UI design

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Roadmap

Intro + Examples

Human Interface Principles

Platform Characteristics

UX Guidelines

Introduction

Before focussing on UI....

in mobile you can always control

Content naming

Visual design

Content Naming

Before you start reasoning on the UI...

Define an APP DICTIONARY

Write down the terms and messages used in the app

ex.
  – "tweets" in Twitter
  – "likes" in Facebook

Visual Design

The direct representation of everything under your app

The **first impression** the user will have

It is not only about layout & colors…
it is about SENSORY SENSATIONS

Example 1

Anti-example 1

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Aesthetic Integrity

It's a measure of how well the appearance of the app **integrates** with its function

- Productive app → order & clarity
- Game → gamish, frivoulous
- …

Consistency

Take advantage of the **standards and paradigms** people are comfortable with

Does it use system-provided controls, views, and icons **correctly**?

Is the application **consistent within itself**?

Does text use **uniform terminology and style**?

Can people **predict** what will happen?

Direct Manipulation

Try to let your users **direct manipulate** objects in your app

Users can experience direct manipulation when they:

- **Rotate** or otherwise **move** the device
  to affect onscreen objects
- Use **gestures** to manipulate
  onscreen objects
- Can see that their actions have
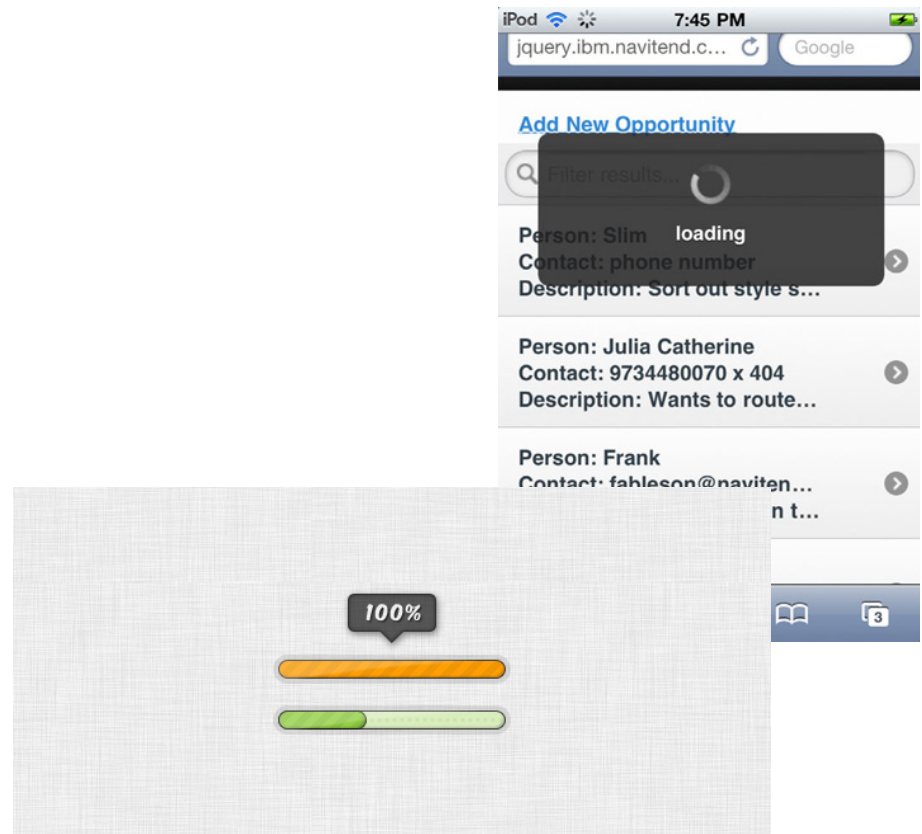 immediate, **visible results**
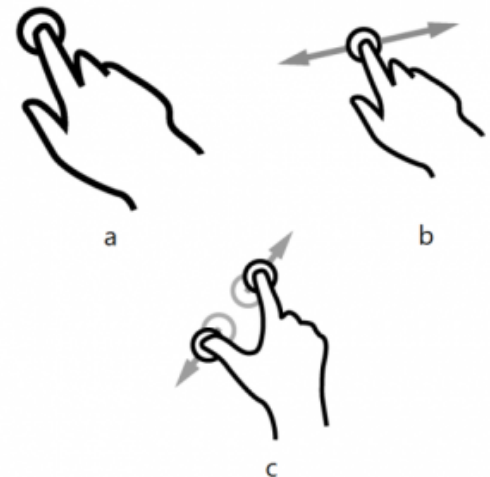
Feedback

Acknowledge people's actions and assures them that processing is occurring

Users expect

- immediate feedback
- status updates during lengthy operations

User Control

People, not apps, should initiate and control actions

Apps can **suggest** actions, but users must do them

Apps can only **infer data** from the context

Users expect to be able to **stop** an operation that's underway

Example 2

Anti-example 2

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Display is Paramount

The **DISPLAY** is (usually) the only means that users use to interact with your app!

- The comfortable **minimum size** of tappable UI elements is 44 x 44 points
- The **quality** of app artwork is fundamental
- The user's focus is on the **content**

Display Orientation

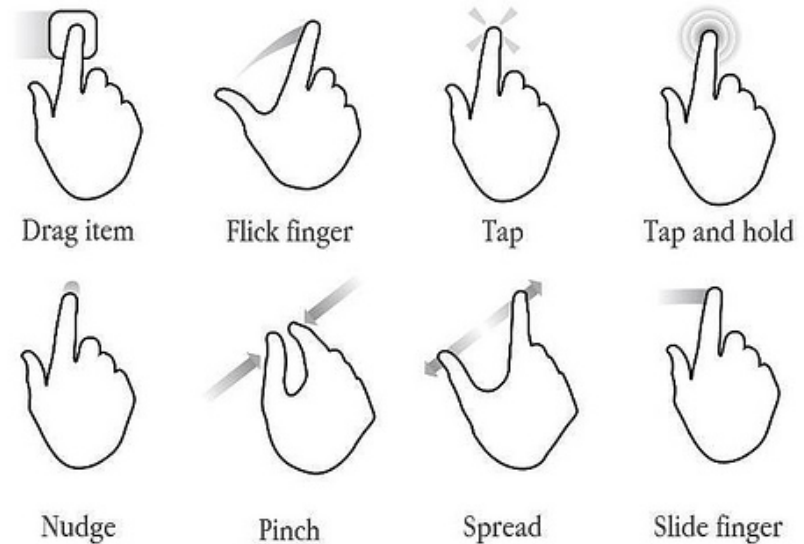Users can **rotate** the device at any time and for any reason

Users tend to expect apps to launch in the device orientation they're currently using

TIP. You can use the splashscreen image to let the user rotate the device
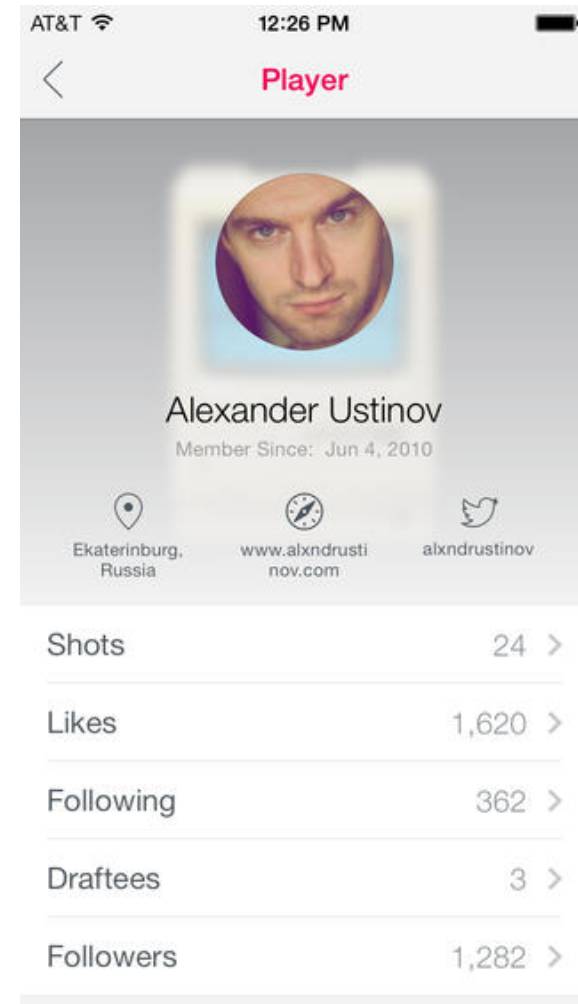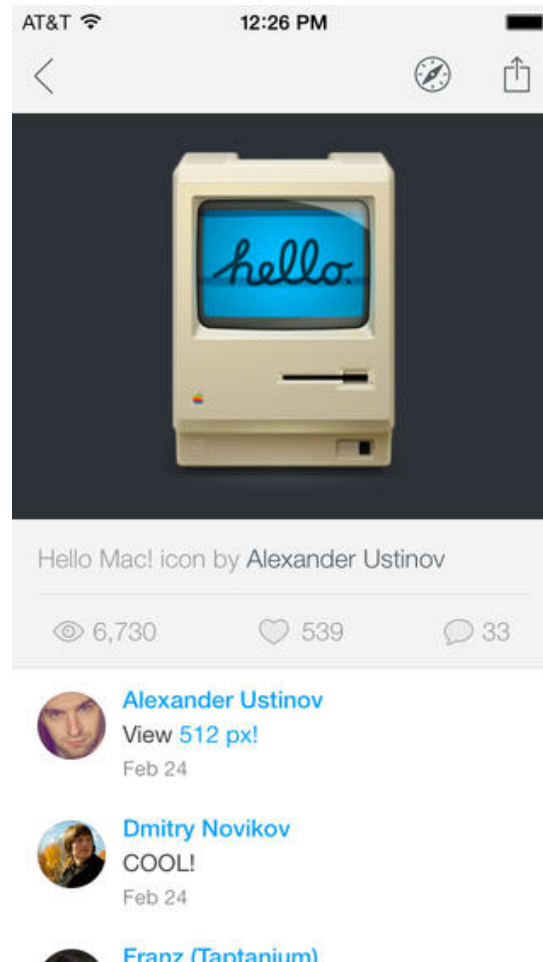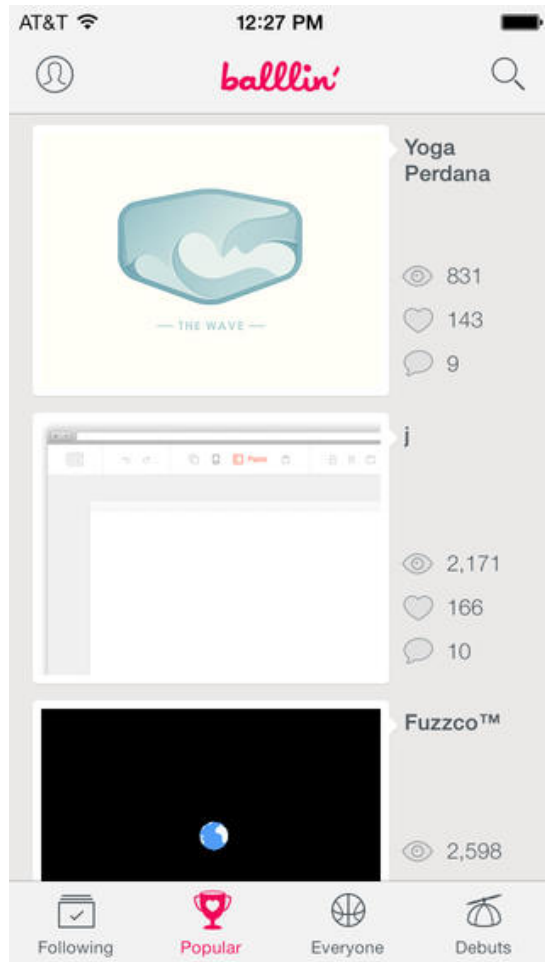
Gestures

Users don't click, they use gestures
- tap/double tap
- drag
- zoom/pinch
- swipe
- flick

Users expect all these gestures to **work the same**, regardless of the app they're currently running

Example 3

Anti-example 3

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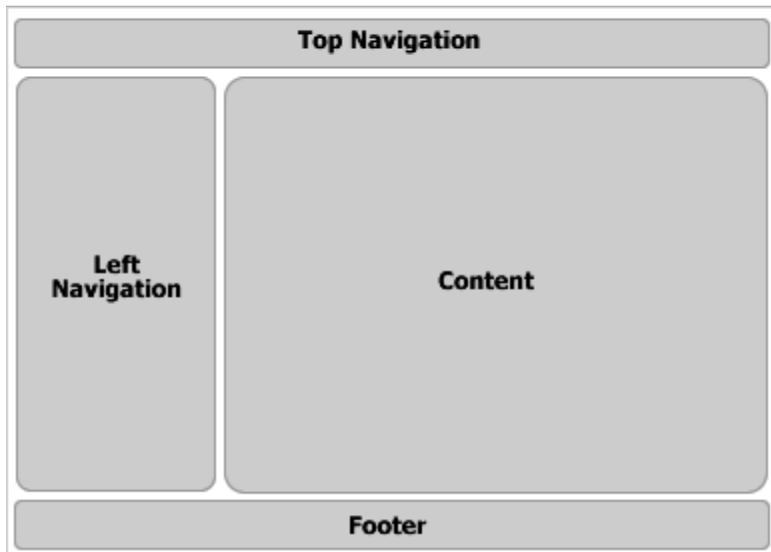UX Guidelines

Layout

It is the first aspect to fix

→ you need pure feedback on it

→ lo-fi wireframing

Desktop Layout

Top Navigation	
Left Navigation	Content
Footer	

Mobile Layout

Header
Navigation
Content
Navigation
Footer

Tablets
content scrolled
horizontally

Colors psychology

Users **react** to different colors differently

Colors evoke **emotions**

BLU
productiveness, interiors,
skies, peace, unity, harmony,
tranquility, calmness, trust,
coolness, confidence,
conservatism, water, ice,
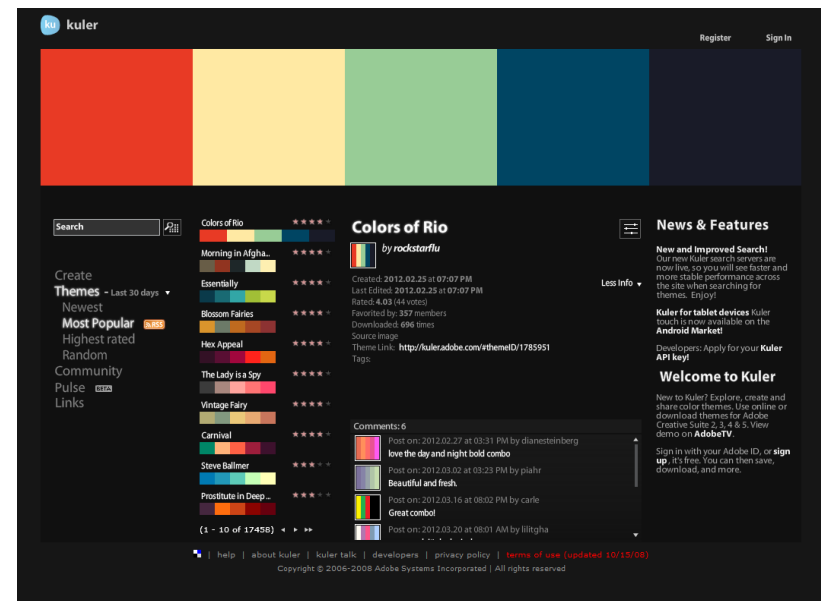loyalty, dependability,
cleanliness, technology...

Color Palette

Predefined number of colors to use **consistently** in your app

You can use **tools** like
palette choosers, or
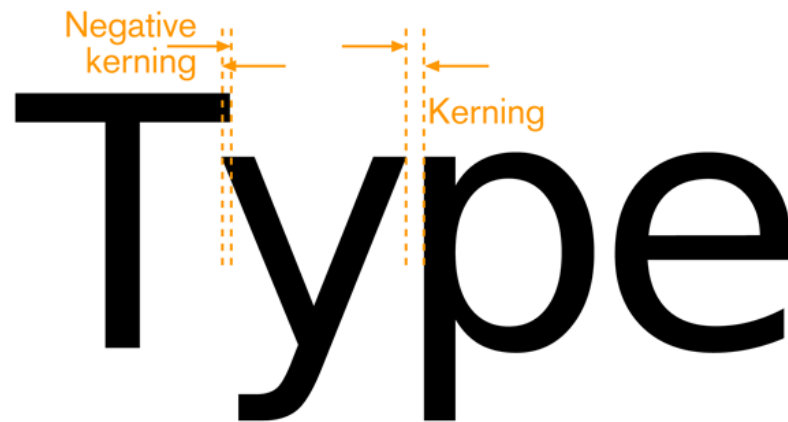palette pickers from images

OR

You can define your palette manually through the **color wheel**

Typography

It is about:

- selection of the correct **font**

- understanding **sizes**

- applying **conventional design methodologies**
  (size, shape, contrast, color, position, space, etc.)

Readability guidelines

1. Use a high-contrast typeface
   - Devices are usually used outdoor

ABCDEFG
NOPQRST
abcdefghijklm

Poor Contrast

2. Use the right typeface (font)

Pretty but too fancy and unreadable!

TOO NARROW   TOO NARROW

Readability guidelines

3. Provide decent **leading**
   – Leading = the space between two lines

Too tight leading causes collisions

Leading is the distance between baselines

Give enough leading for depth of the descenders

4. Leave **space** on the right and left of each line

5. **don't crowd** the screen

Readability guidelines

6. Generously utilize **headings**
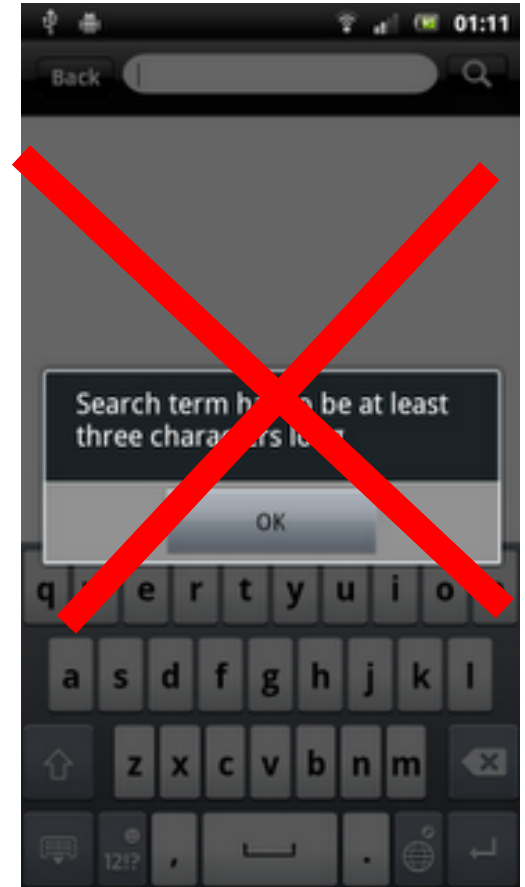   - Divide the content into paragraphs

7. Use **short paragraphs**
   - 2-3 sentences at most

Respect User-Entered data

Input is hard,

users slip (and sleep!)

Do whatever it takes to

preserve user data

and plan for real-world behaviors

Realize That Mobiles Are Personal

one device for one person

Don't continuously ask for name, data, etc.

Only implement passwords and clear personal information when required

Ensure That Lives Take Precedence

Don't interrupt people's life!

Differently from desktops

mobiles are glanced at, used in gaps between conversation and driving and watching TV

Use Your Sensors

Whenever possible, perform actions for the user based on sensors and user data

Ex.

Why should you have to silence your phone for a meeting, when the phone knows where you physically are and knows from your calendar that you have a meeting in that room right now?

Focus on the Primary Task

you need to determine what's most important in each
    context or screen and…

focus on it exclusively!

Your app definition statement will help you focus on its
    primary task

Logical Path

Make the path through the information you present **logical and easy to predict**

- – put markers to let them where they are
- – put a back-button

Give users **only one path to a screen**

Minimize the Effort Required for User Input

Inputting information takes time and attention, **minimize it**

TIP. If your app asks users a lot of input data, you have to revise your design!

Balance any request for input by users with what you offer them in return

Get information from the OS, when appropriate
  – for example: contacts, address, events in the calendar…

Enable Collaboration

Push for collaboration and **sharing** with others

When appropriate, make it easy for users to interact with others
– allow them to share things like their location, opinions, and high scores

For tablets: think of ways to allow more than one person to use your app on the same device

Be Succinct

Think like a newspaper editor, and strive to convey **information in a condensed, headline style**

When your UI **text is short and direct**, users can absorb it quickly and easily

Give controls **short labels**, or use **well-understood symbols** users should tell what they do at a glance

Use UI Elements Consistently

Follow the **recommended usages** for standard user interface elements
→ you can build on users' prior experience

Avoid radically changing the appearance of a control that performs a standard action

Never use the standard buttons and icons to mean something else

Make Targets Fingertip-Size

Display may change, but the average size of a fingertip does not!

Give tappable elements in your application a target area of about
44 x 44 points

If you create smaller controls, the app becomes much less enjoyable
→   or people may focus on the interface only, rather that content

Ask People to Save Only When Necessary

People should have **confidence** that their work is always preserved unless they explicitly cancel or delete it

Never ask for saving data, it should be done automatically
- You can ask to either edit or delete data

Make Modal Tasks Occasional

Modality prevents users' freedom by interrupting their workflow and forcing them to choose a particular path

Keep modal tasks fairly **short and narrowly focused**

Always provide an obvious and safe way to **exit** a modal task

Start instantly

Avoid displaying an **About window** or a **splash screen**

Avoid asking people to supply **setup information**
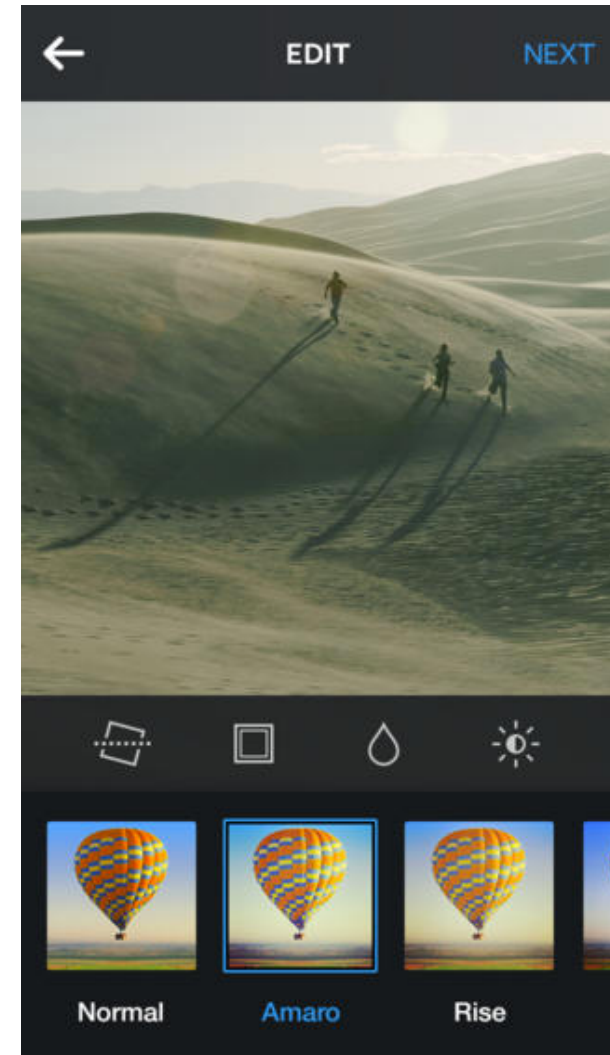
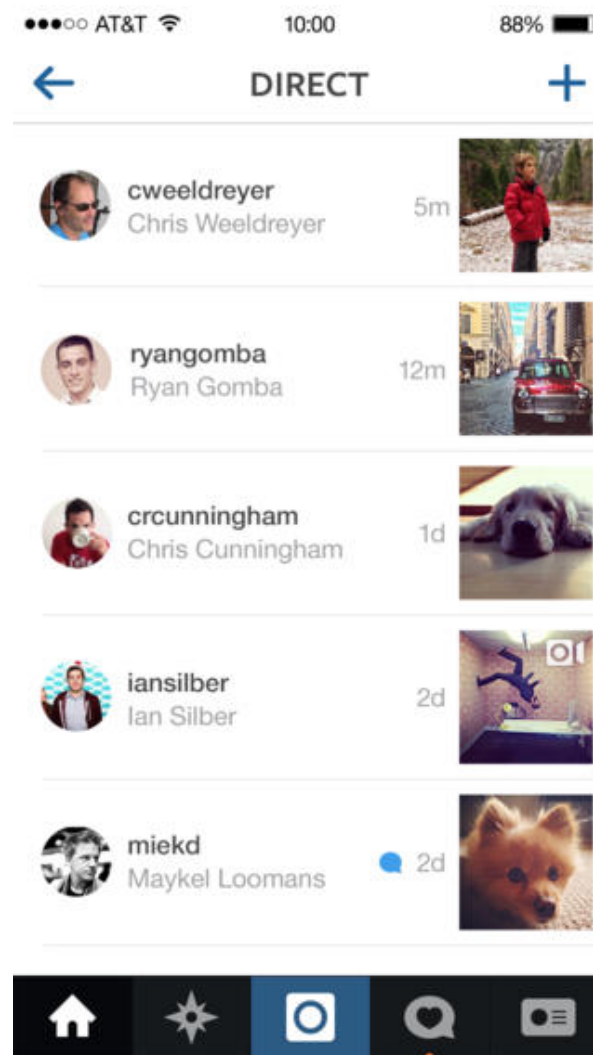Delay a **login** requirement for long as possible:

- Focus your solution on the needs of 80 percent of your users

- Get as much information as possible from other sources

- If you must ask for setup information, put it in your app's settings
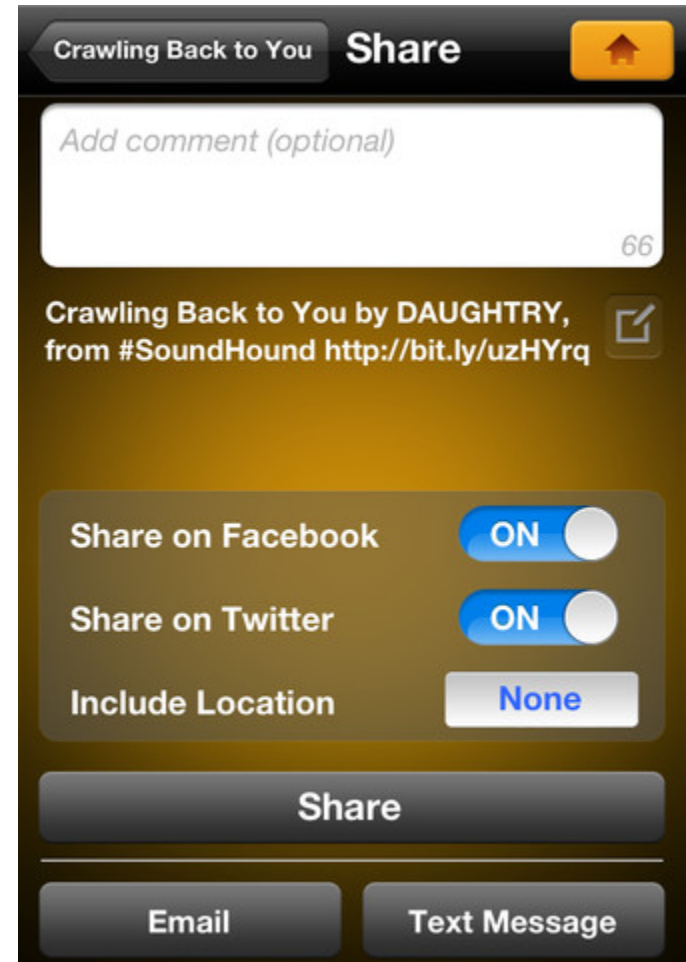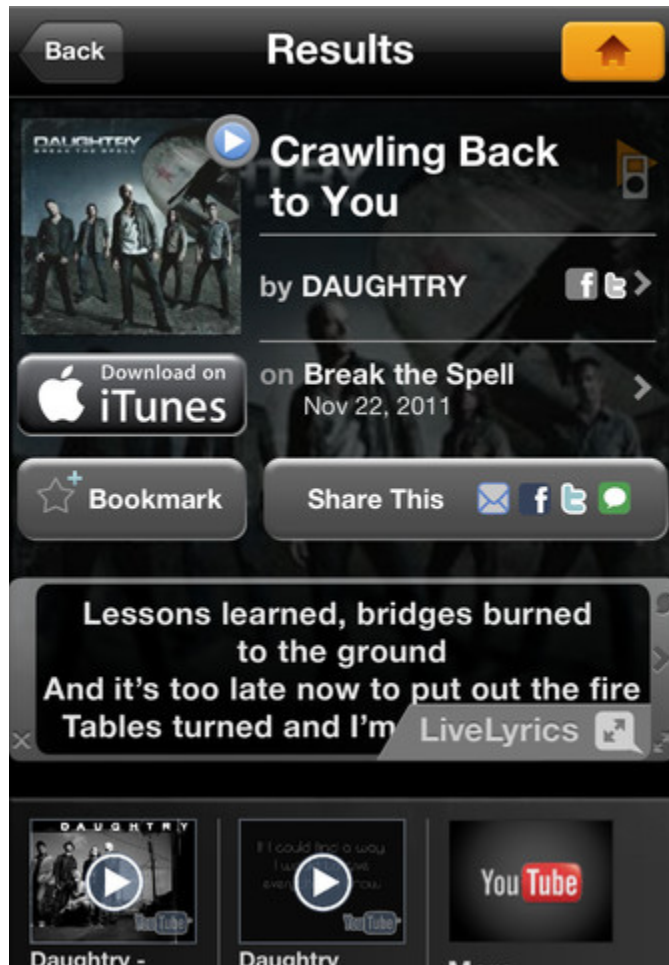
Always Be Prepared to Stop

Save user data as often as reasonable

Save the current state when stopping

Example 4

Anti-example 4

A Final <u>BAD</u> example
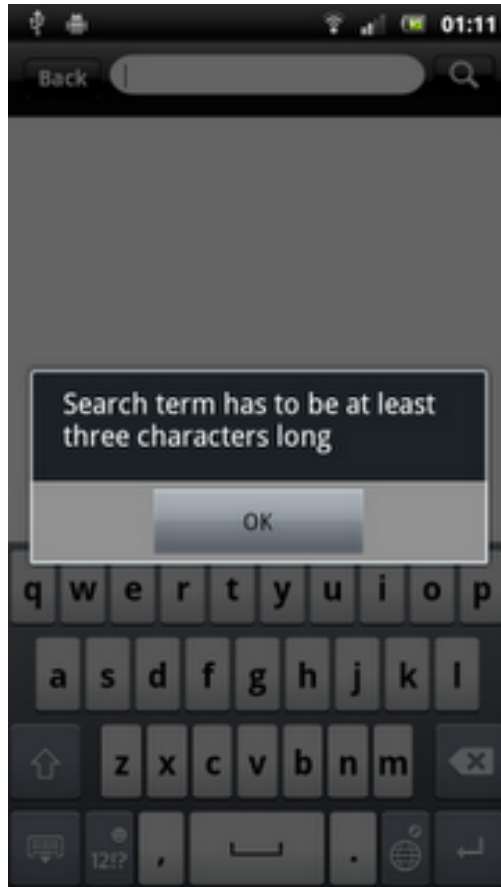

Layout & icons

A Final <u>BAD</u> example
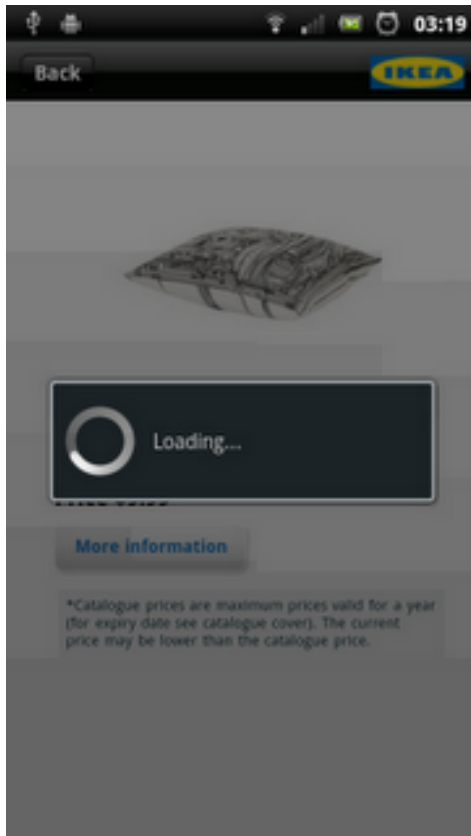

Navigation buttons

A Final <u>BAD</u> example
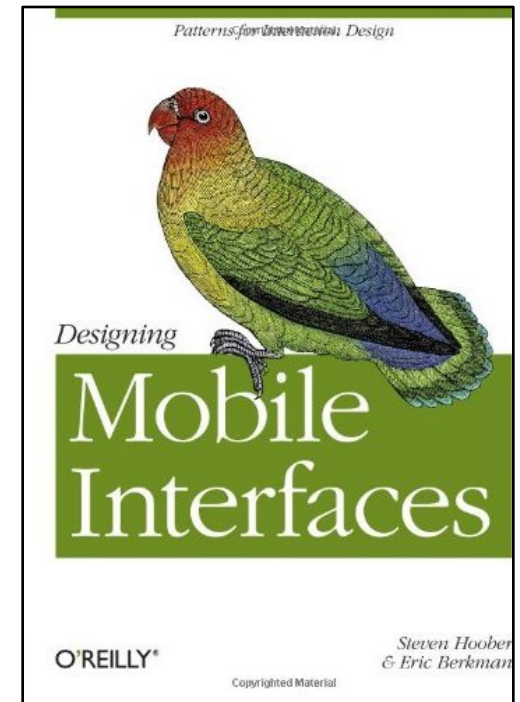

Error Handling

A Final <u>BAD</u> example

Data Handling

References

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O'REILLY®

Brian Fling

Chapter 8

Patterns for Interaction Design

Designing Mobile Interfaces

O'REILLY®

Steven Hoober
& Eric Berkman

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