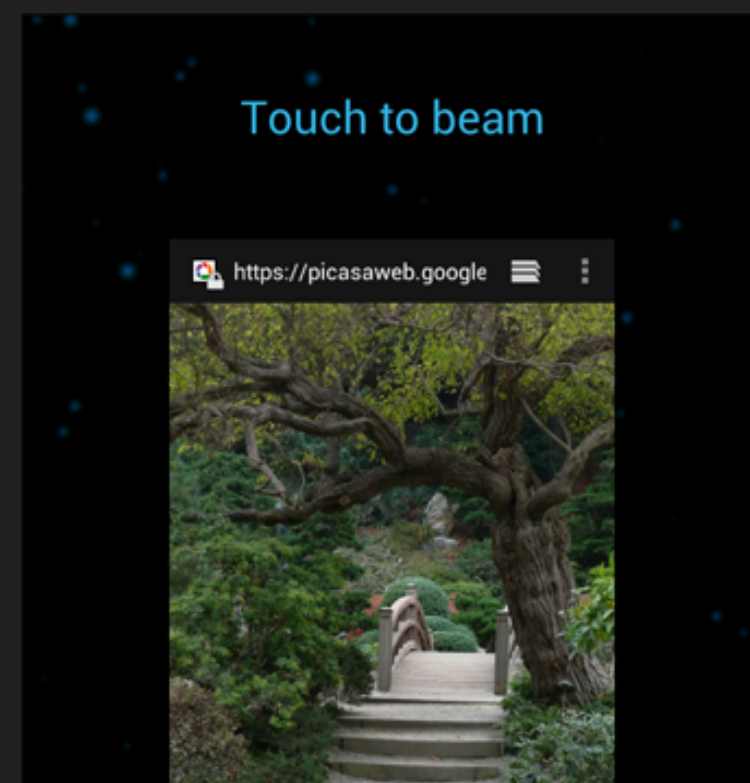
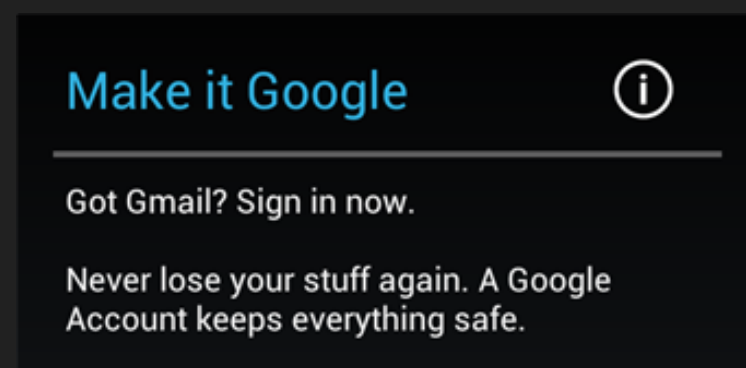
We try to take our best guess and act rather than asking first. Too many choices and decisions make people unhappy. In case we get it wrong, we allow for 'Undo'.

Pictures are faster than words

Whenever possible, we use pictures to explain ideas.

Only show what I need when I need it

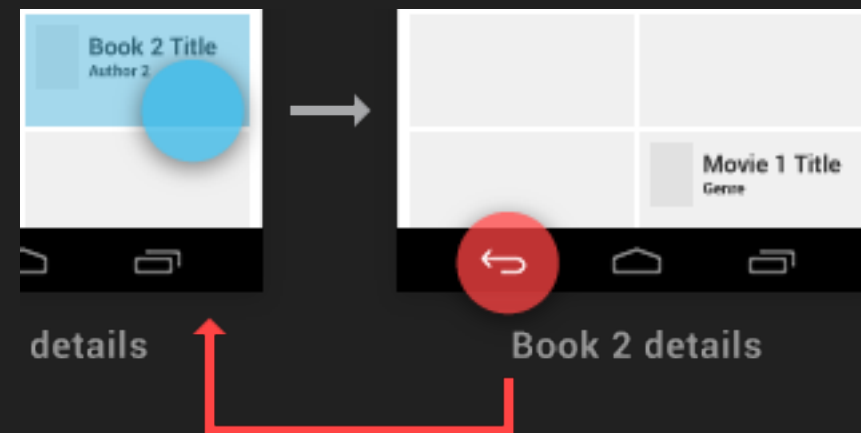
People get overwhelmed when they see too much at once. We break tasks and information into small, digestible chunks. We hide options that aren't essential at the moment, and teach people as they go.



Simplify My Life

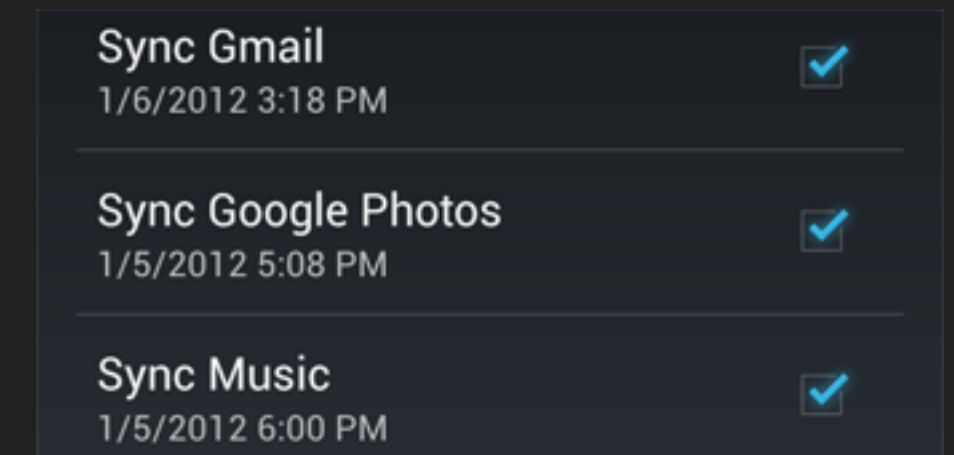
I should always know where I am

People feel more confident when they know their way around. We make places on our app look distinct and use transitions to show relationships among screens. We provide feedback on tasks in progress.



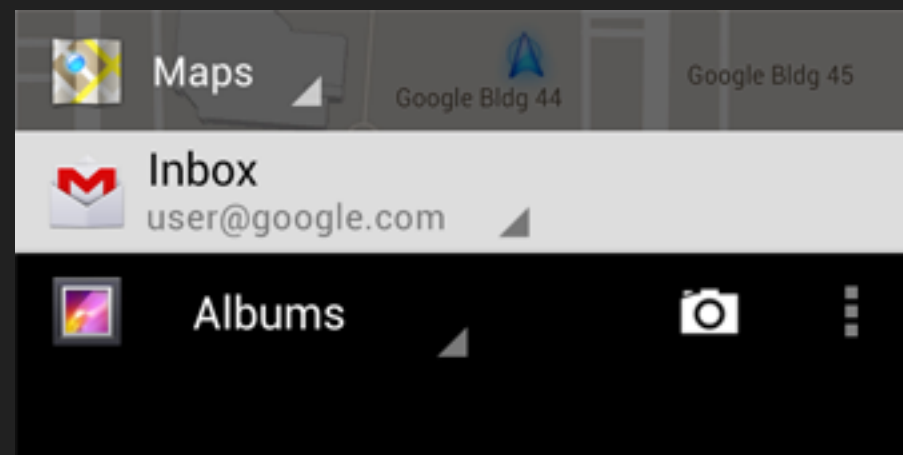
Never lose my stuff

Android saves what people took time to create and lets them access it from anywhere. We remember settings, personal touches, and creations across phones, tablets, and computers. It makes upgrading the easiest thing in the world.



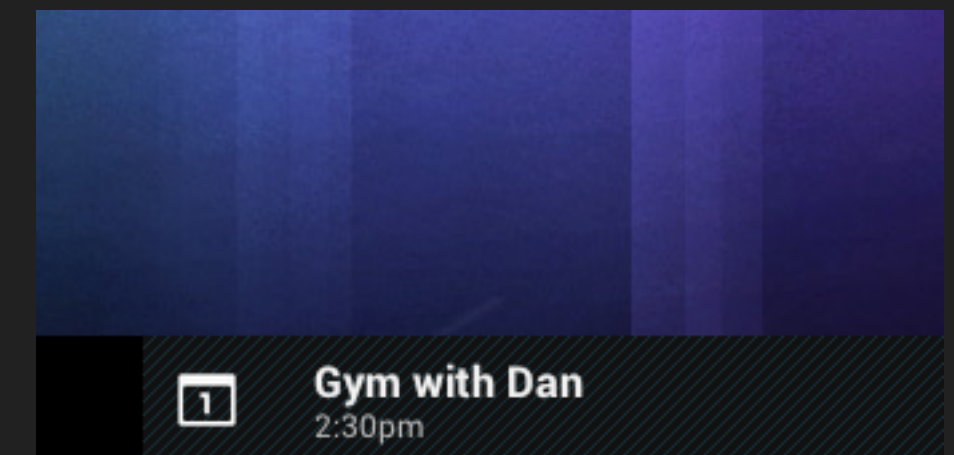
If it looks the same, it should act the same

Android helps people discern functional differences by making them visually distinct rather than subtle. We try to avoid mode, having places that look similar but act differently on the same input.



Only interrupt me if it's important

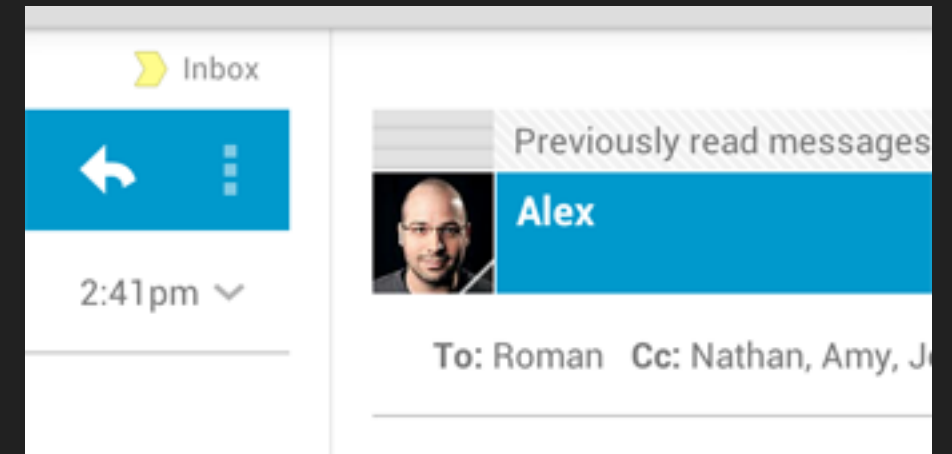
Like a good personal assistant, Android shields people from unimportant minutiae. People want to stay focused, and unless it's critical and time-sensitive, an interruption can be taxing and frustrating.



Make Me Amazing

Give me tricks that work everywhere

People feel great when they figure things out for themselves. Android apps should be easy to learn by leveraging visual patterns and muscle memory from other Android apps.



It's not my fault

Android is gentle when prompting people to make corrections because they want to feel smart. If something goes wrong, we give clear recovery instructions but spare them the technical details. And before we do that, we try to fix it behind the scenes.

Insert SIM card

Turn off your phone, remove the battery, and carefully insert your SIM card with the gold contact side down. The cut-off corner should end up furthest away from the battery.

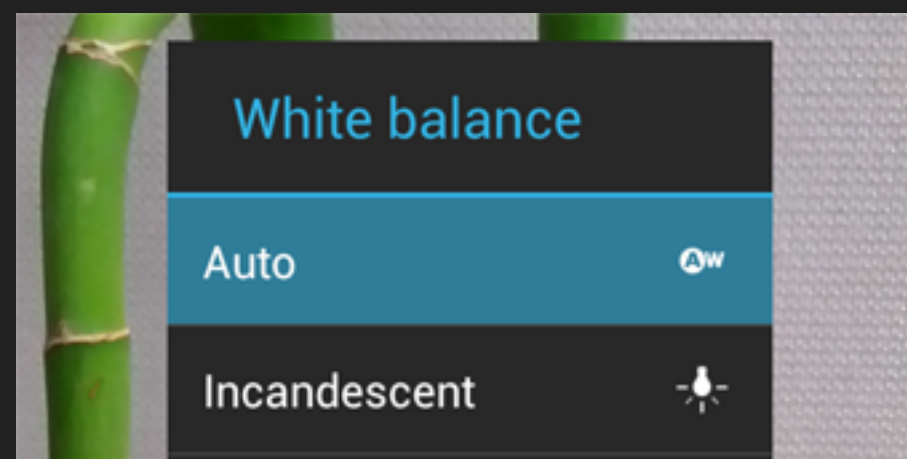
Sprinkle encouragement

Android apps break complex tasks into smaller steps that can be easily accomplished. Actions trigger feedback, even if it's just a subtle glow.



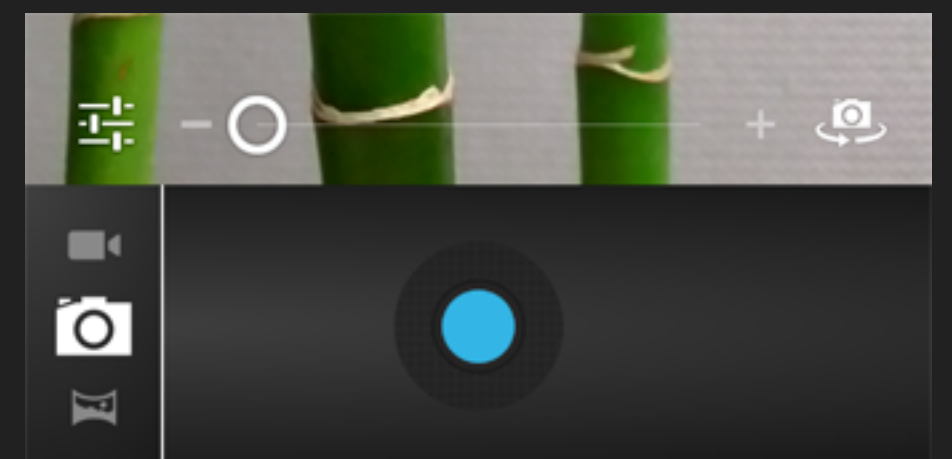
Do the heavy lifting for me

Android makes novices feel like experts by enabling them to do things they never thought they could. For example, shortcuts that combine multiple photo effects make amateur photographs look amazing in only a few steps.



Make important things fast

Not all actions are equal. What's most important in an app should be easy to find and fast to use, like the shutter button in a camera, or the pause button in a music player.





Settings



Jesse Markel
sunday morning blues



John Meluca
always watching



Jamie Wilson
making money

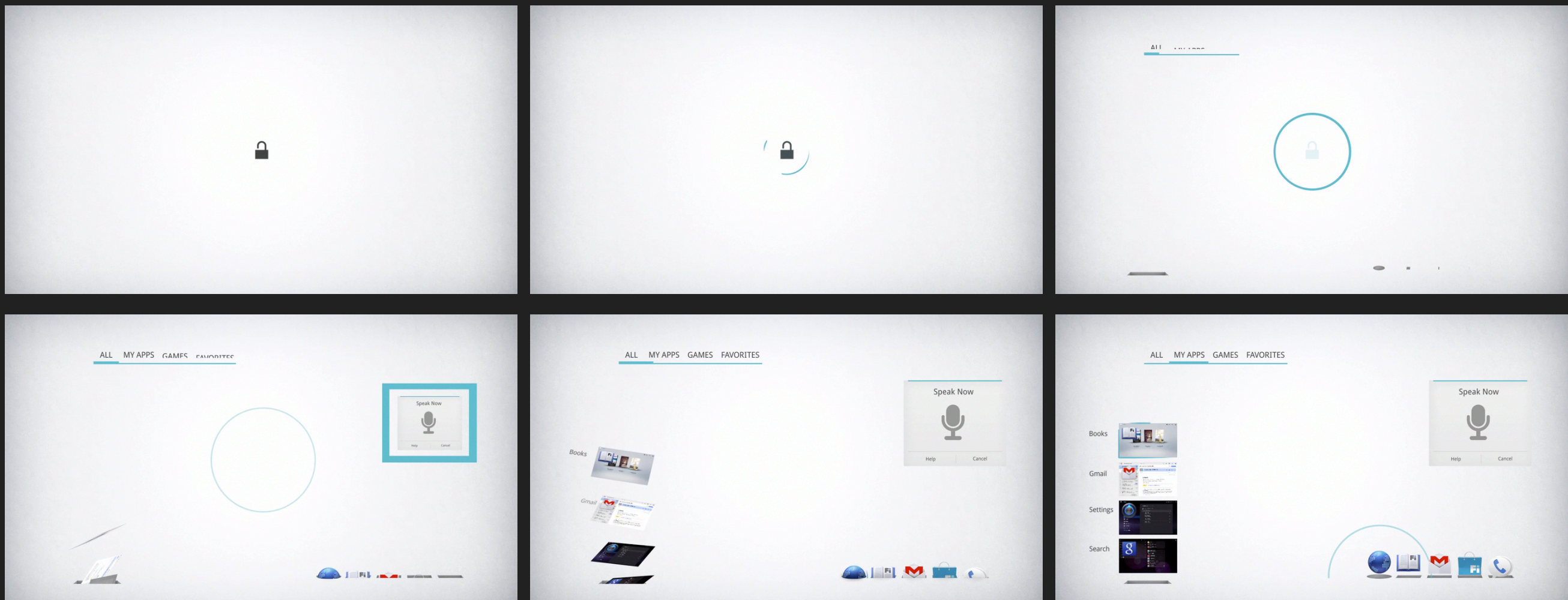


This phone
will self destruct
in 15 seconds.

OK

Cancel

Motion



Hello,
Roboto

THIN

Roboto

BLACK SMALL CAPS

SUNGLASSES

ITALIC

Self-driving robot ice cream truck

BOLD

Fudgesicles only 25¢

BOLD CONDENSED

ICE CREAM

MEDIUM

Marshmallows & almonds

LIGHT

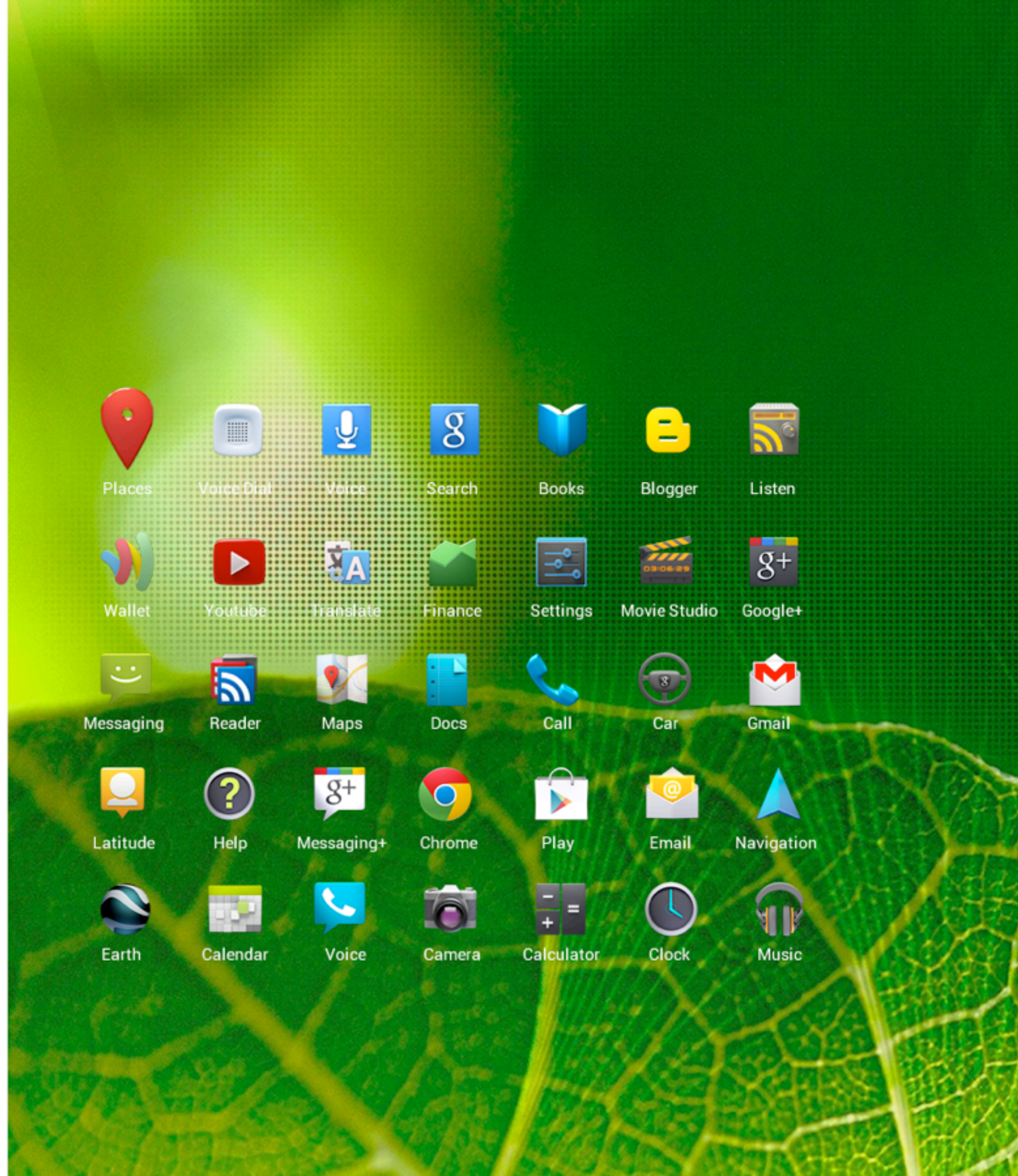
#9876543210

BOLD ITALIC

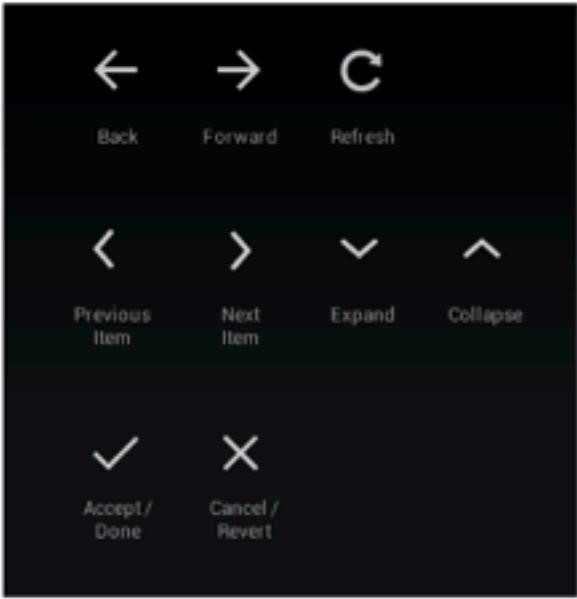
Music around the block

REGULAR

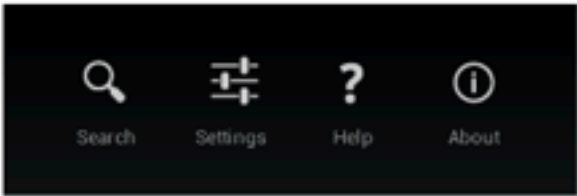
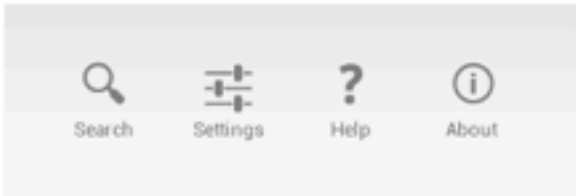
Summer heat rising up from the sidewalk



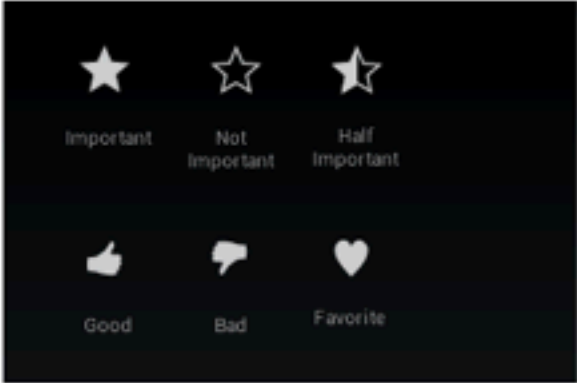
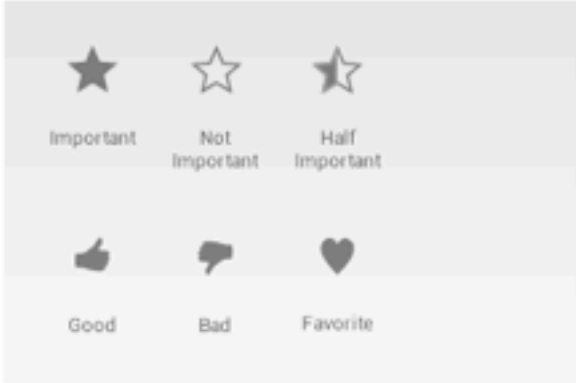
NAVIGATION



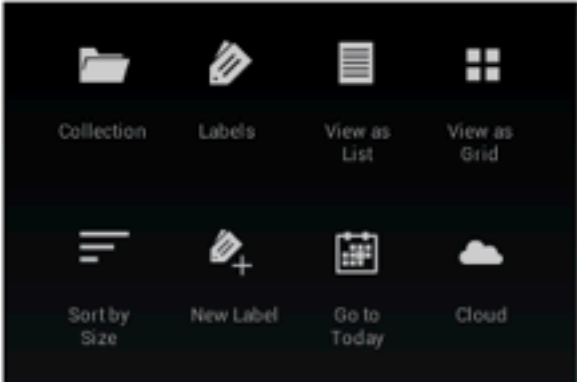
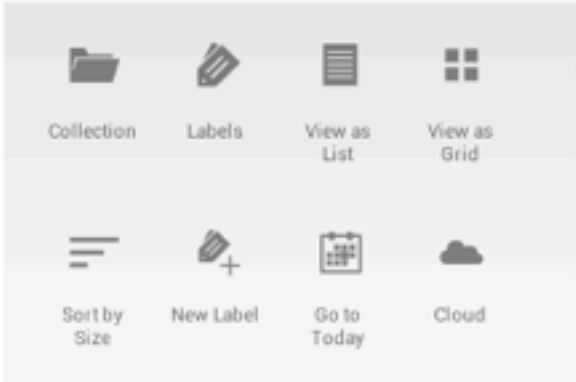
ACTIONS



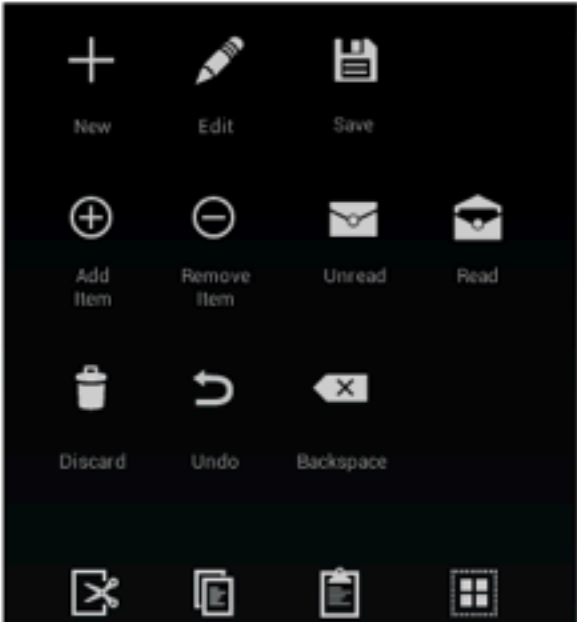
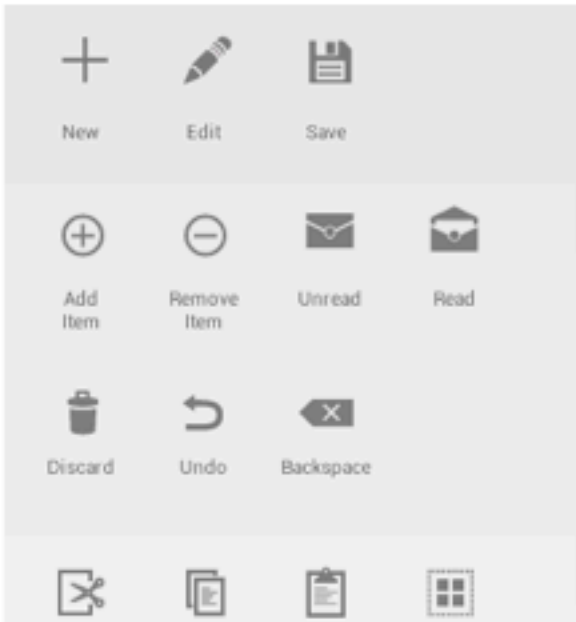
RATING



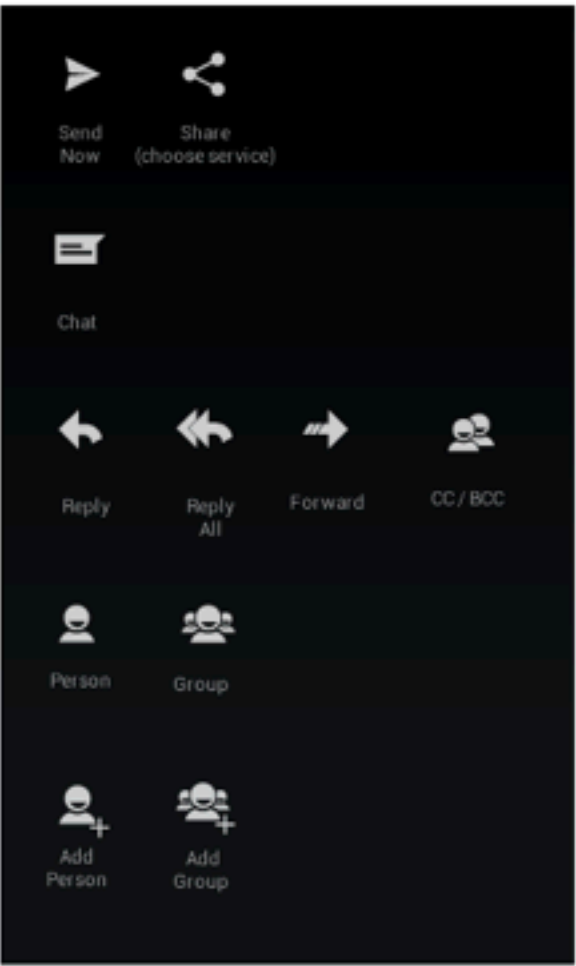
COLLECTIONS



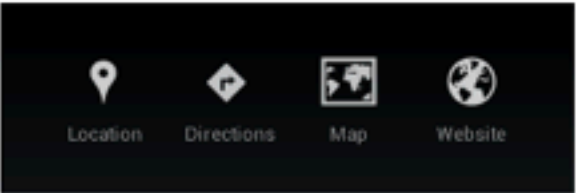
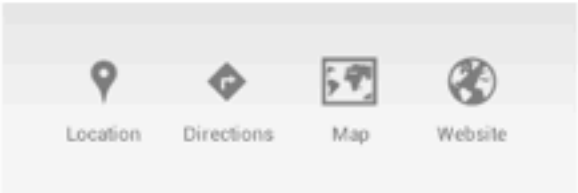
CONTENT



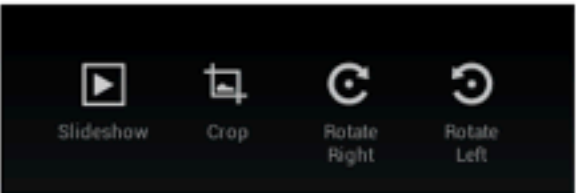
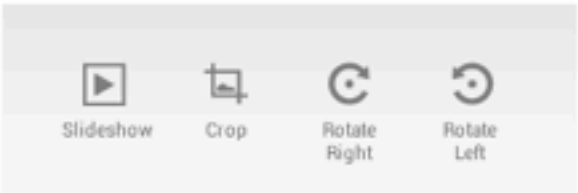
SOCIAL



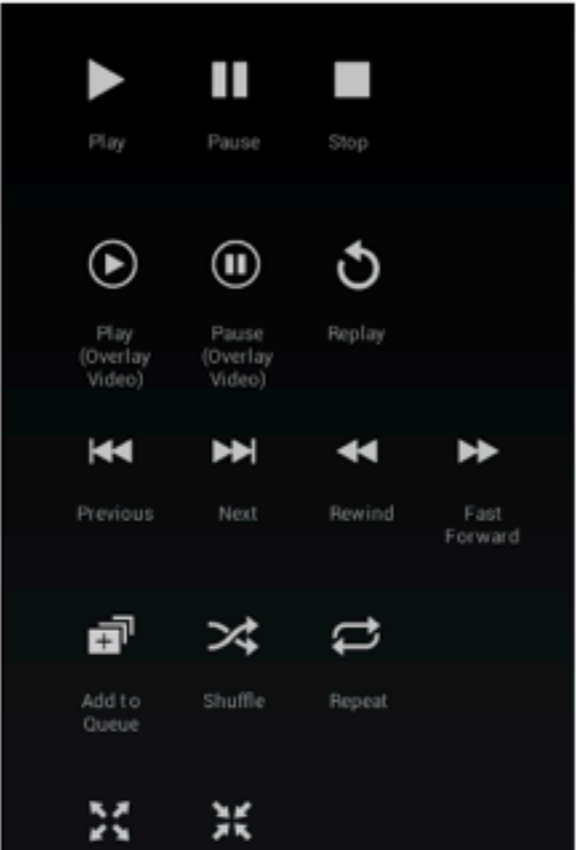
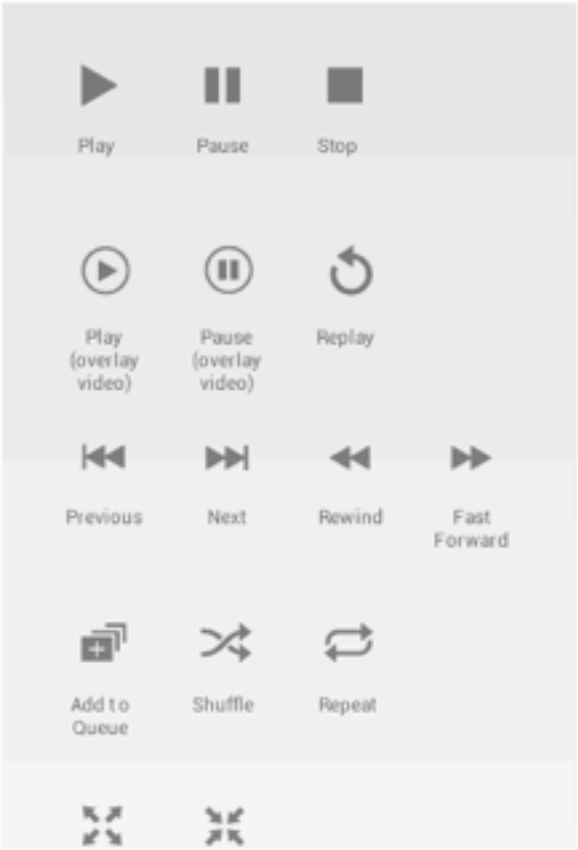
LOCATION



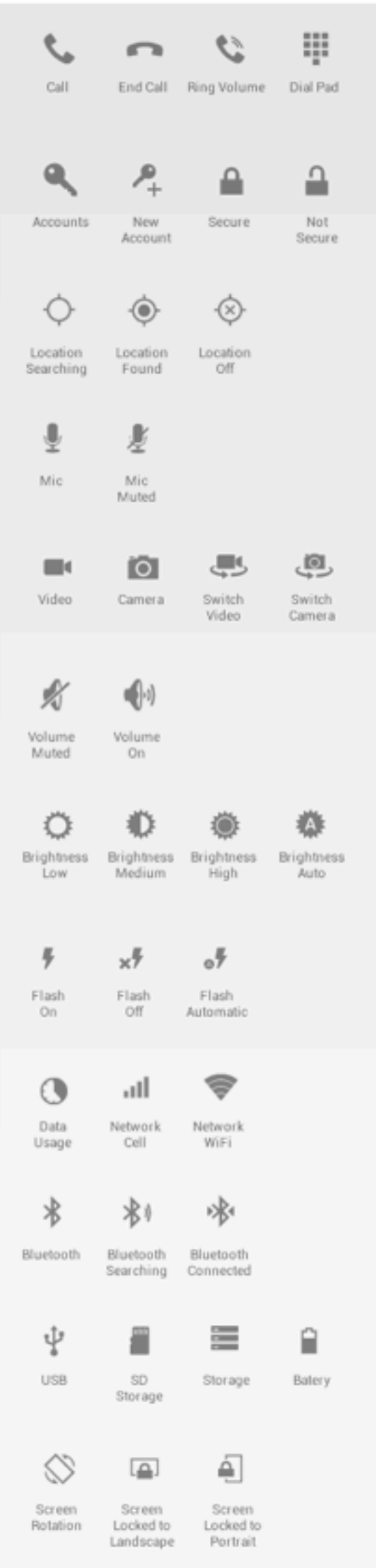
IMAGES



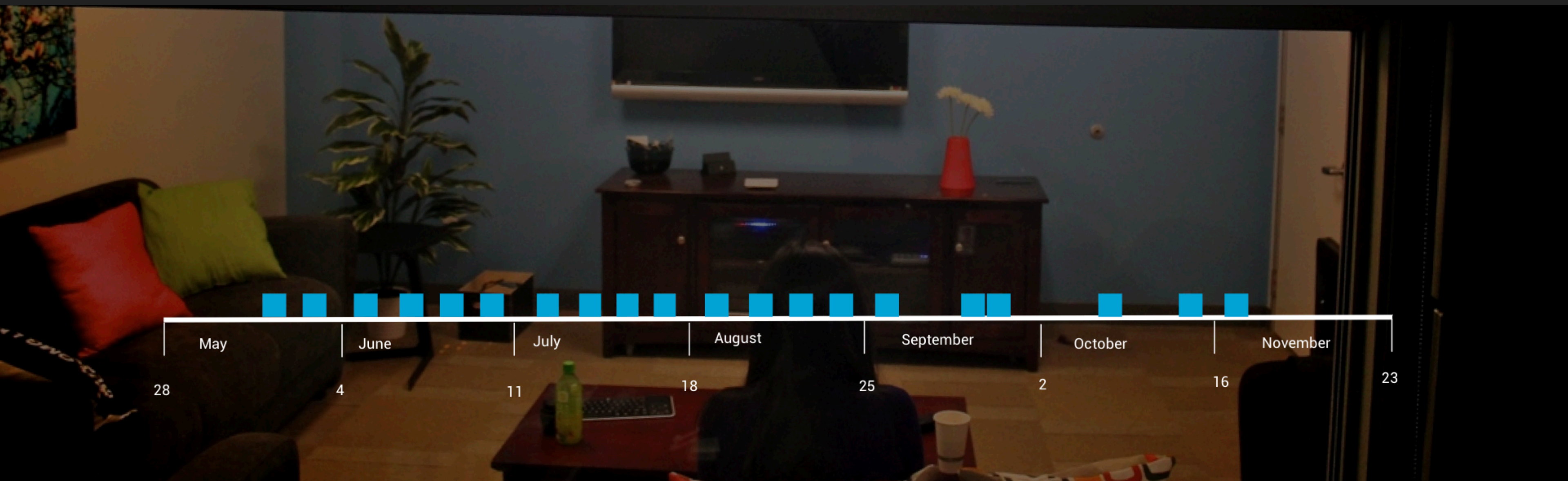
AV



DEVICE ACCESS



Usability Study Schedule



Ethnography

Very early in the design process we began conducting a significant amount of baseline research that hadn't been done before at Android.

We spent a great deal of time shadowing users, observing how they use their phones and the role that they play in their lives.

This was a wakeup call for Google and it helped establish our objectives for improving the Android user experience.

Process

Establish shared,
ambitious UX goals



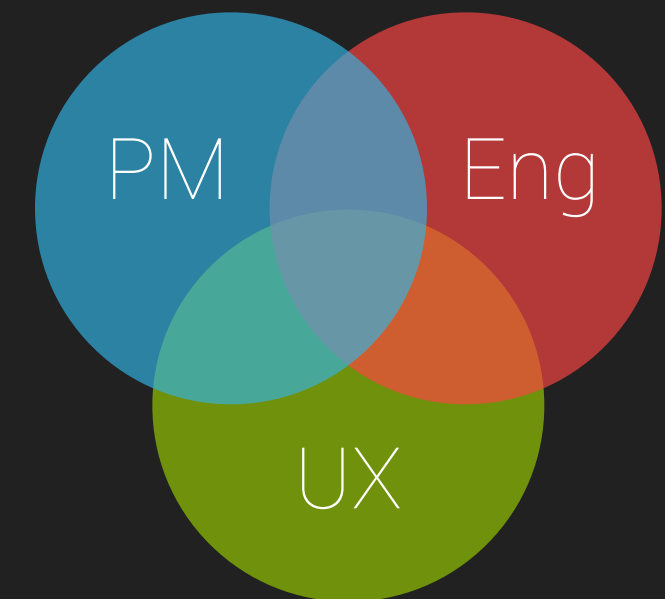
Iterate and validate



Explore designs



We are all user
experience advocates



Metrics

Android is the fastest growing mobile platform in the world

More than 850,000 Android devices are activated each day

More than 300 million Android devices have been activated globally

