

Collaborative Mobile Media

Bauhaus-Universität
Weimar

04. Mobile Guidelines

SS2013

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http://www.uni-weimar.de/medien/wiki/IFD:Collaborative_Mobile_Media_SS13



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iOS - Android

Guidelines and Differences



Platforms

Native



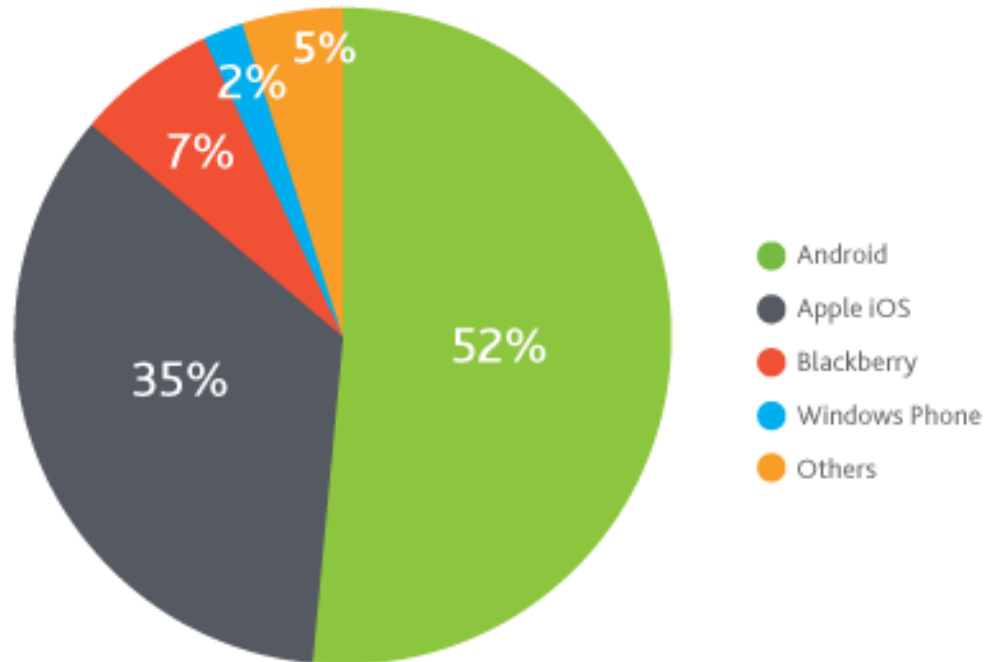
WebApp



iOS & Android

Top U.S. Smartphone Operating Systems by Market Share

Q3 2012, Nielsen Mobile Insights



Read as: During Q3 2012, 52% of smartphone owners had a handset that runs on the Android operating system

Source: Nielsen

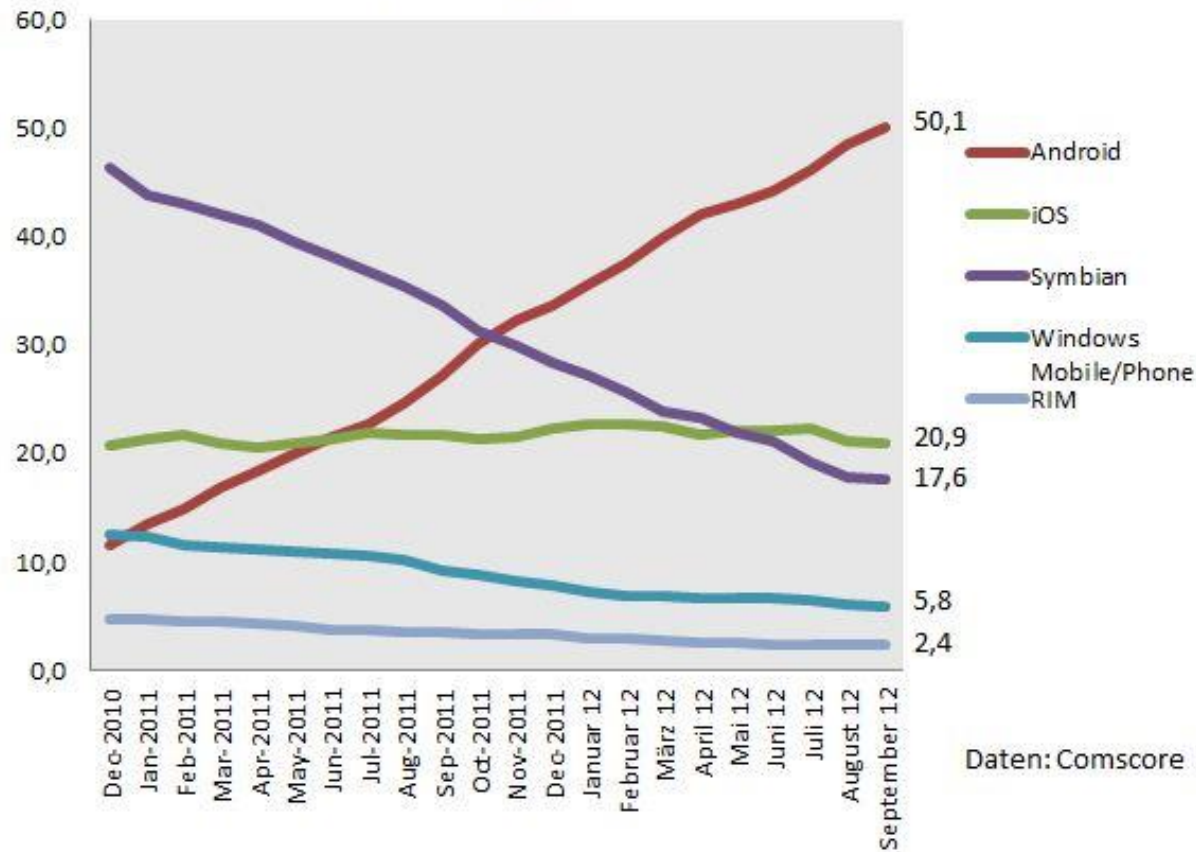
nielsen

Source: <http://www.nielsen.com/us/en/newswire/2012/nielsen-tops-of-2012-digital.html>

iOS & Android

Smartphone-Betriebssysteme in Deutschland

Anteile der bevorzugt eingesetzten Systeme in Prozent



Smartphone OS market in Germany (Schmidt, 2012)

iOS & Android

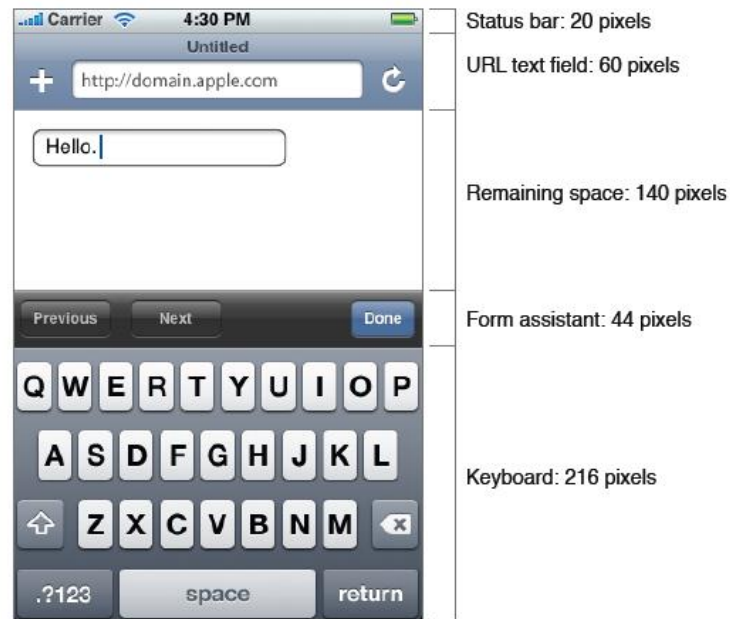
Two most popular mobile platforms



Official Design Guidelines: iOS

iOS Human Interface Guidelines

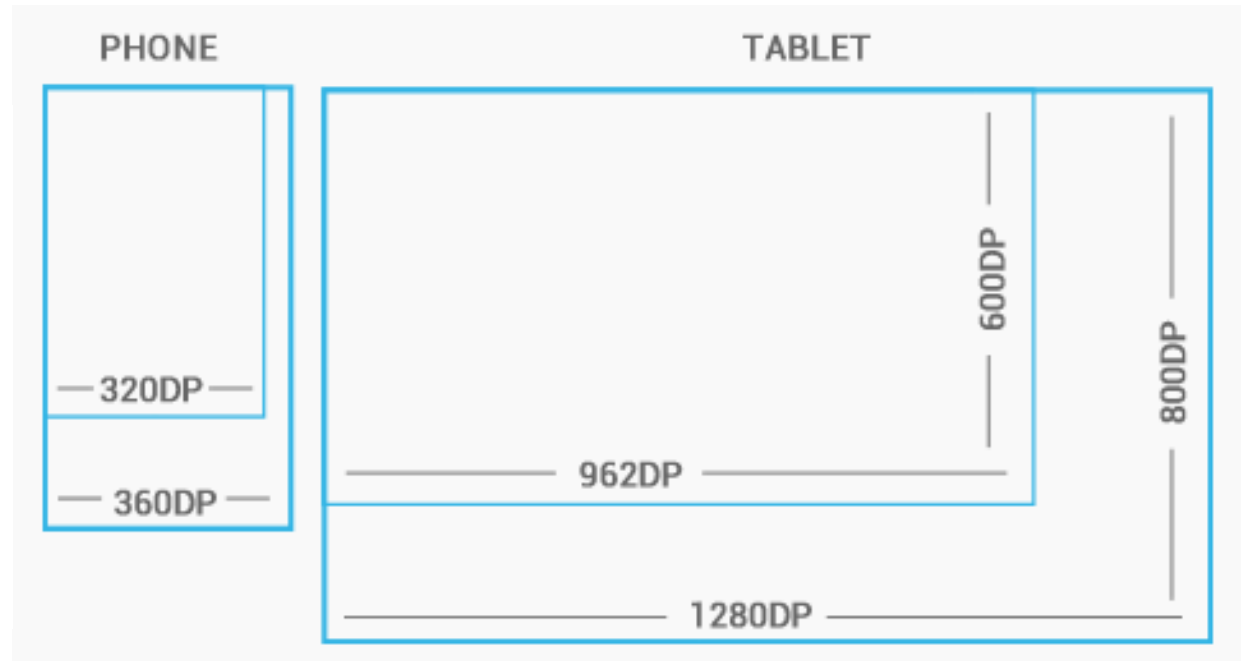
- <http://developer.apple.com/library/ios/documentation/UserExperience/Conceptual/MobileHIG/MobileHIG.pdf>
- <http://developer.apple.com/library/ios/#DOCUMENTATION/UserExperience/Conceptual/MobileHIG/Introduction/Introduction.html>



Official Design Guidelines: iOS

Design | Android Developers

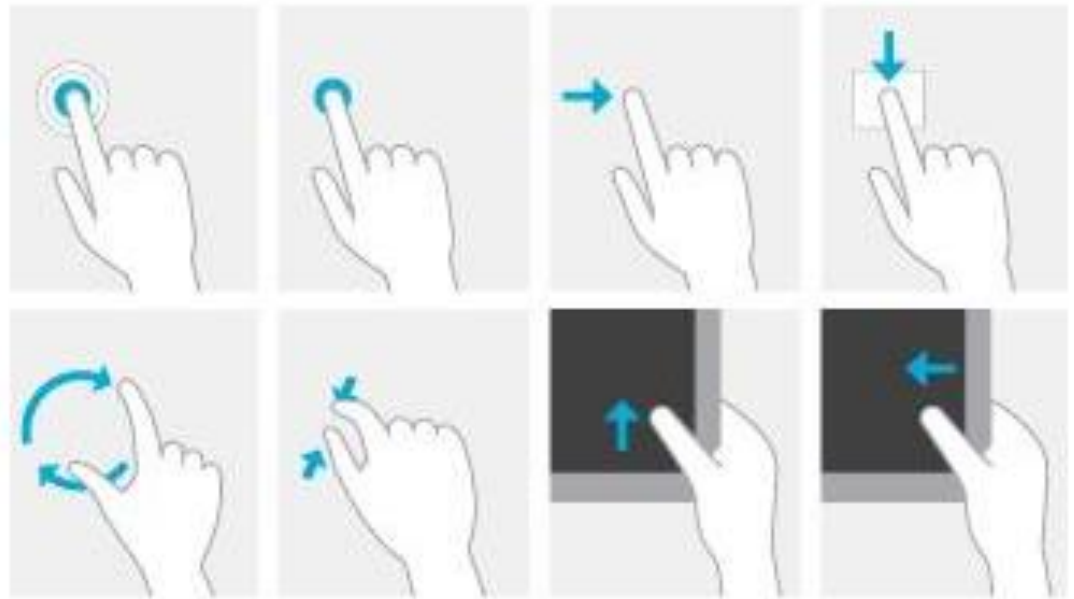
- <http://developer.android.com/design/index.html>



Official Design Guidelines: Windows

Windows Phone Dev Center

- <http://developer.windowsphone.com/en-us/design>



iOS & Android: Design Guidelines

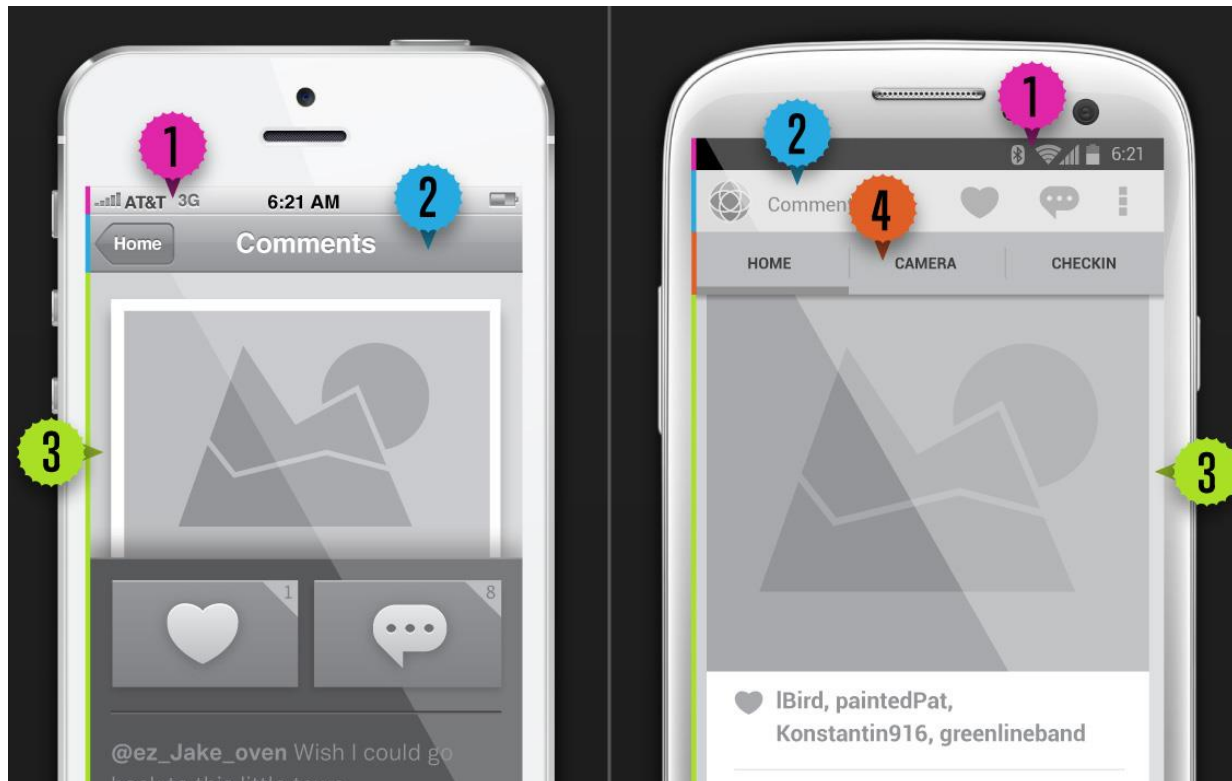


Retrieved and Modified from: (McKibben, n.d.)

iOS & Android: Design Guidelines - Retrieved and Modified from: (McKibben, n.d.)



iOS & Android: Design Guidelines - Retrieved and Modified from: (McKibben, n.d.)



#1 STATUS BAR

Contains

Battery charge, network connection, time

Things to note

It can be hidden but should only be done when the media being displayed needs the extra real estate.

#1 STATUS BAR

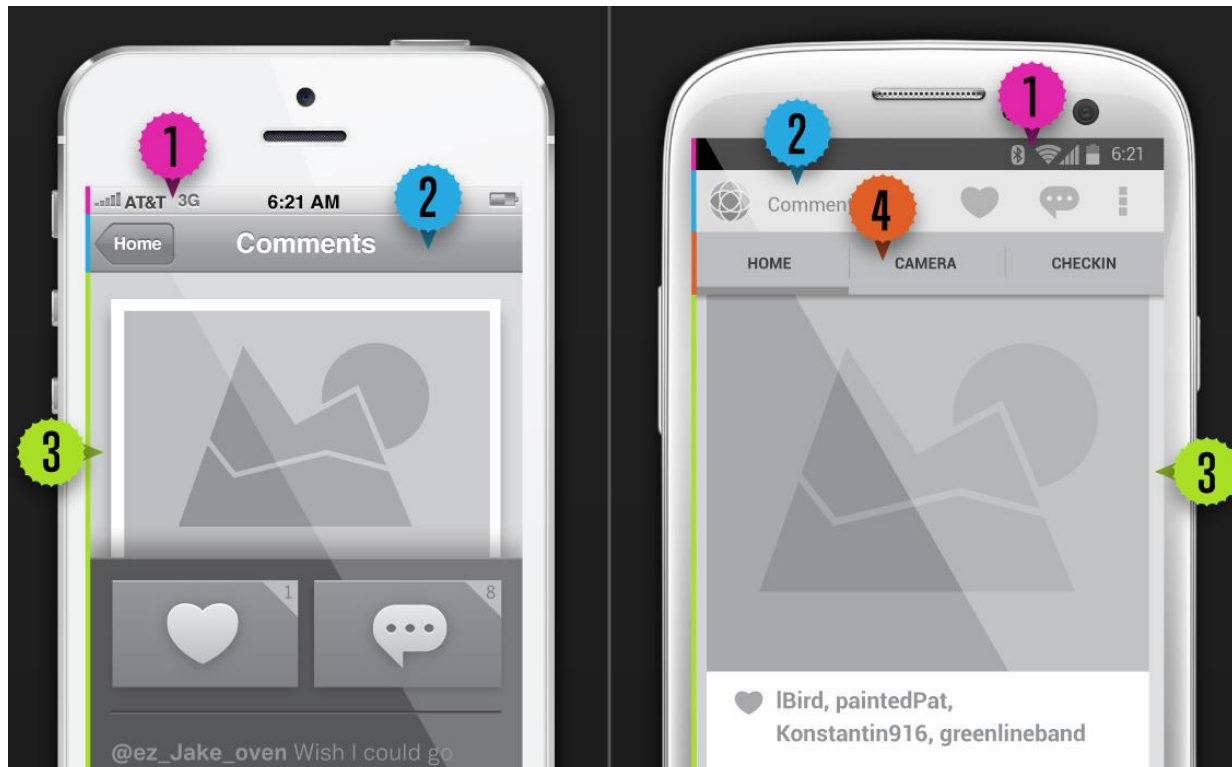
Contains

Battery charge, network connection, time

Things to note

It can be hidden but should only be done when the media being displayed needs the extra real estate.

iOS & Android: Design Guidelines - Retrieved and Modified from: (McKibben, n.d.)



#2 NAVIGATION BAR

Contains

Navigation controls (like the back button), screen title, content display controls (like filtering)

Things to note

If the screen title is too long to fit on the screen, it should be truncated—not scaled down in size.

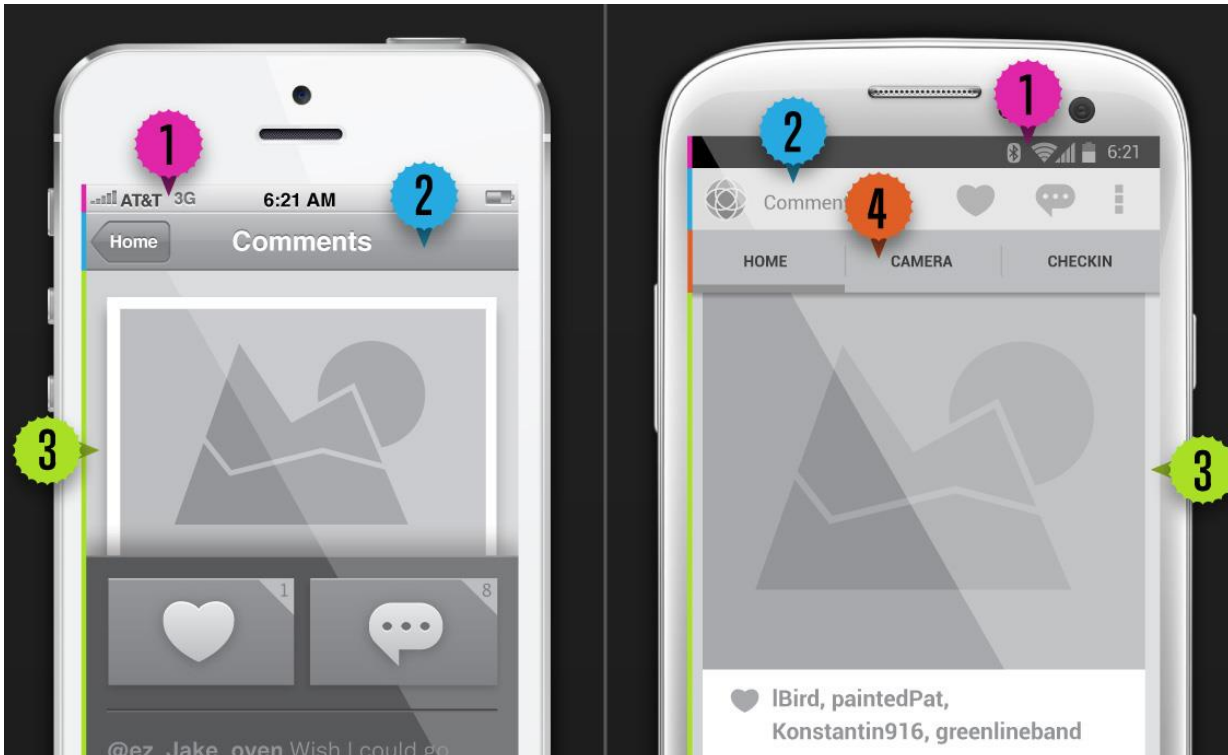
#2 MAIN ACTION BAR

Contains

Up button, app icon, spinner

Things to note

This bar is both a source of navigation as well as a toolbar for the displayed content.



#3 CONTENT DISPLAY

Contains

Standard and custom content views such as map view, page view, table view, web view, and collection view

Things to note

This is the most customizable area of the application. Typical screen views should remain as true as possible to the standard iOS screen designs in order to maximize user familiarity.

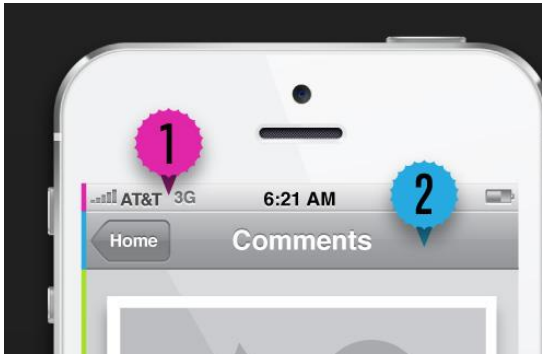
#3 CONTENT DISPLAY

Contains

Standard and custom content views such as map view, page view, table view, web view, and collection view

Things to note

This is the most customizable area of the application. Typical screen views should remain as true as possible to the standard android screen designs in order to maximize user familiarity.



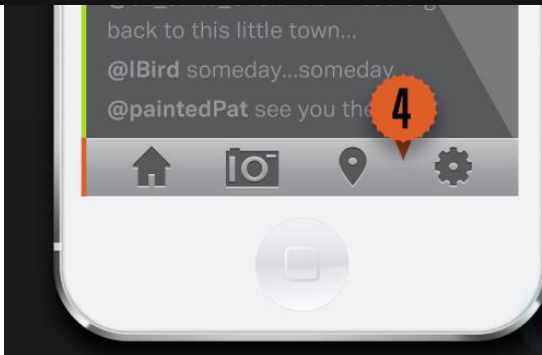
#4 TAB BAR / TOOLBAR

Contains

Tab style navigation or progress bar, activity indicator and/or other controls

Things to note

Tab bars are used as a main source of navigation and as such should be present on every screen (excluding some edge cases). Toolbars are only used when your application requires the user to edit the app's content view.



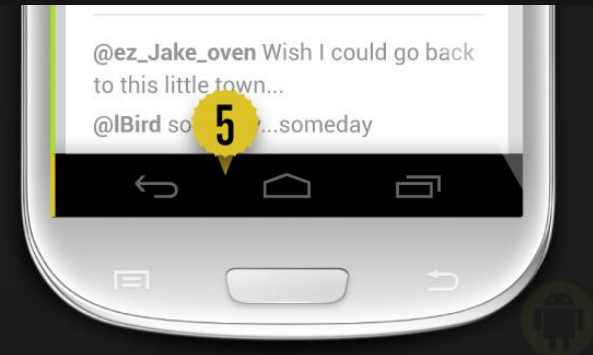
#4 ACTION BAR TABS

Contains

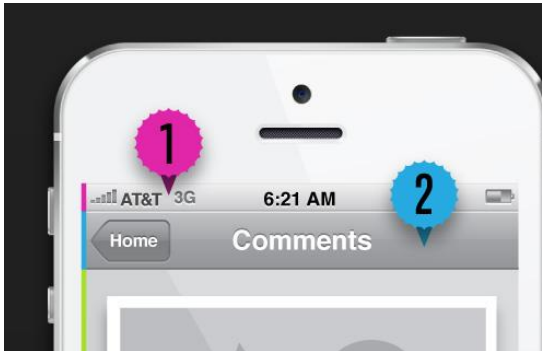
Tab style navigation

Things to note

You can choose between fixed and scrollable tabs for your action bar. Fixed allows the user to see all options at a glance while scrollable can support more views.



iOS & Android: Design Guidelines - Retrieved and Modified from: (McKibben, n.d.)



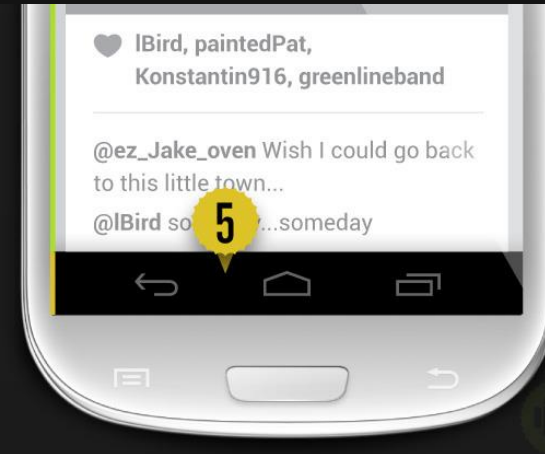
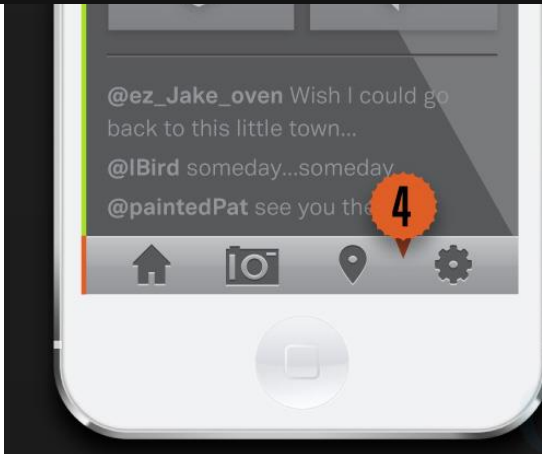
#5 NAVIGATION BAR

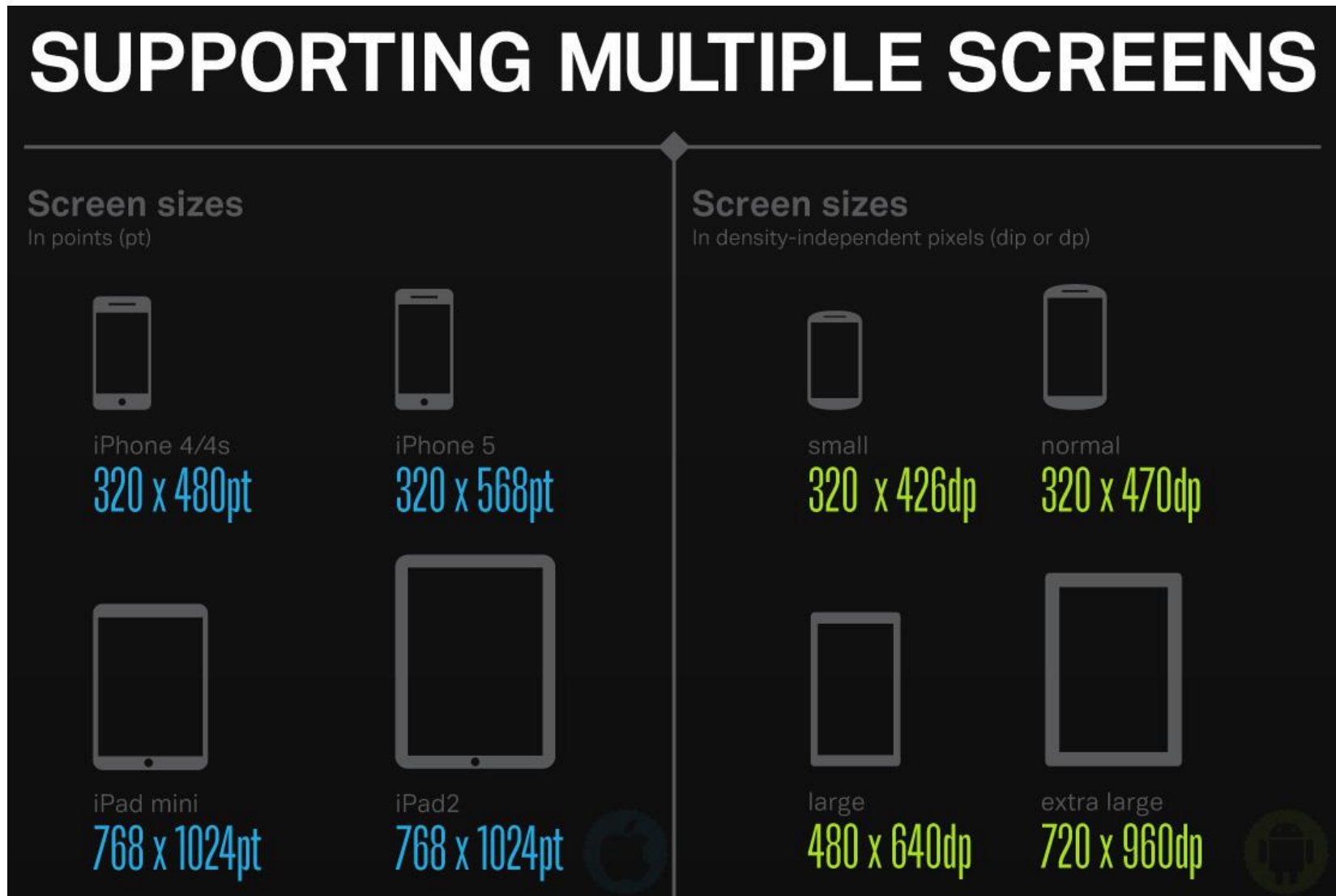
Contains

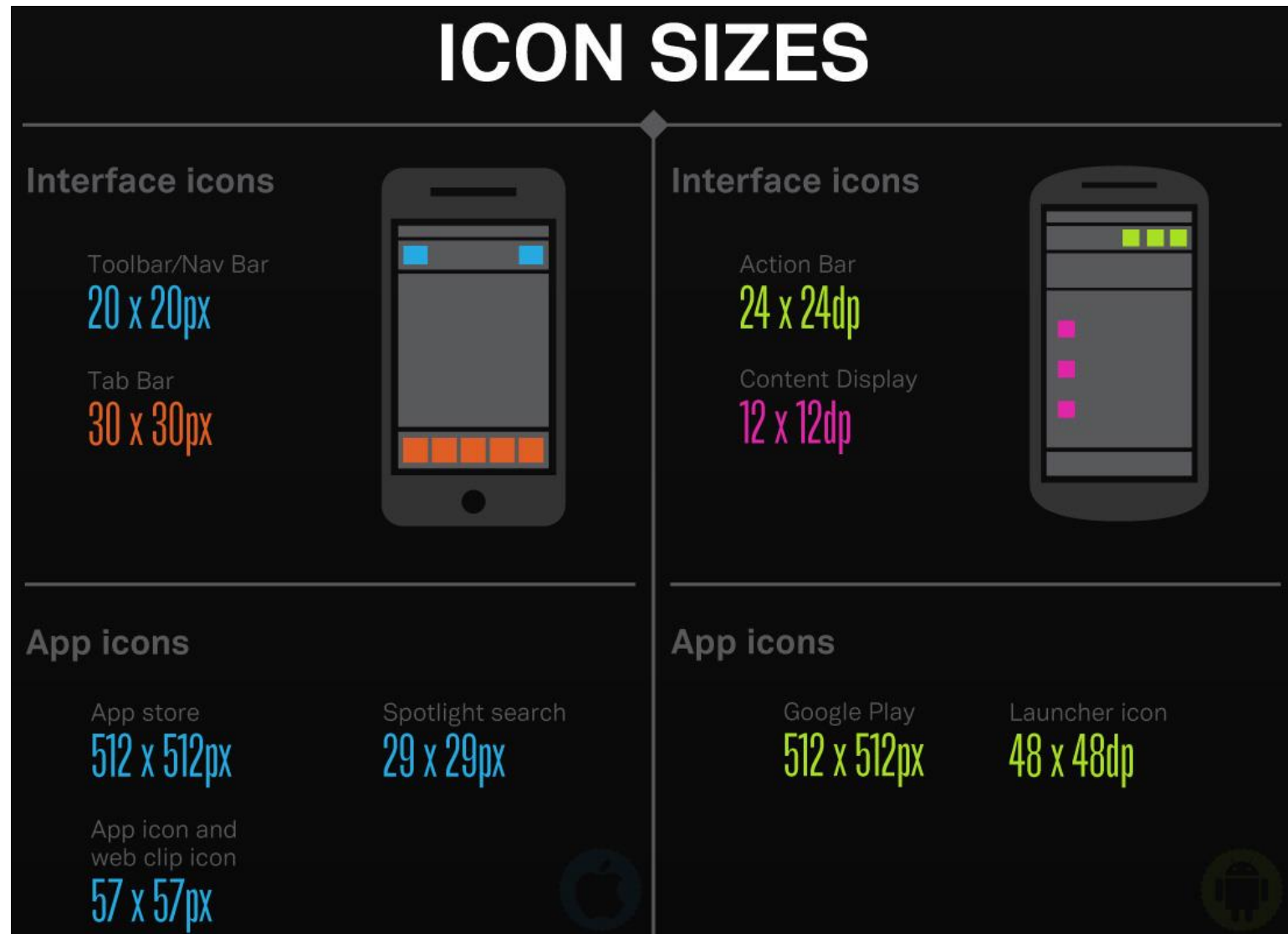
Back button, home button, and history button

Things to note

The nav bar is persistent across all views.







Retina support

For retina support, all you need to do is export all custom icons/graphics at 2x the regular size. If you are working with a bitmap program like photoshop, you will need to start at the 2x size and then scale down to the regular size.



2x

iPhone 4s,
iPhone 5
New iPad



1x

iPhone 4
iPad, iPad 2
iPad mini



Variable screen density support

In order to support all of the varying screen densities that run on it, Android groups them into four buckets LDPI, MDPI, HDPI, and XHDPI. The sizes listed on this doc support the MDPI bucket which is the most common screen density. Adjusting your custom graphics is as easy as scaling their sizes when you are exporting them:



2x

XHDPI
320dpi



1.5x

HDPI
240dpi



1x

MDPI
160dpi



0.75x

LDPI
120dpi



TOUCH GESTURES



touch



long press



double touch



flick/swipe



pinch close



pinch open



drag



shake device

Android & iOS: Differences



Android & iOS: Differences

Examples using

- HTC One V
 - Android 4.0.3 with HTC Sense 4.0
 - 480 × 800 pixels at 252 ppi
 - 3.7 in (94 mm)

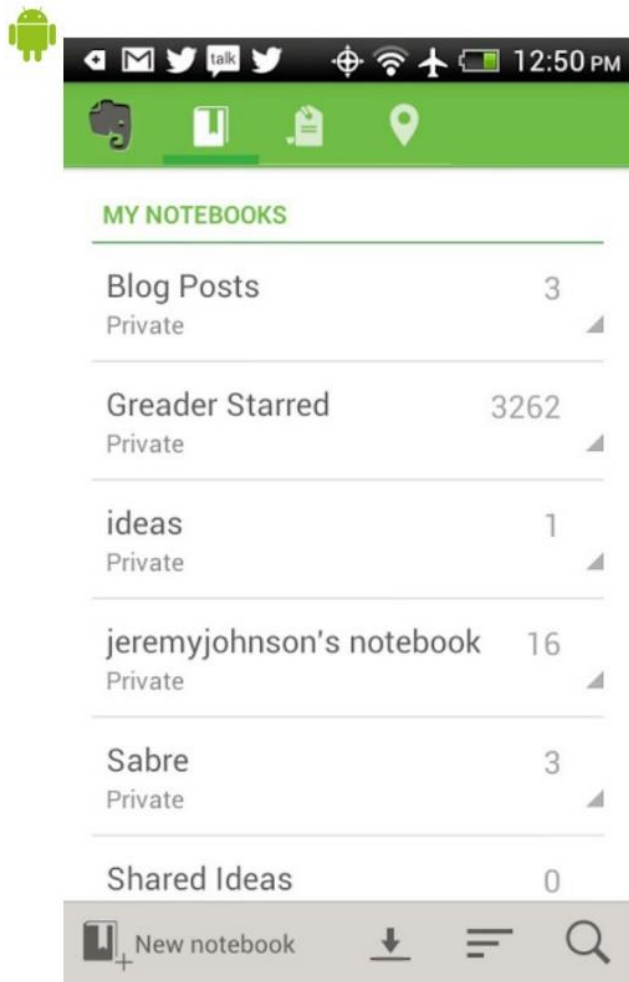
vs.

- iPhone 5
 - iOS 6.1.4
 - 640 × 1136 pixels at 326 ppi
 - 4 in (100 mm)

Retrieved and Modified from: (Johnson, 2013)

Android vs iPhone - Differences - Retrieved and Modified from: (Johnson, 2013)

Evernote

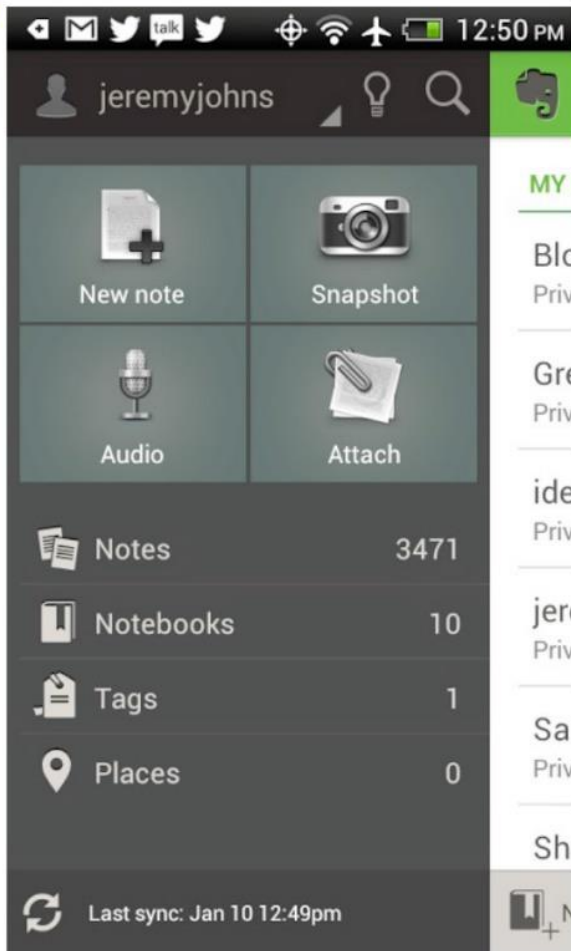


NOTES

- » Android app cleaner, less hidden UI
- » iOS using skeuomorphic design
- » Android app more branded to Evernote

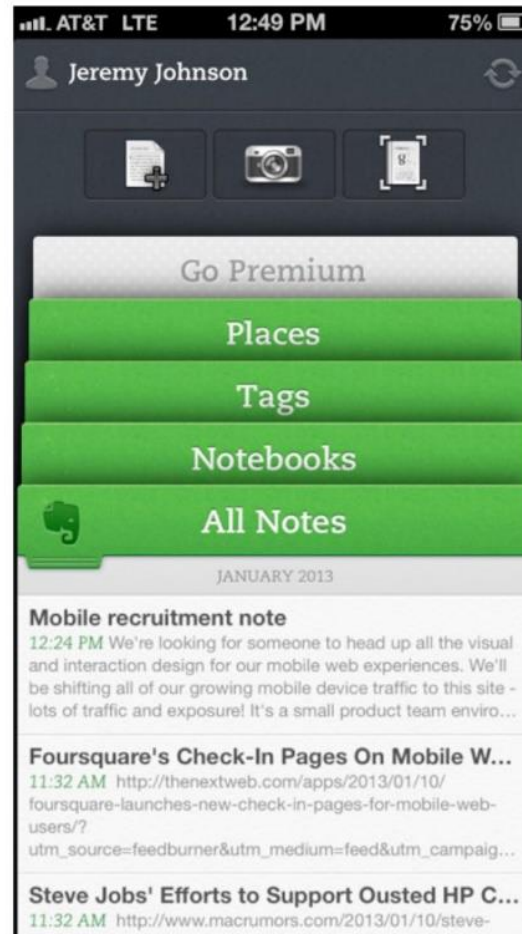
Android vs iPhone - Differences - Retrieved and Modified from: (Johnson, 2013)

Evernote



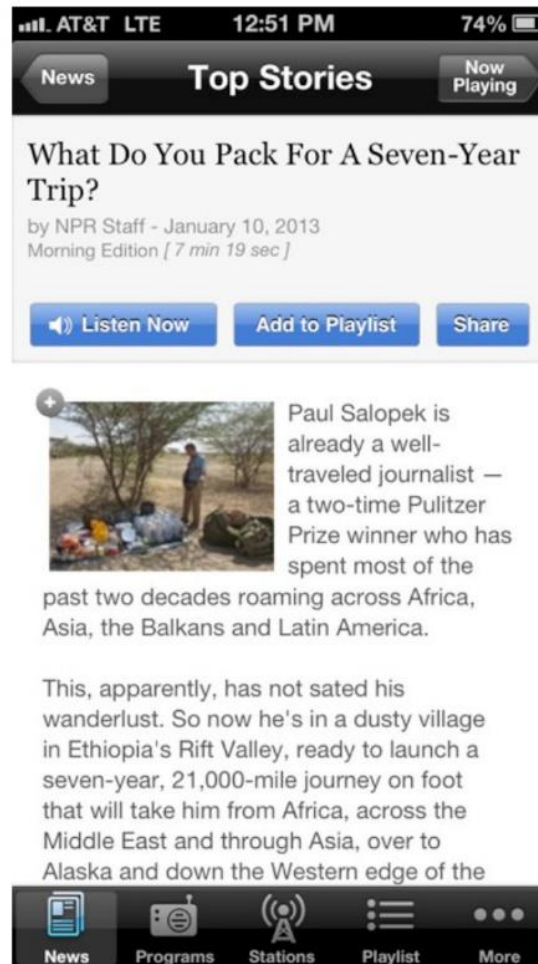
NOTES

- » Android uses the more standard “left side menu”
- » Android is using the “notch menu”



Android vs iPhone - Differences - Retrieved and Modified from: (Johnson, 2013)

NPR

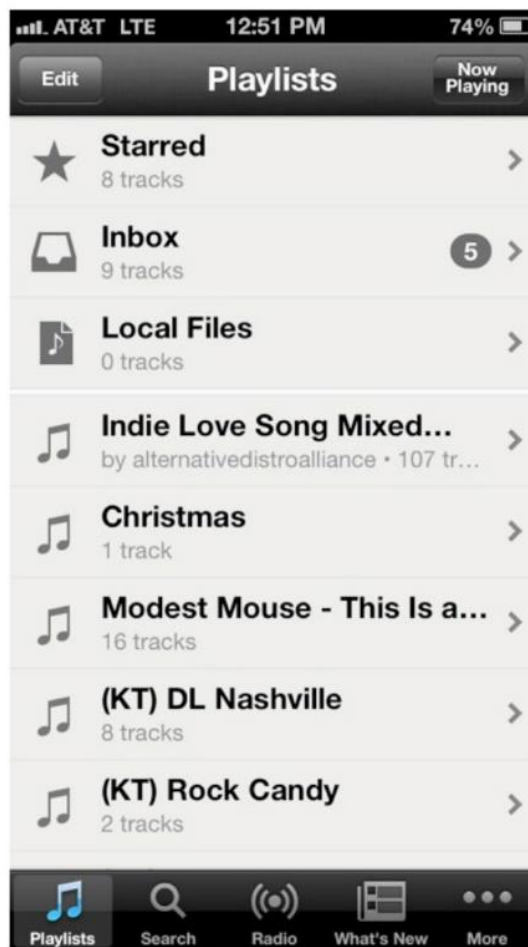
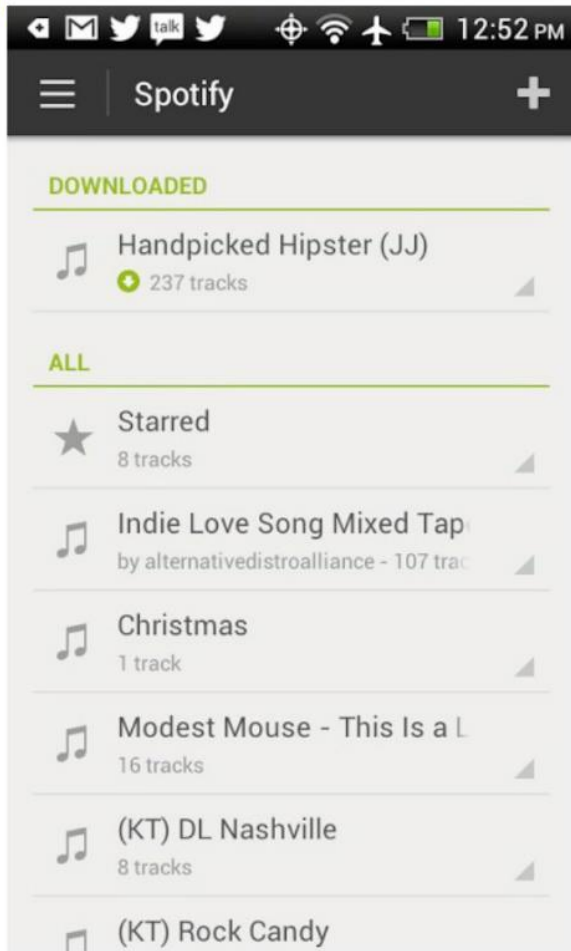


NOTES

- » Android using notch menu
- » I like the "now playing" placement on Android
- » Android has more branding

Android vs iPhone - Differences - Retrieved and Modified from: (Johnson, 2013)

Spotify



NOTES

- » Android has left slide menu
- » iOS is using more standard iOS components

Android vs iPhone - Differences - Retrieved and Modified from: (Johnson, 2013)

Spotify

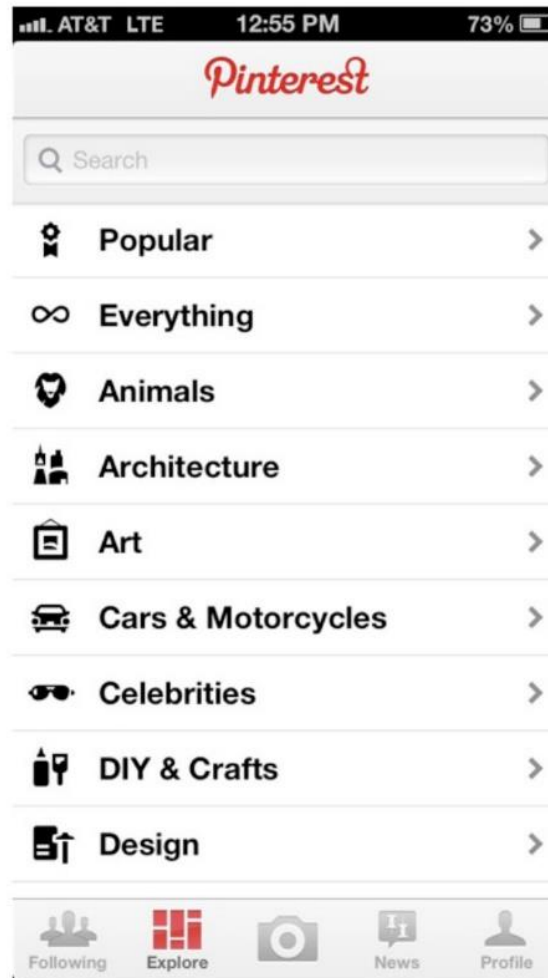
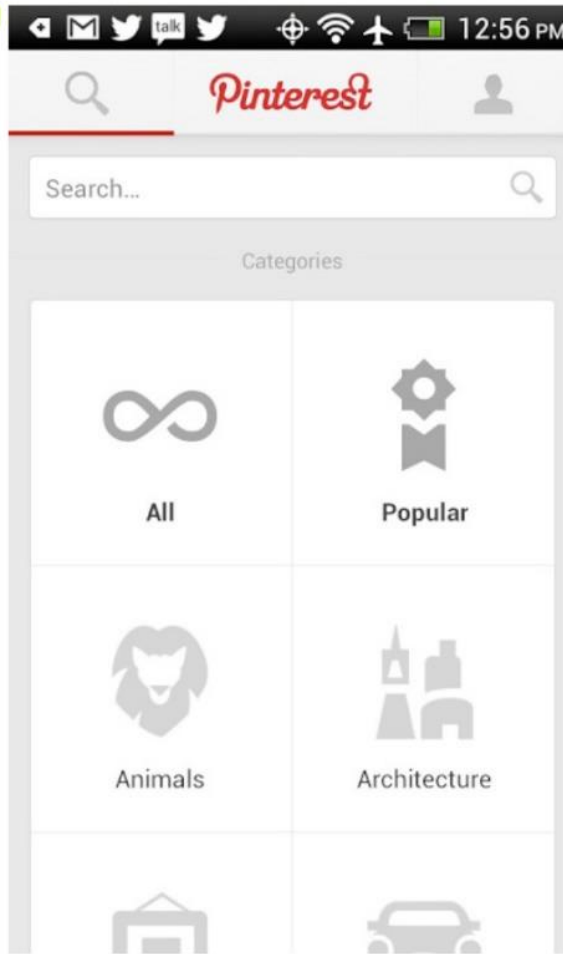


NOTES

- » iOS using more standard iOS components
- » I like the mixed search results from Android
- » Android has more branding

Android vs iPhone - Differences - Retrieved and Modified from: (Johnson, 2013)

Pinterest

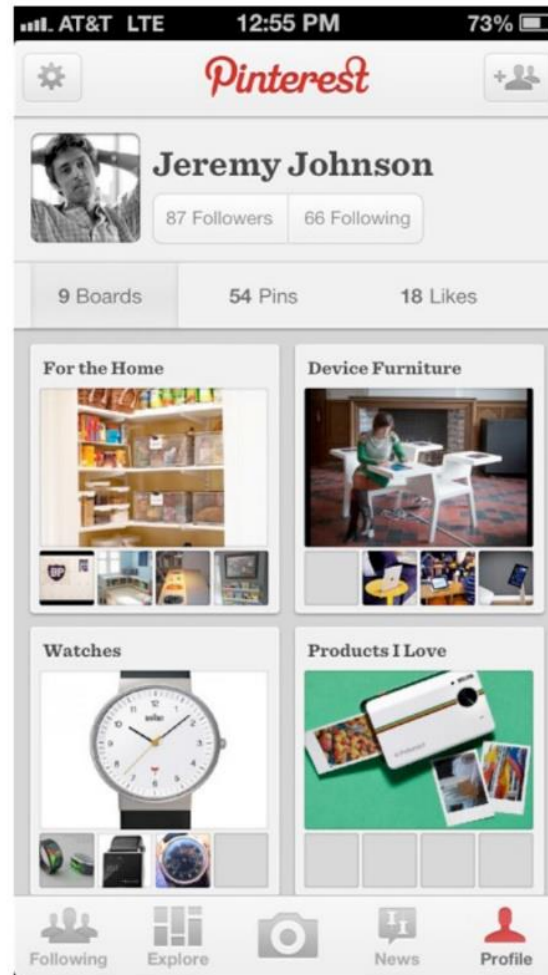


NOTES

- » iOS uses more standard navigation elements
- » Android screen is visually nicer

Android vs iPhone - Differences - Retrieved and Modified from: (Johnson, 2013)

Pinterest



NOTES

- » iOS profile more visual - has news feed in a different area
- » Android style, again blocky
- » Search more noticeable on Android
- » Android using the thin underline to show selected nav item

Android vs iPhone - Differences - Retrieved and Modified from: (Johnson, 2013)

Twitter

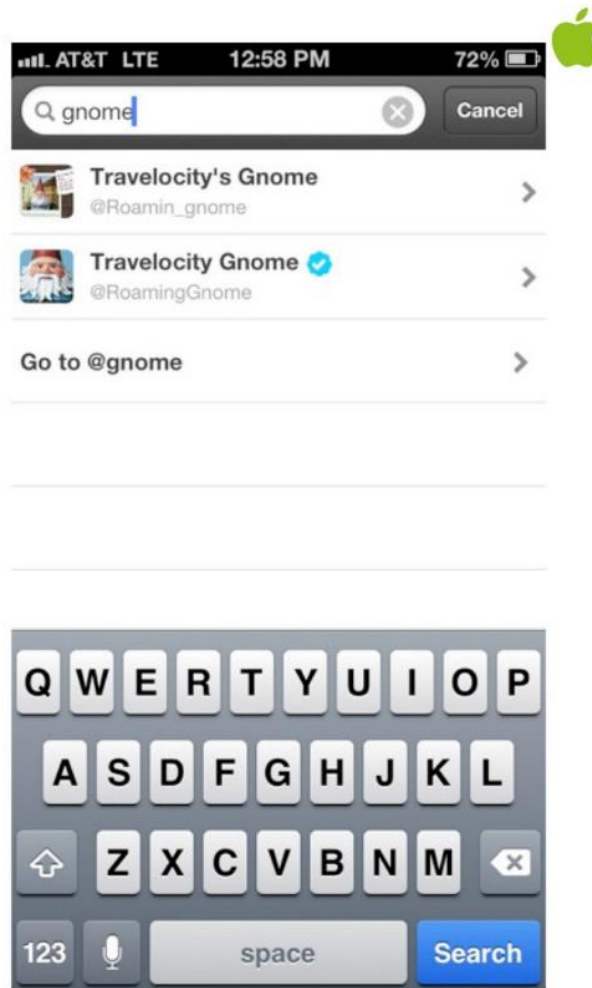
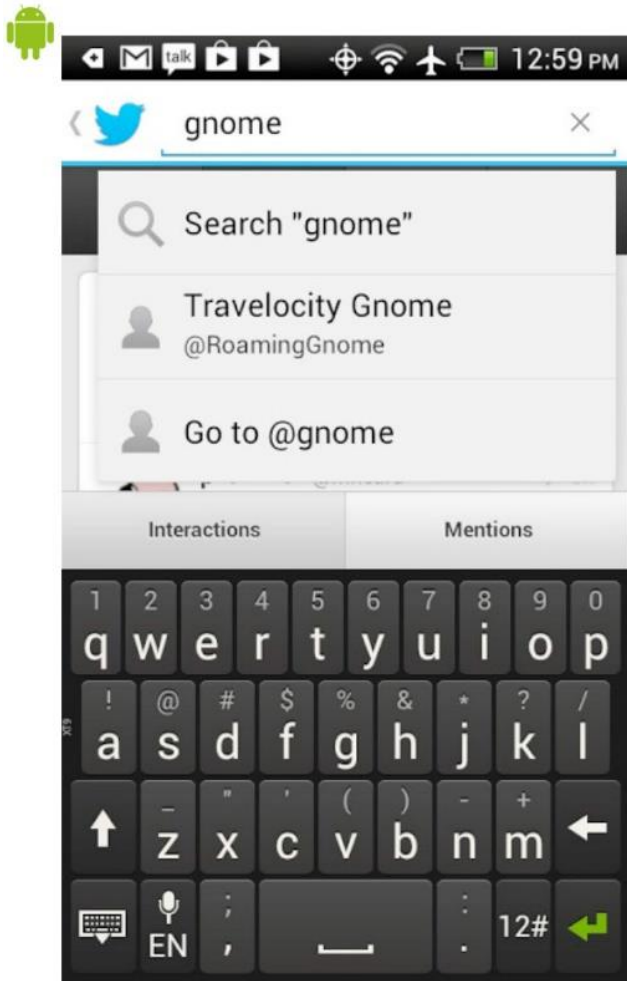


NOTES

- » Twitter took the “move the iOS bar to the top” shortcut for Android
- » More branding on Android
- » Seeing a lot of “pull to search” on iOS vs. having a search UI element always visible on Android

Android vs iPhone - Differences - Retrieved and Modified from: (Johnson, 2013)

Twitter

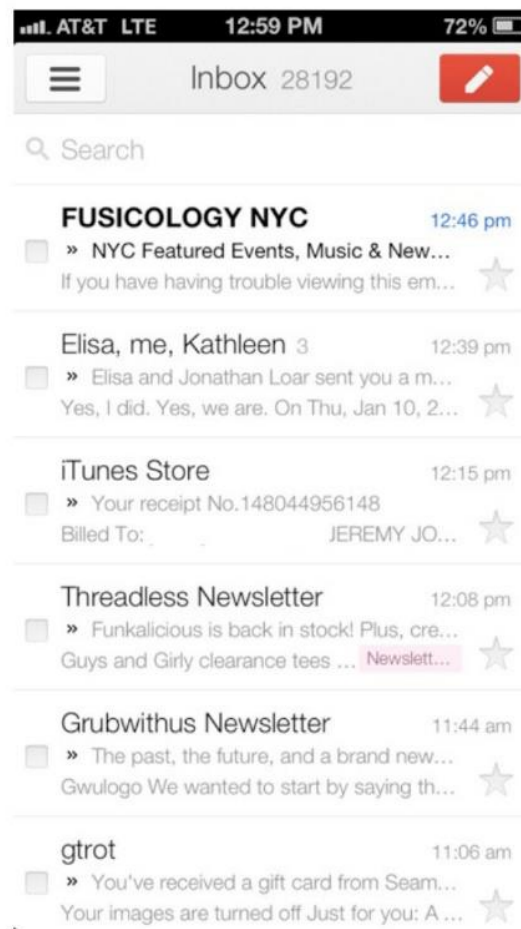
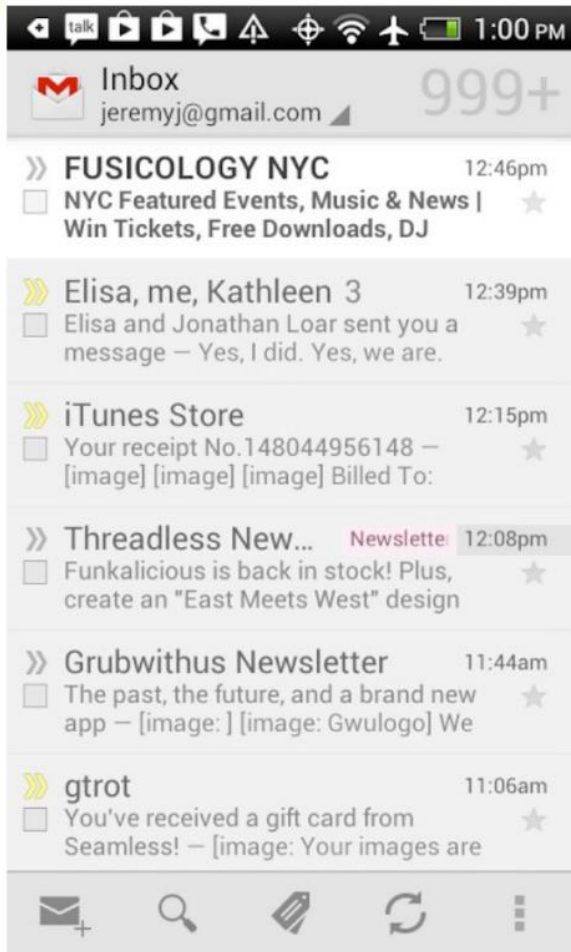


NOTES

- » Android uses logo with ">" instead of iOS's cancel button
- » iOS search is more visual

Android vs iPhone - Differences - Retrieved and Modified from: (Johnson, 2013)

Gmail

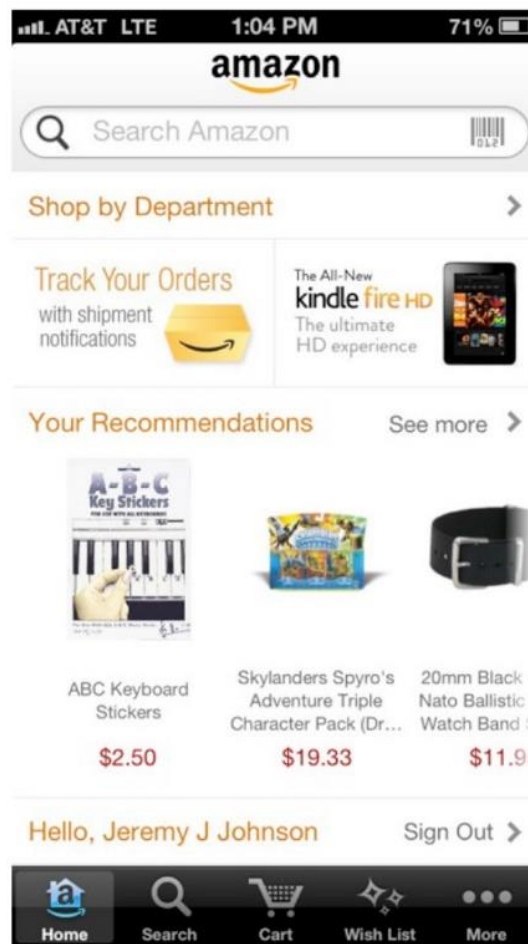
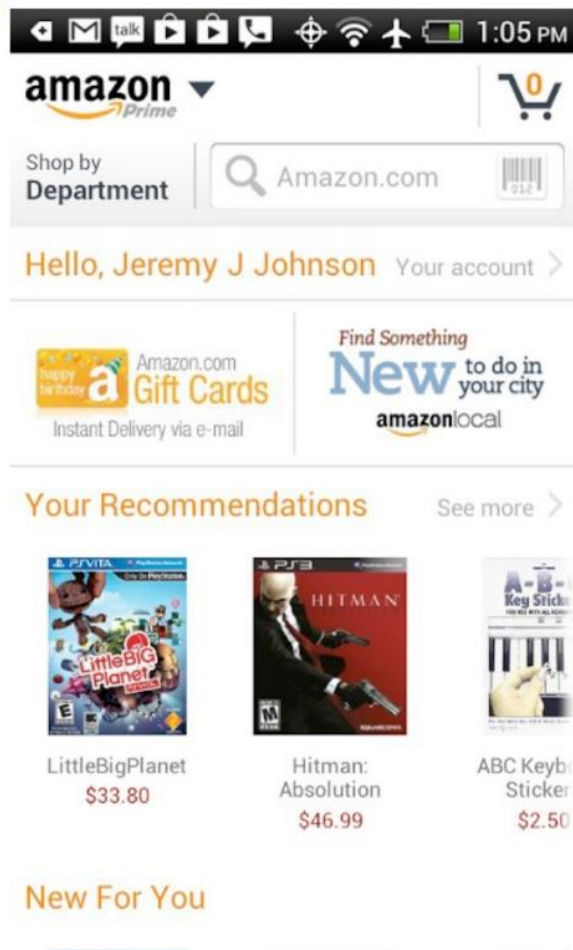


NOTES

- » Very different layouts
- » On Android Google kept the Android specific pattern to "notch" the username
- » Almost reverse - Android has a row of icons at the bottom where the iOS does not. You could argue that the functionality is so different from standard iOS this bar would confuse on an iPhone.

Android vs iPhone - Differences - Retrieved and Modified from: (Johnson, 2013)

Amazon

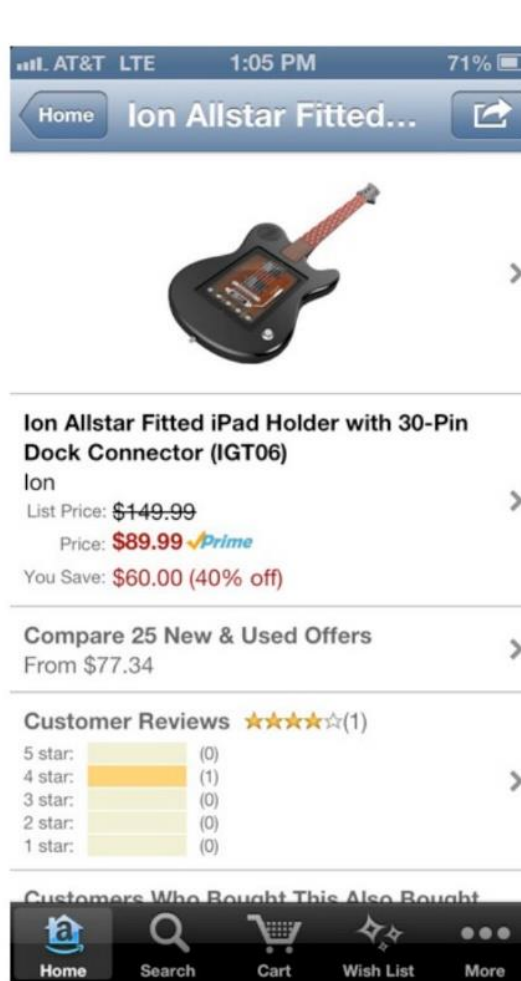
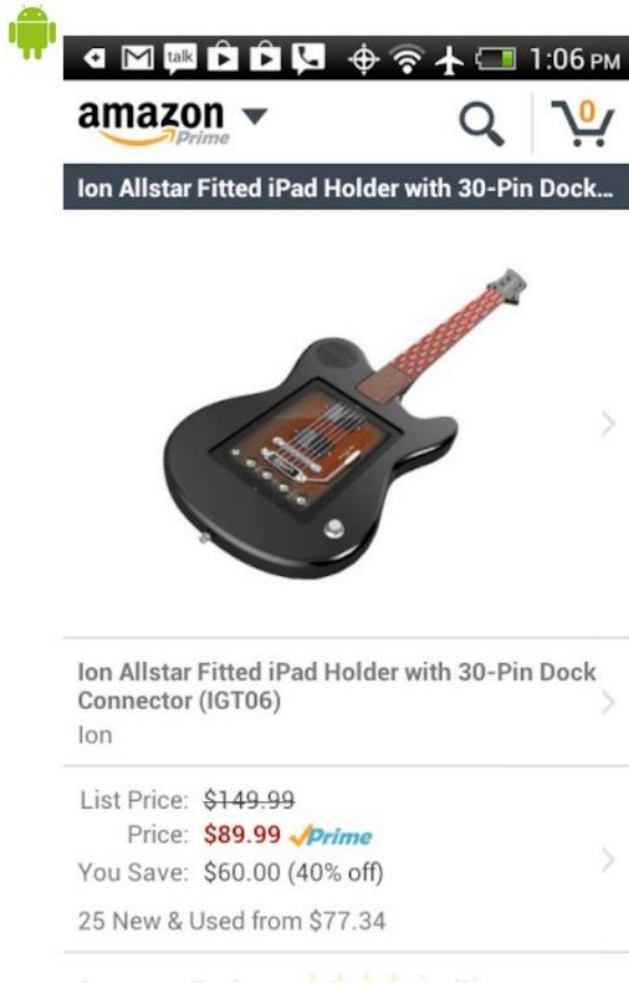


NOTES

» Cart and logo / nav flyout on Android is closer to the Amazon website (brand patterns vs. OS patterns)

Android vs iPhone - Differences - Retrieved and Modified from: (Johnson, 2013)

Amazon

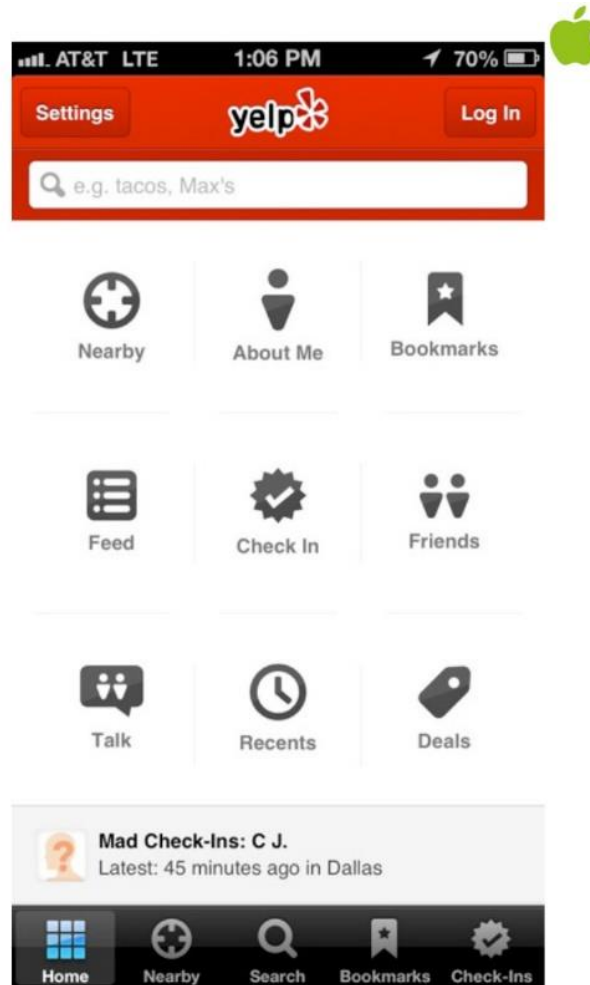
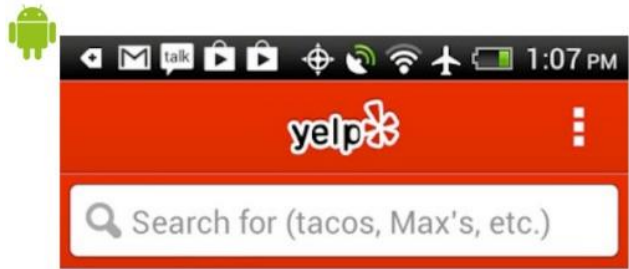


NOTES

» More branding on the Android device

Android vs iPhone - Differences - Retrieved and Modified from: (Johnson, 2013)

Yelp

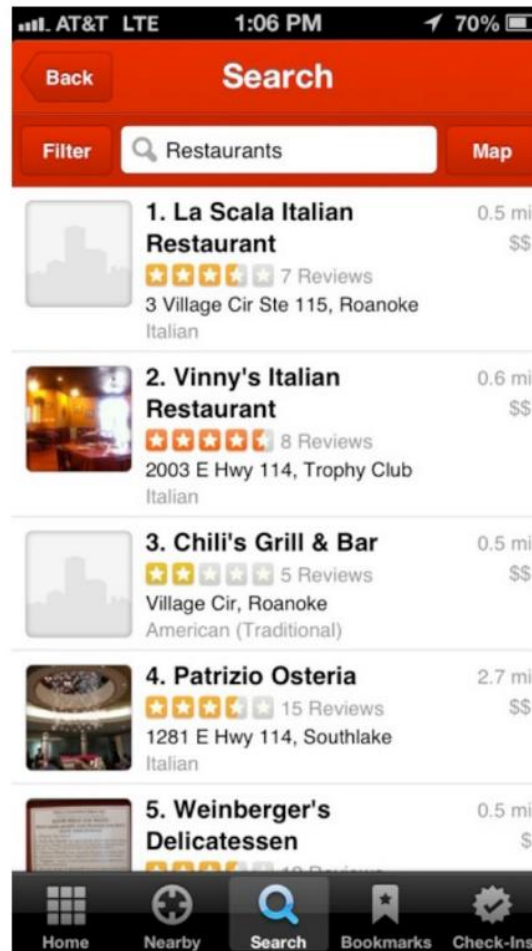
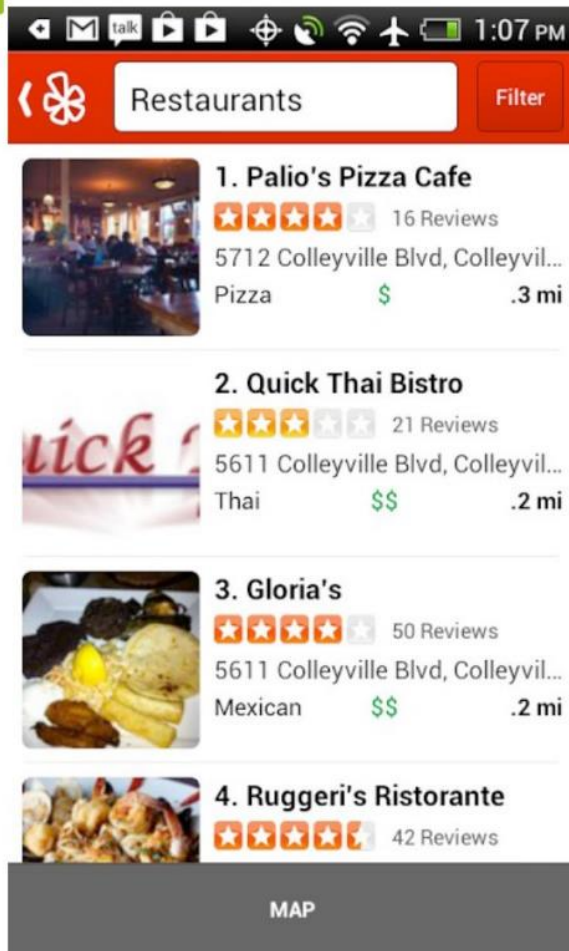


NOTES

» Android combined buttons into the “three dot” menu

Android vs iPhone - Differences - Retrieved and Modified from: (Johnson, 2013)

Yelp

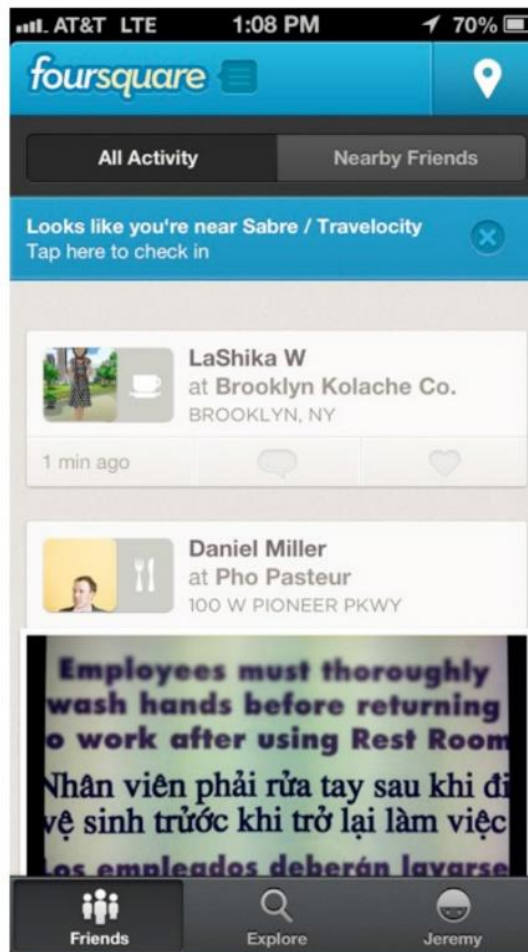
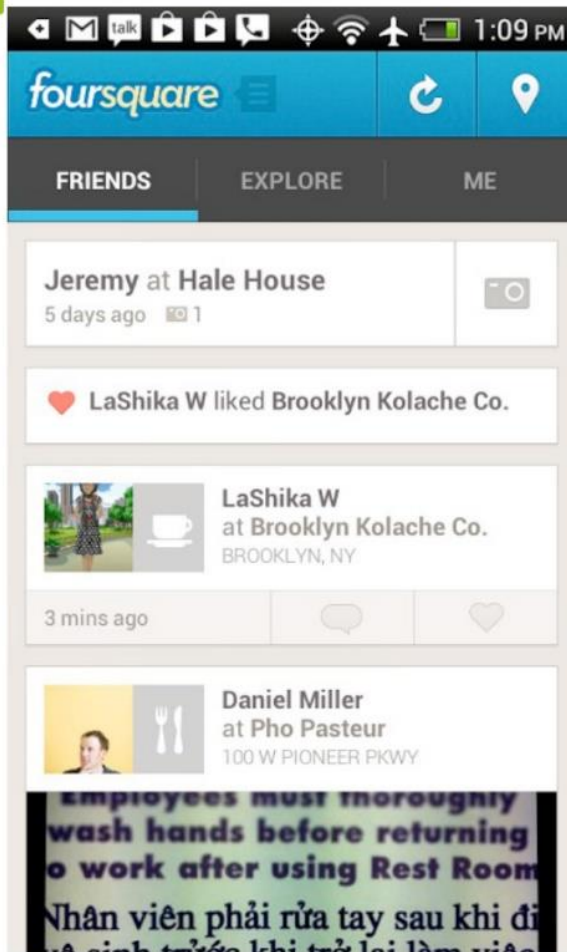


NOTES

- » More branding on the Android
- » Obviously trying to keep the apps very close to the same design
- » Using the Android ">" logo as a back button

Android vs iPhone - Differences - Retrieved and Modified from: (Johnson, 2013)

foursquare

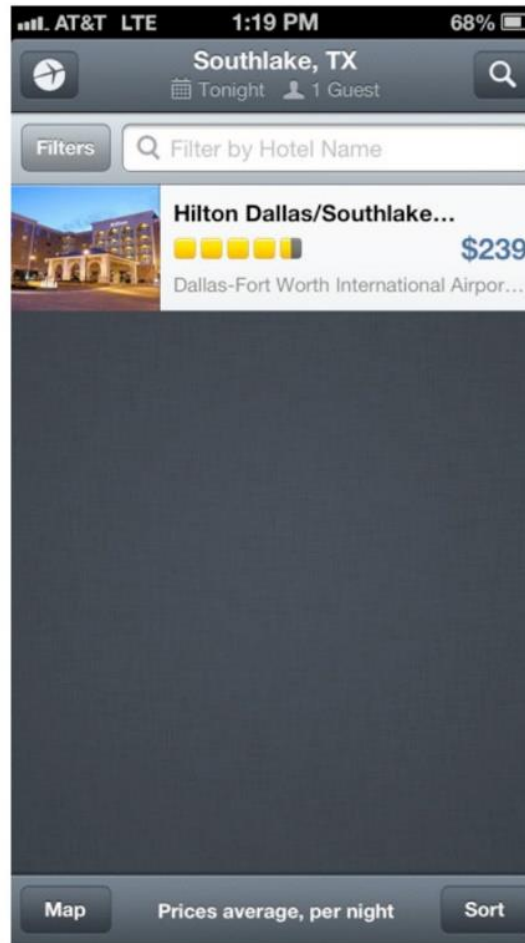
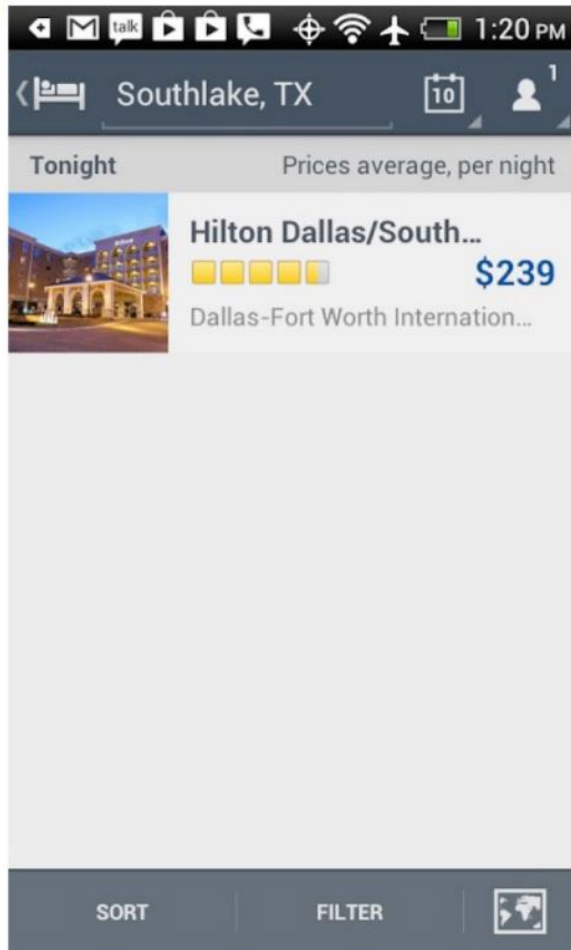


NOTES

- » Very branded app on both OSes
- » Android using the thin underline to show selected nav item

Android vs iPhone - Differences - Retrieved and Modified from: (Johnson, 2013)

Expedia

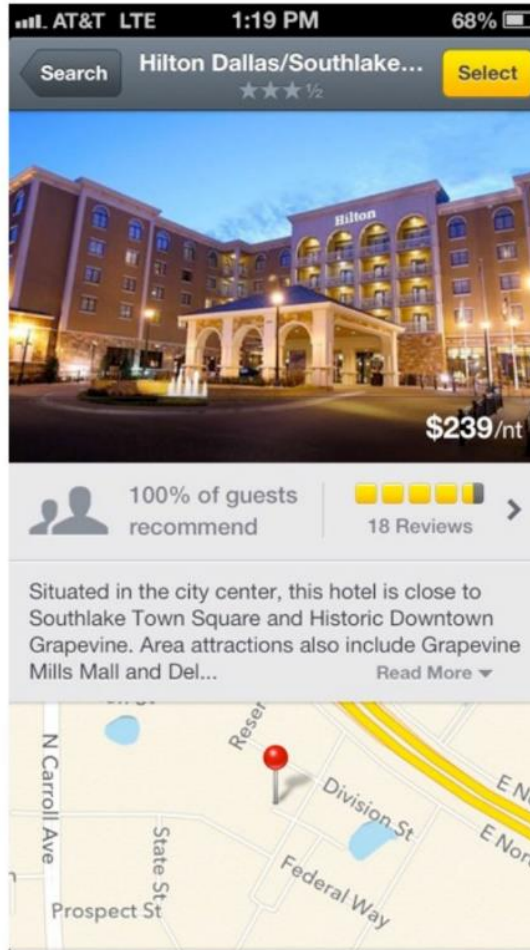
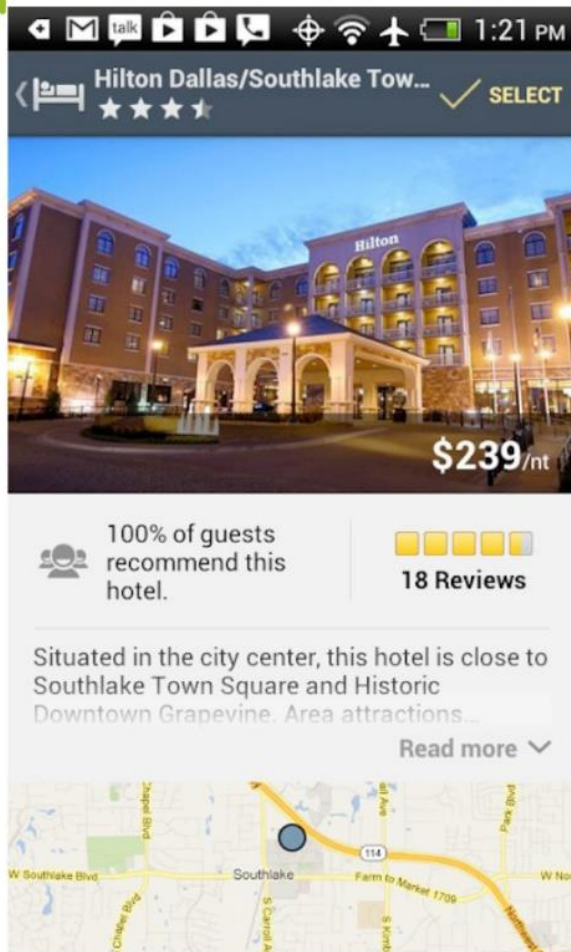


NOTES

- » Android has the standard back, search area, and notches that's seen across many modern Android apps

Android vs iPhone - Differences - Retrieved and Modified from: (Johnson, 2013)

Expedia

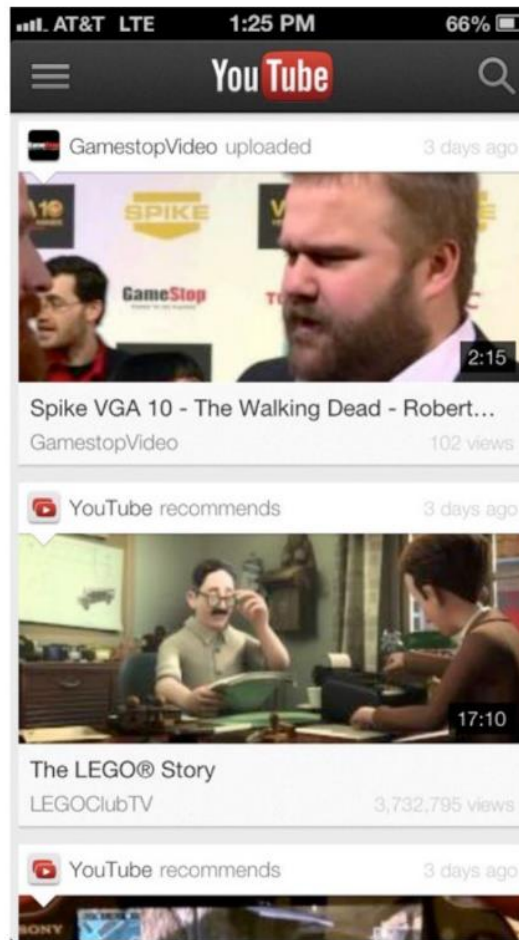
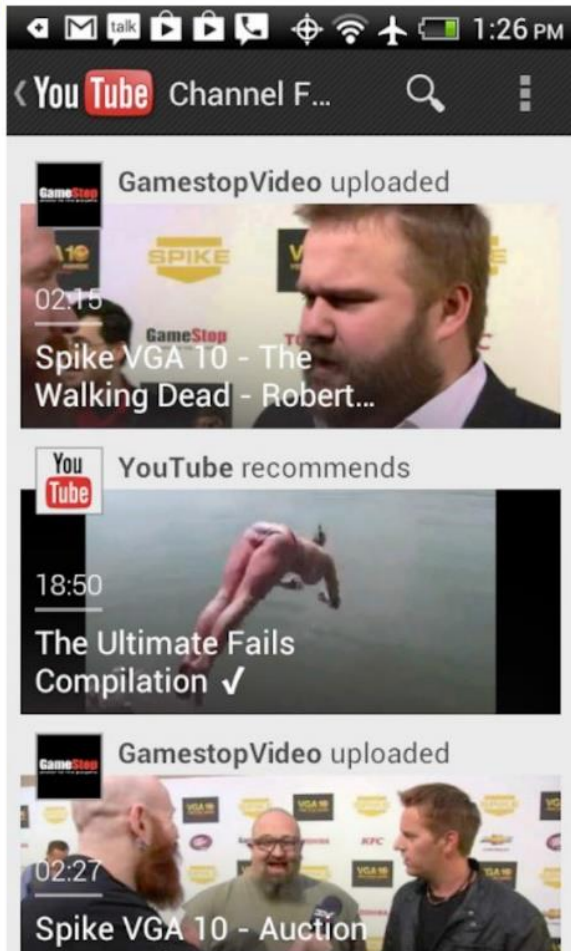


NOTES

- » Very similar app across OSes
- » Android design tries to stay away from buttons (Following the "Buttons are a Hack" philosophy?)

Android vs iPhone - Differences - Retrieved and Modified from: (Johnson, 2013)

YouTube



NOTES

- » Similar branding, but slightly different visual placement of elements
- » This case, the iOS gets the left nav, and the Android does not

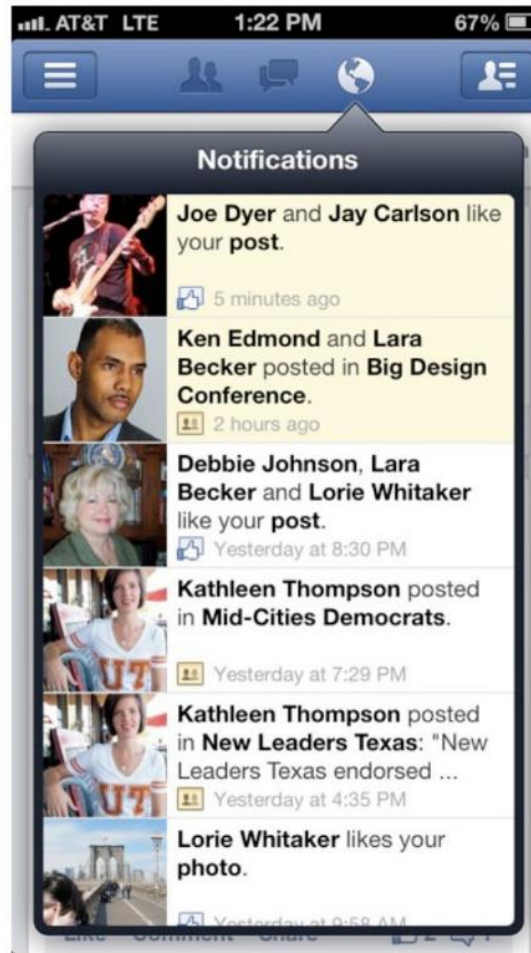
Android vs iPhone - Differences - Retrieved and Modified from: (Johnson, 2013)

Facebook



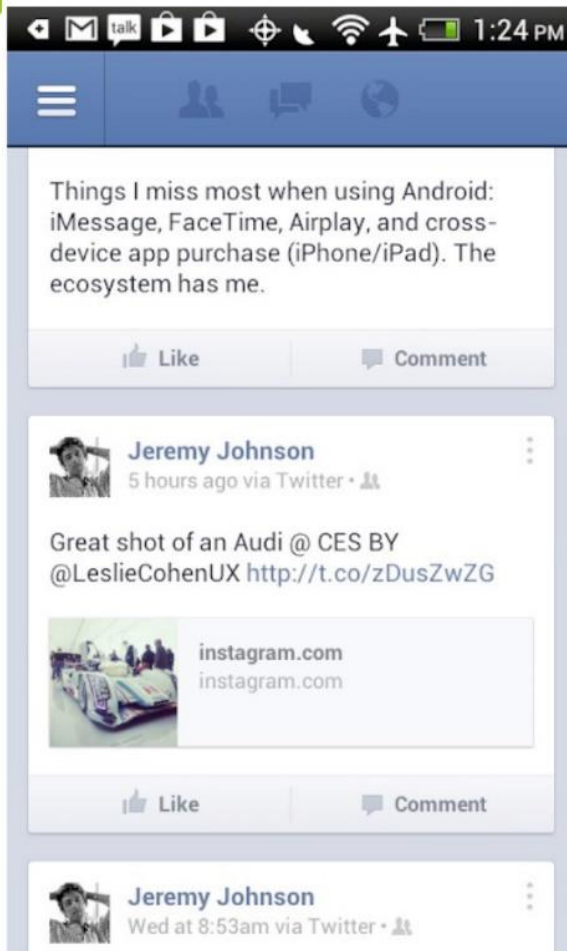
NOTES

- » A more blocky design on the Android app
- » Apps very similar



Android vs iPhone - Differences - Retrieved and Modified from: (Johnson, 2013)

Facebook

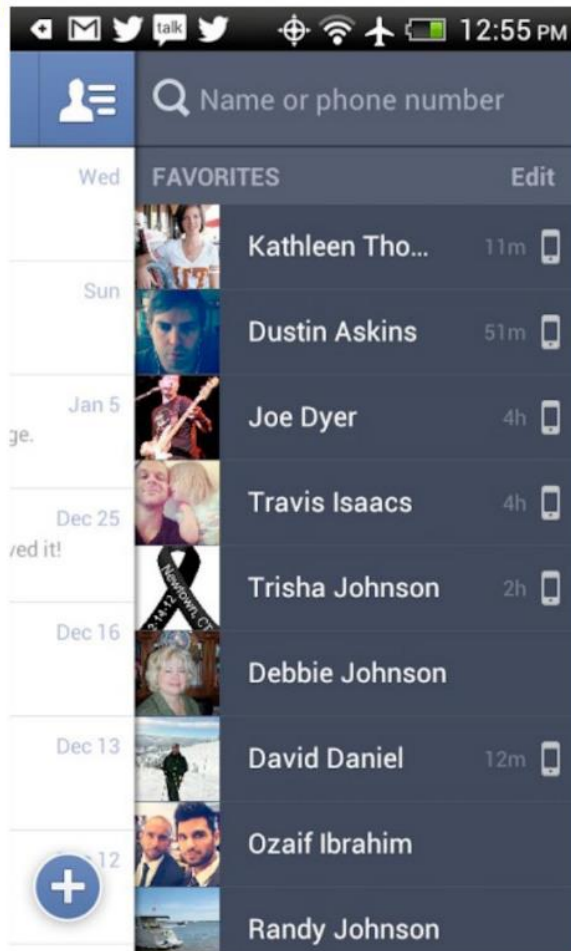


NOTES

- » Android has larger hit areas
- » Facebook moved the "three dot" menu to iOS
- » Apps are very similar

Android vs iPhone - Differences - Retrieved and Modified from: (Johnson, 2013)

Facebook



NOTES

- » Facebook tends to try to copy pixel for pixel when they can.
- » Android version has a blocky design - which is the current design trend (think Windows 8).

iOS & Android

Which one is better?

It is just a matter of taste



Mockup

How to do

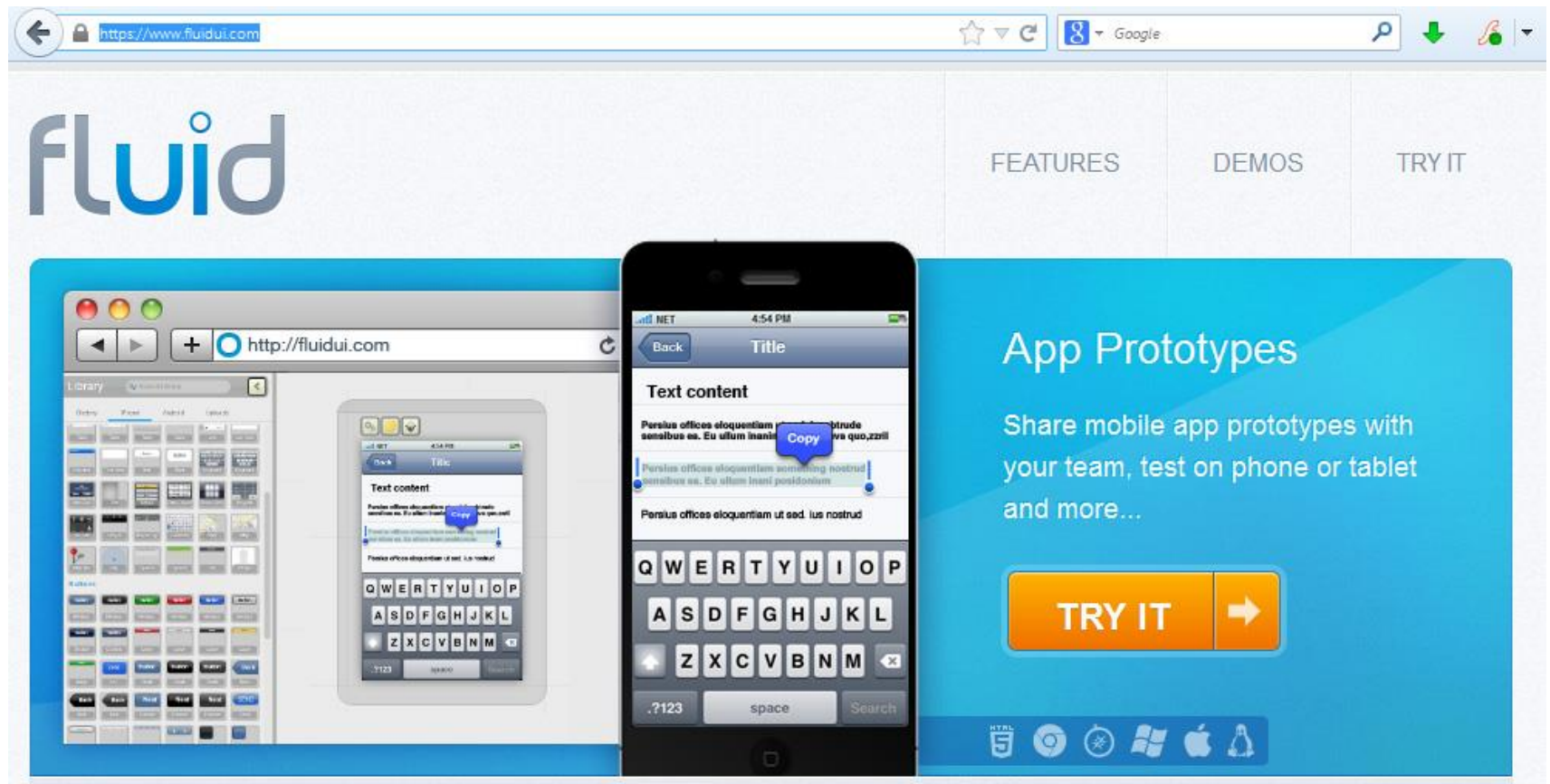


Mockups

- Online Tools
- Photoshop Templates
- Vector Templates

Mockup

Online Tool: fluid <https://www.fluidui.com/>



Mockup

Desktop Tool: pencil <http://pencil.evolus.vn/>



The screenshot shows the Pencil Project website on the left and a mockup of a medical application on the right. The website has a blue header with the Pencil Project logo and navigation links: Home, Features, Downloads, Stencils & Templates, and Wiki. Below the header, there is a section titled "An open-source GUI prototyping tool that's available for ALL platforms." followed by a description of Pencil's purpose. A download button for Windows (Version 2.0.3, exe, ~22 MB) is visible. The mockup on the right shows a tablet displaying a medical application interface with various fields, buttons, and a flowchart.

PENCIL PROJECT

An open-source GUI prototyping tool that's available for ALL platforms.

Pencil is built for the purpose of providing a free and open-source GUI prototyping tool that people can easily install and use to create mockups in popular desktop platforms.

The latest stable version of Pencil is **2.0.3** with **many enhancements and bug-fixes**.

Download for Windows
Version 2.0.3, exe, ~22 MB

For other platforms?
[See all downloads »](#)

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Project News

November 28th, 2012 - Pencil version 2.0.3 has been released with minor enhancements and bug fixes.

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Mockup

iOS GUI Template

- iPhone GUI PSD

<http://www.teehanlax.com/tools/iphone/>

- Apple iPhone 5 Vectorized Mockup

<http://pixelb.in/apple-iphone-5-vectorized-mockup-410/>

and

- <http://bit.ly/11YYbHY>

Mockup

Android GUI Template

- Download | Android Developers
<http://developer.android.com/design/downloads/index.html>
 - Font: Roboto <http://www.fontsquirrel.com/fonts/roboto>
 - Android UI Design Kit PSD 4.2
<http://www.mediafire.com/download/bw96xx77k5az549/Android+UI+Design+Kit+PSD+4.2.zip>
- and
- <http://bit.ly/12NjzN6>

Overview

Tips and Guidelines



Overview

General Tips



Prototype Presentation: Tips

UI Design Guidelines for Handheld Devices

(Stone & Open University, 2005, p. 384) (adapted from Weiss, 2002, pp. 66–70)

- **"Select" versus "Type"**

Text entry on a small device can be difficult. Where possible, and where it is appropriate to the application, the user should be offered a selection option rather than be made to enter text. Finding the best solution will require both thought and user testing.

Prototype Presentation: Tips

UI Design Guidelines for Handheld Devices

(Stone & Open University, 2005, p. 384) (adapted from Weiss, 2002, pp. 66–70)

- **Be consistent**

Ensure that the same terminology is used within an application and that the same terminology is used between handheld applications. In the absence of guidelines, try to borrow ideas from applications that have been well designed and have a high degree of usability.

Prototype Presentation: Tips

UI Design Guidelines for Handheld Devices

(Stone & Open University, 2005, p. 384) (adapted from Weiss, 2002, pp. 66–70)

- **Consistency between platforms**

While the same terminology can be used between handheld applications, you will need to think carefully when adapting an application from a desktop to a handheld device. It is not necessarily the case that terminology that works for a desktop will work for the smaller screened handheld device.

Prototype Presentation: Tips

UI Design Guidelines for Handheld Devices

(Stone & Open University, 2005, p. 384) (adapted from Weiss, 2002, pp. 66–70)

- **Design stability**

In the event of, say, a connectivity failure, the system should allow the user to pick up from where he or she left off when the connection is restored. For example, if the user is completing some sort of form and a wireless connection goes down, the data in the fields from previously should not be lost and have to be reentered.

Prototype Presentation: Tips

UI Design Guidelines for Handheld Devices

(Stone & Open University, 2005, p. 384) (adapted from Weiss, 2002, pp. 66–70)

- **Provide feedback**

The system should support the user with feedback regarding what the application is doing. Feedback in relation to, say, the use of an application or navigation within it could be provided via an assigned information key.

Prototype Presentation: Tips

UI Design Guidelines for Handheld Devices

(Stone & Open University, 2005, p. 384) (adapted from Weiss, 2002, pp. 66–70)

- **Forgiveness**

The UI should be tolerant of user errors and provide an Undo function by, where feasible, a specially designated Back key.

Prototype Presentation: Tips

UI Design Guidelines for Handheld Devices

(Stone & Open University, 2005, p. 384) (adapted from Weiss, 2002, pp. 66–70)

- **Use metaphors**

Real-world metaphors in line with the size of the display should be used. For example, while a desktop metaphor would be inappropriate for a cell phone, the use of an address book for storing telephone numbers would be okay.

Prototype Presentation: Tips

UI Design Guidelines for Handheld Devices

(Stone & Open University, 2005, p. 385) (adapted from Weiss, 2002, pp. 66–70)

- **Clickable graphics should look clickable**
If a graphic is clickable, then it should have defined borders and the graphic should have high contrast with the background color. Conversely, graphics that are static should not appear to be clickable.

Prototype Presentation: Tips

UI Design Guidelines for Handheld Devices

(Stone & Open University, 2005, p. 385) (adapted from Weiss, 2002, pp. 66–70)

- **Use icons to clarify concepts**

Icons should be meaningful and representative of the concepts they are meant to convey.

Prototype Presentation: Tips

Most Important:



Be **CREATIVE** and
LOGICAL

and try something
NEW!

Image retrieved and modified from <http://estudioimg.files.wordpress.com/2012/05/two-sides-of-brain.png>

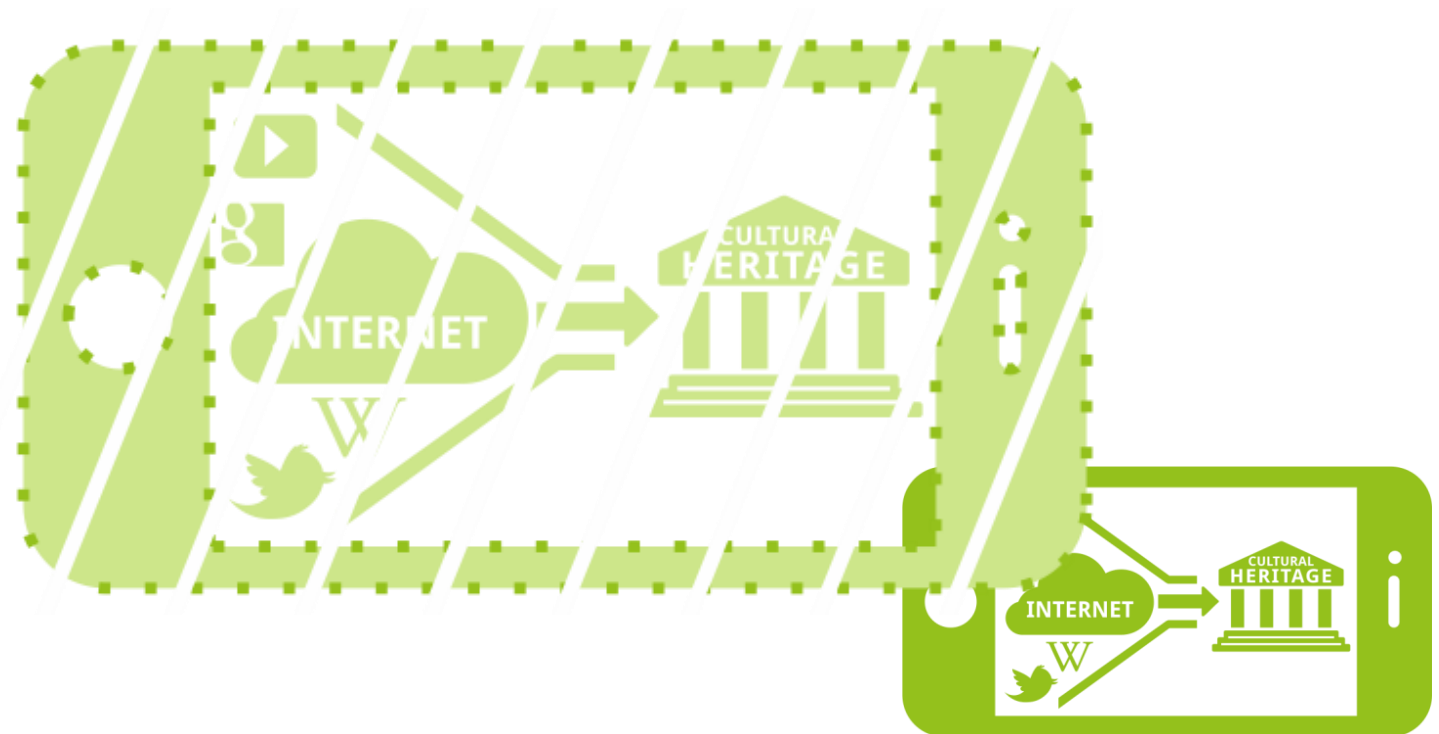
2nd Presentation

What should be done



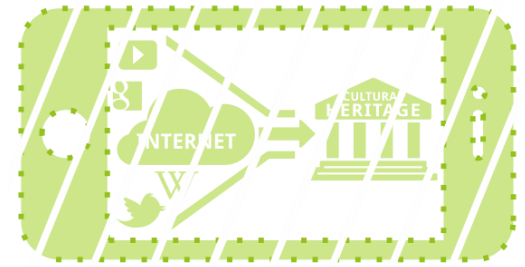
2nd Presentation (30.05.2013)

Seminary presentation (draft)
– 10 minutes (+ discussion)



2nd Presentation (30.05.2013)

Seminary presentation (draft)

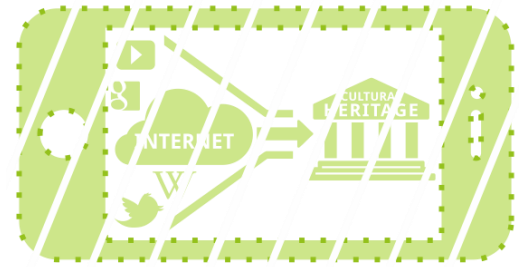


For this moment, it is just needed the app idea with navigation and content structure;

The main point is to present your idea, followed by discussion before doing the final version.

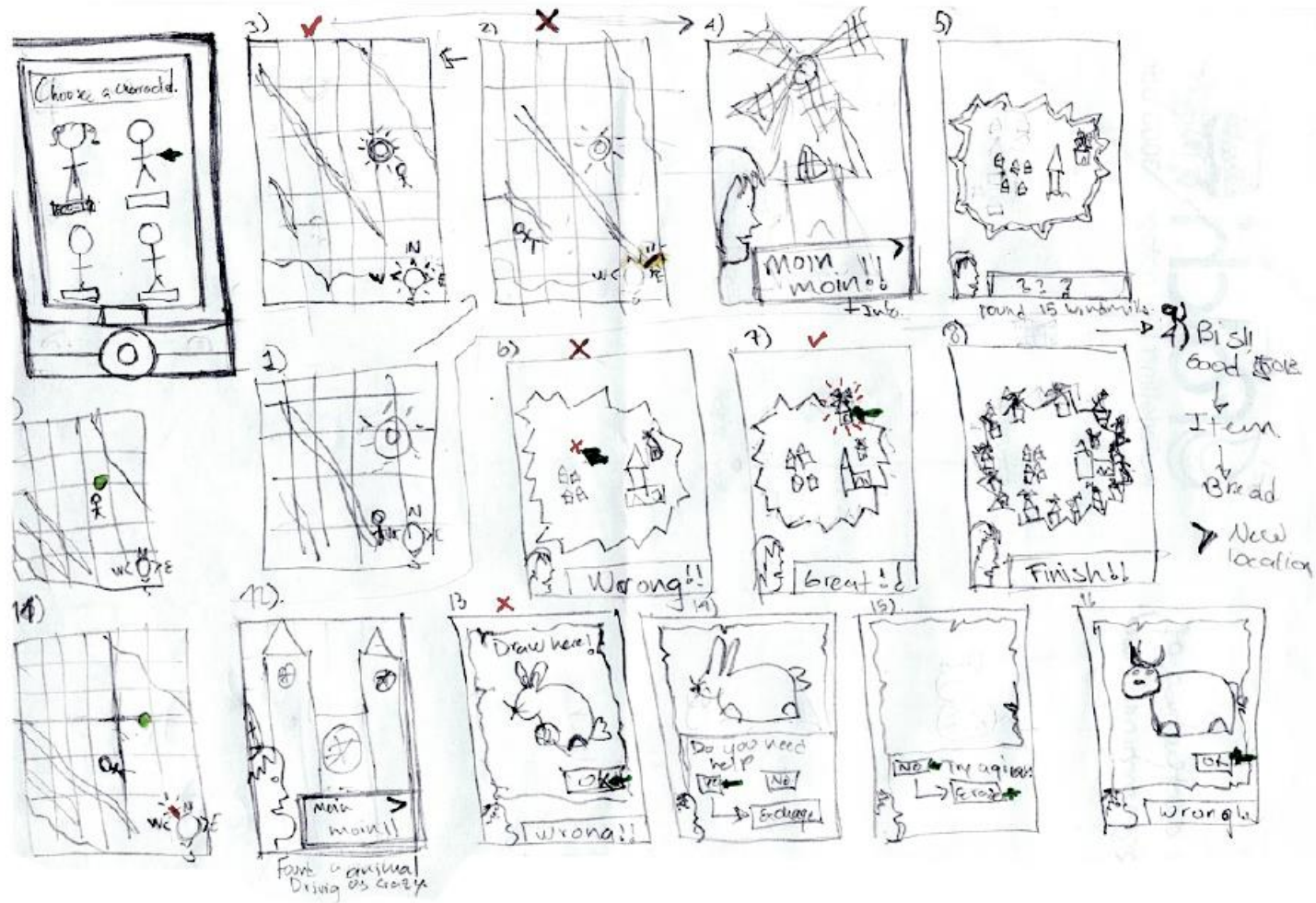
2nd Presentation (30.05.2013)

Seminary presentation (draft)



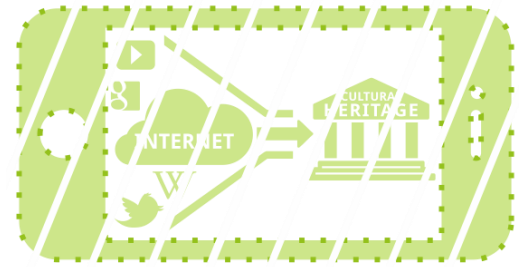
For the first/draft version, should be explored the app idea and structure, in order to receive the feedback and possible adjustments suggestions for the final version.

Ser



2nd Presentation (30.05.2013)

Seminary presentation (draft)

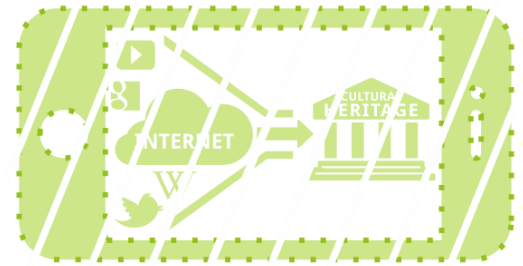


Slides in a PDF format should be delivered electronically one day BEFORE the presentation: at 29th May – 23:59h.

All the presentations will be available in ONE computer, to make the presentation changing faster.

2nd Presentation (30.05.2013)

Seminary presentation (draft)



Questions you should think about:

- What is the main purpose of your app
- “Where is the beef?” = What is new about it?
- Why people would use it?
- How the users will collaborate with it?
- Is it related to culture (and preservation – maybe) topic?

2nd Presentations

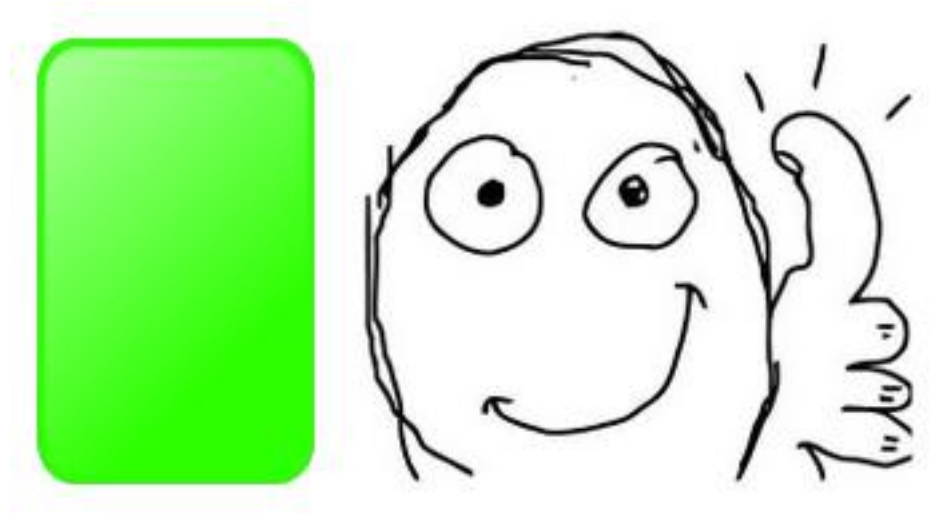


Each student will have
10 minutes

1st and 2nd Presentations

At the 9th Minute, it will be shown a **Green** card.

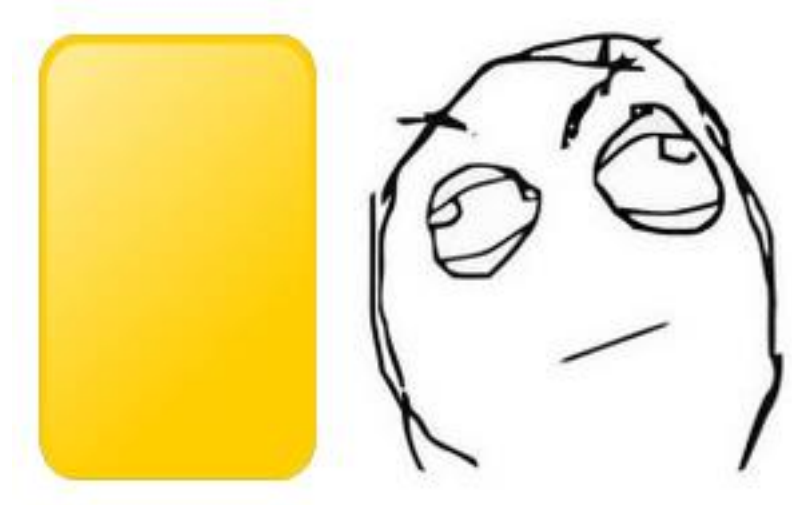
Here the time is fine – it is just a reminder that there is still one minute to go.



1st and 2nd Presentations

At the 10th Minute,
it will be shown a
Yellow card.

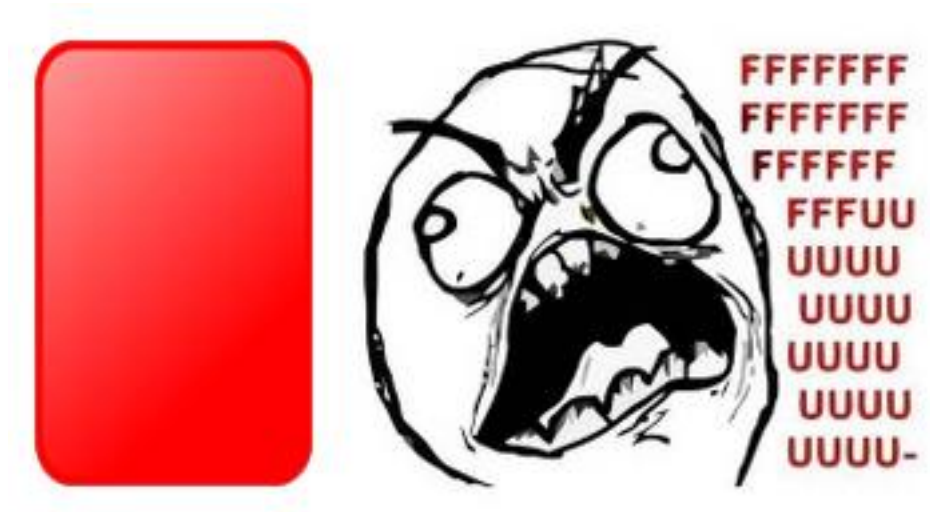
Here the time is over
– and the student
should hurry to finish
the presentation.



1st and 2nd Presentations

At the 11th Minute,
it will be shown a
Red card.

Here the
presentation will be
interrupted.



References

References for further readings



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Thank You!



Collaborative Mobile Media

Bauhaus-Universität
Weimar

04. Mobile Guidelines

http://www.uni-weimar.de/medien/wiki/IFD:Collaborative_Mobile_Media_SS13

