

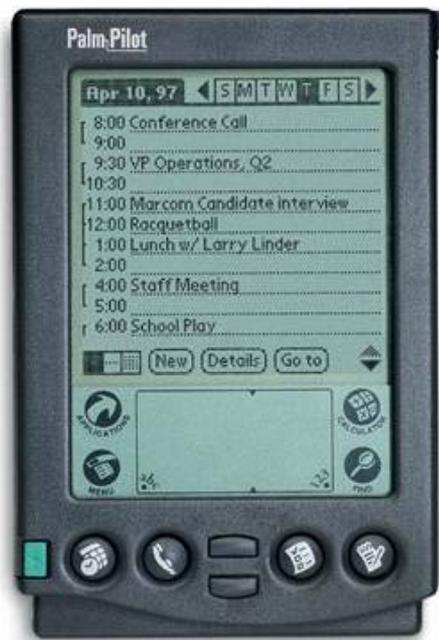


# User Experience for Tablets

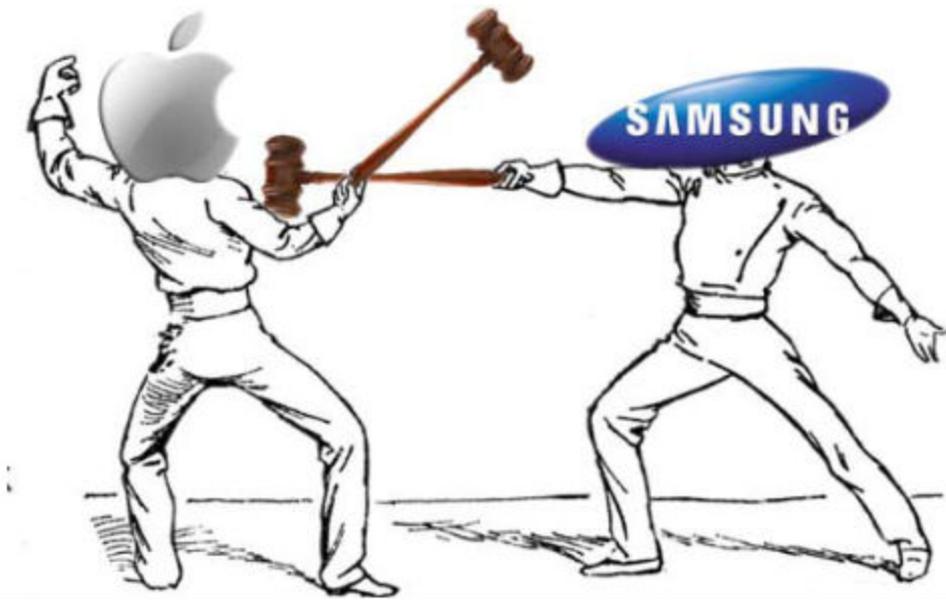
From Thought to Touch

Jordan DeVries | LookThink  
10/18/2012













We must ask ourselves,

**WHY TABLETS?**

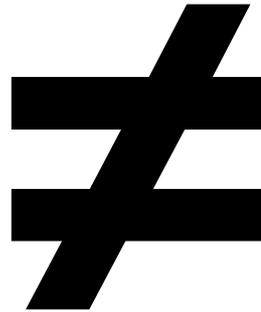


# Creation, Consumption & Decision

- Data-entry
- Navigation
- Meeting
- Accounting
- Photography
- Writing
- Planning
- Editing
- Coordination
- Forensics
- Illustration
- Correspondence
- Recording
- Simulation



We don't have technological parity just yet





# Tablets are not always the answer

## **TASKS**

- Data-entry
- Writing
- Illustration

## **DRAWBACKS**

- Lack of tactile feedback
- Limited processing power
- User fatigue



If we're smart,

**TABLETS CAN BE INCREDIBLE**



Example 1

# **AUGMENTED REALITY**





# Nearby

 Prentiss Brown Tea...  
★★★★★ 0.44mi

 Banana Republic  
★★★★★ 0.02mi

 Posh Bagel  
★★★★★

 Old Town  
★★★★★ 0.04mi

 GapBody  
★★★★★ 0.04mi

   
★

   
★





ATH

emini

Athena

Orion

Rigel

Eridanus

Lepus

Monoceros

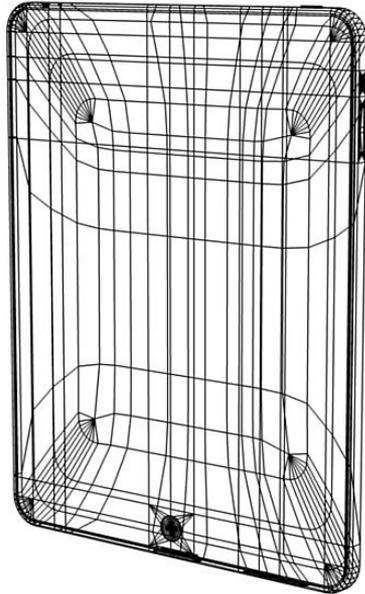
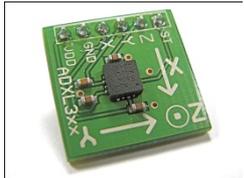
Procyon

Sirius

Columba

Canis Major  
Adhara

**E**





Example 2

# **GOD'S EYE VIEW**

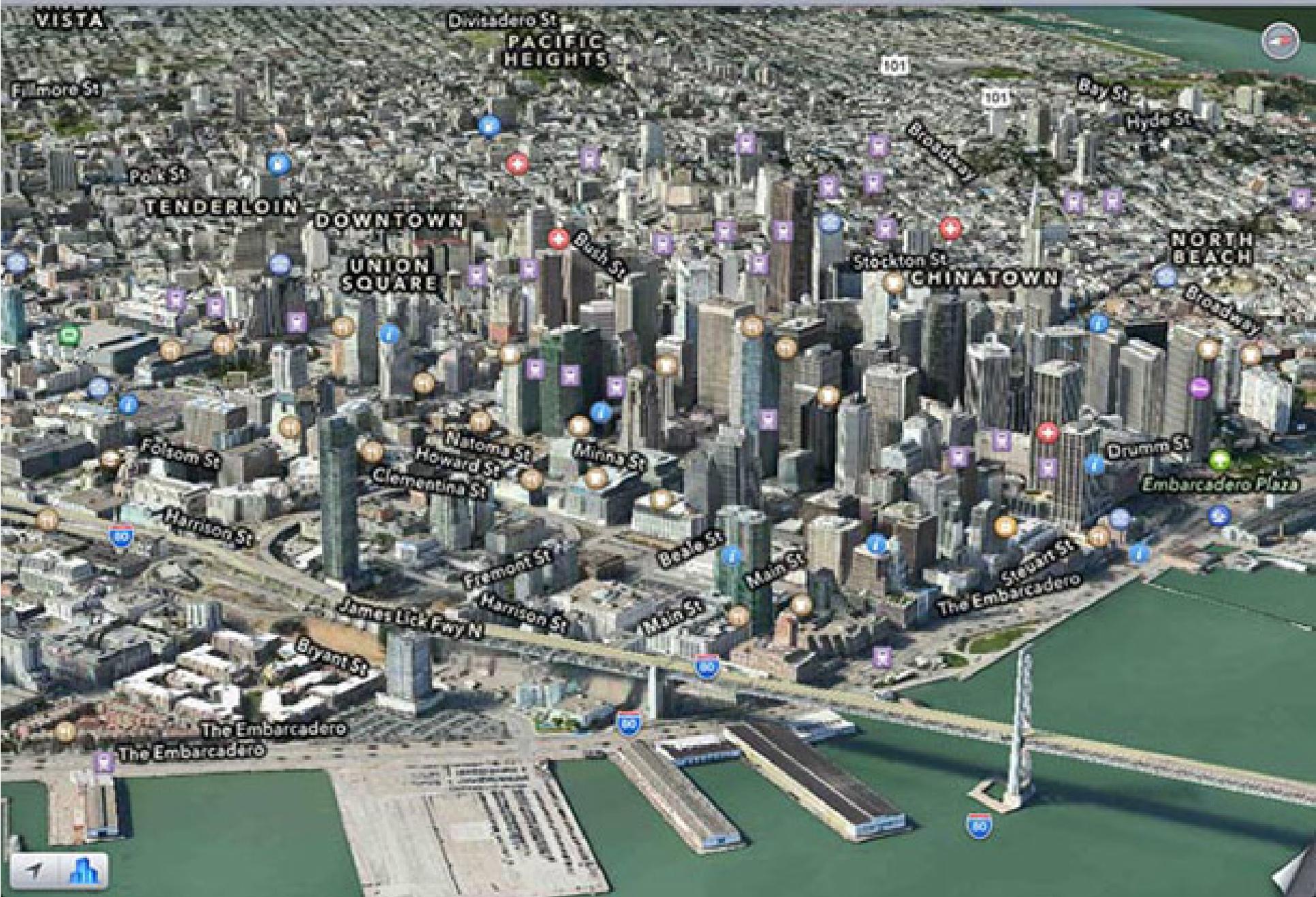




Directions



san francisco



VISTA

Divisadero St  
PACIFIC HEIGHTS

101

101

Bay St

Hyde St

Polk St

TENDERLOIN

DOWNTOWN

UNION SQUARE

Bush St

Stockton St

CHINATOWN

NORTH BEACH

Folsom St

Natoma St

Howard St

Clementine St

Minna St

Drumm St

Embarcadero Plaza

Harrison St

Fremont St

Beale St

Main St

Stuart St

The Embarcadero

James Lick Fwy N

Harrison St

Main St

Bryant St

The Embarcadero

The Embarcadero







15

15

15

H

4

4

6

12

2

8

8

H

25

15





Example 3

# **THE ULTIMATE REPORT**





Photos

0:00:18.11

Pan And Zoom

PHONE CAPTAIN

"Best Tips, Tweaks, and App Reviews online"

T

Events

Albums

Faces

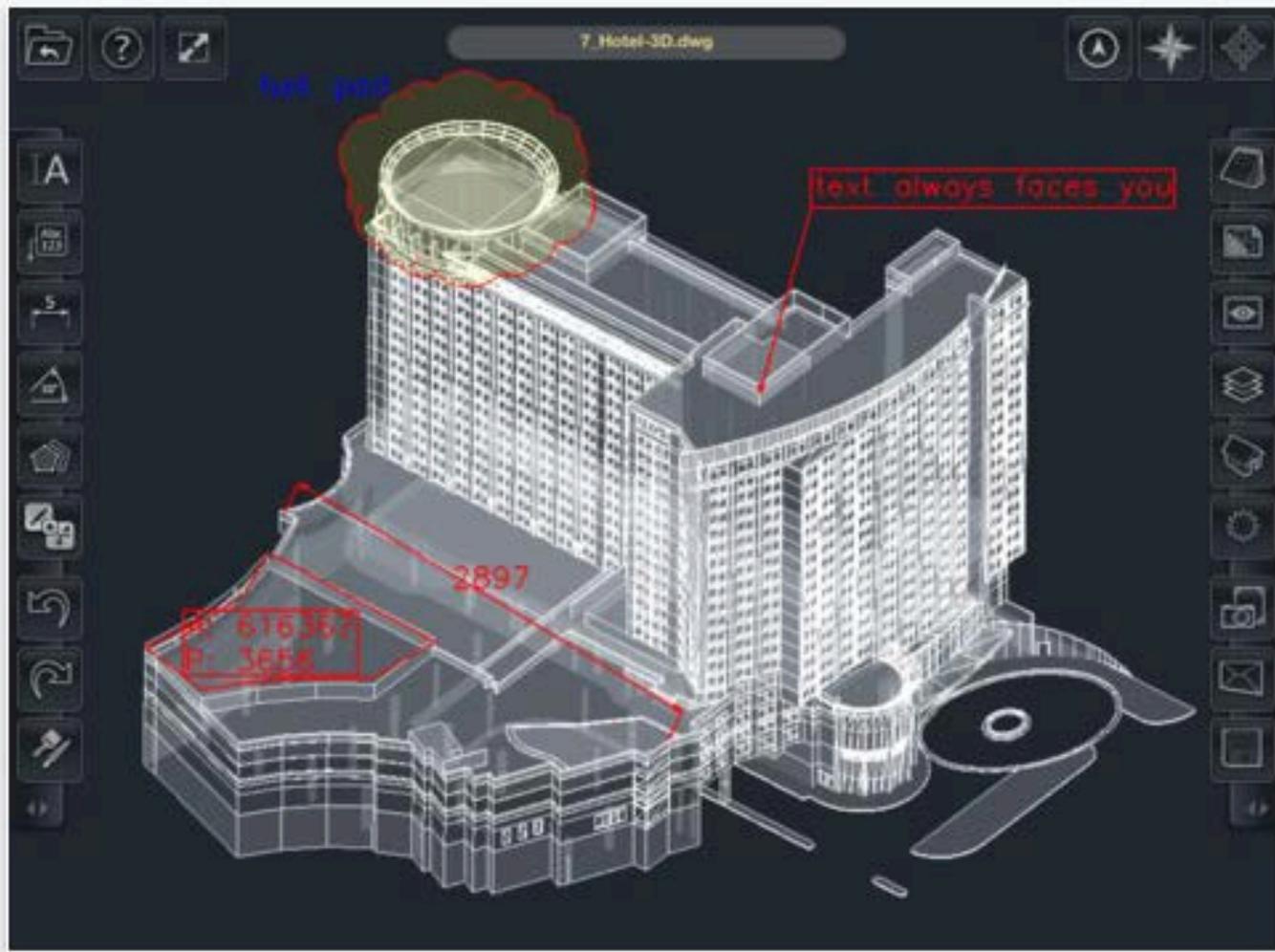
STOP

18.00

20.00

22.00

2015



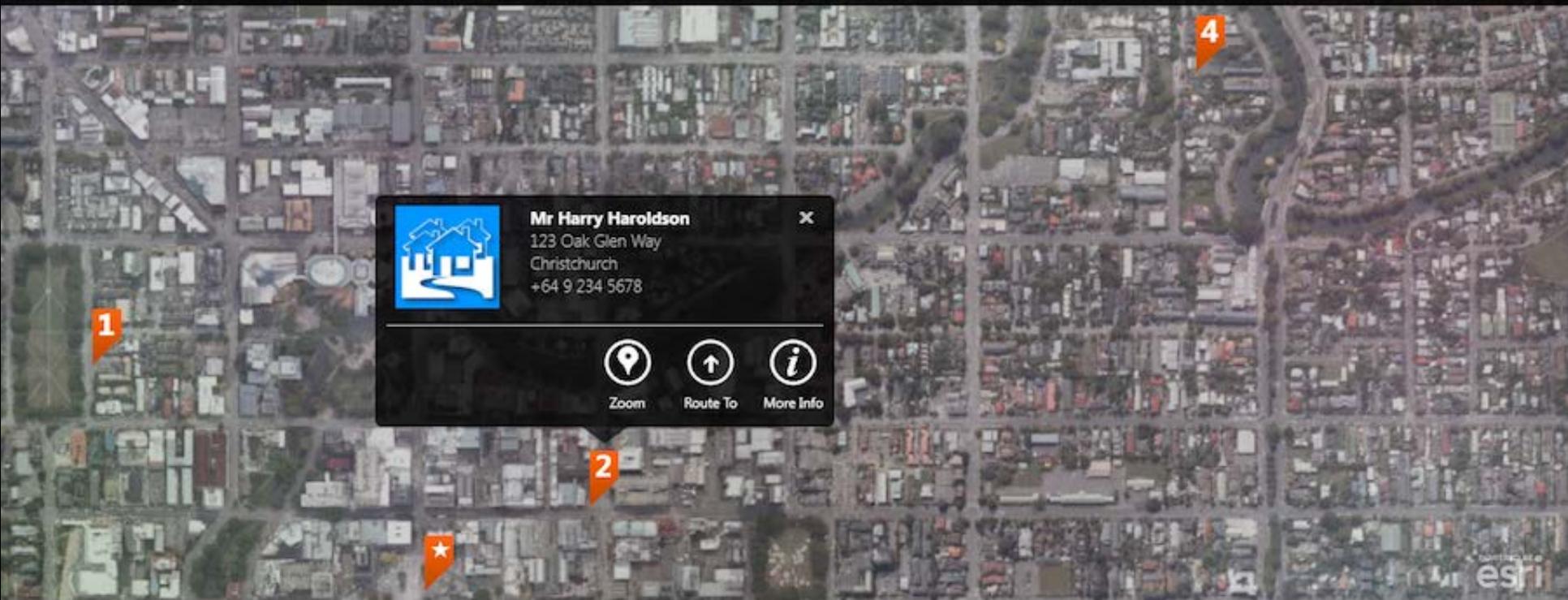


Example 4

# **THE FIRST RESPONDER**

# Claims Overview

13 Total Claims 4 Open 9 Completed



 **Mr Harry Haroldson**  
123 Oak Glen Way  
Christchurch  
+64 9 234 5678

 Zoom    Route To    More Info



View List



Streets



Imagery

Before  After



Add claim



edge





SO YOU WANT TO

**MAKE A TABLET APP**

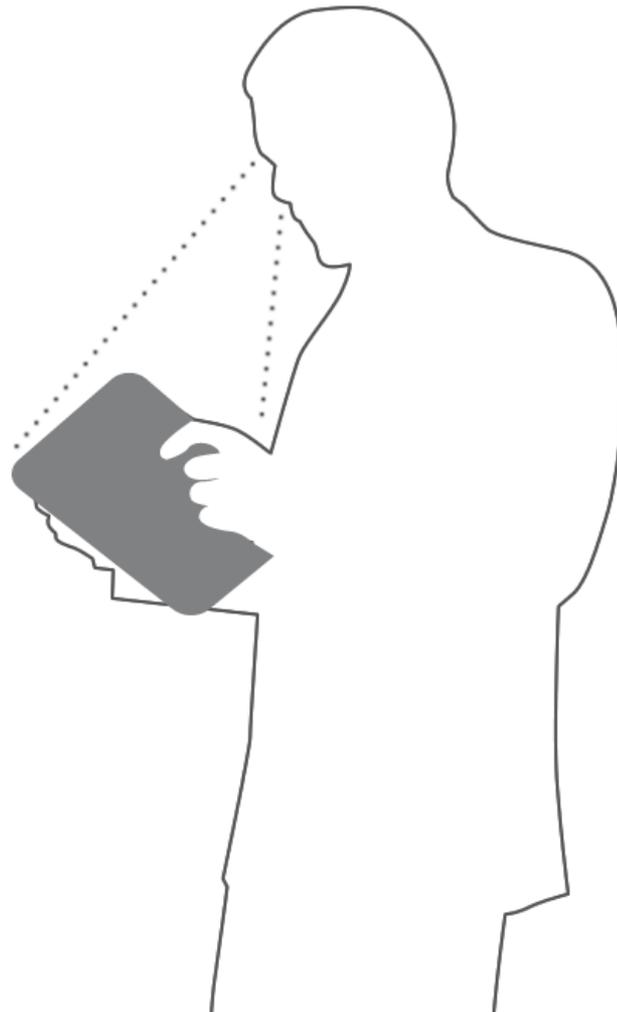


# Portability is Key





# Handheld means optimal personal viewing



# Tablets can serve as a 'second screen'



Tablets can be used like poker hands



Tablets mean touch





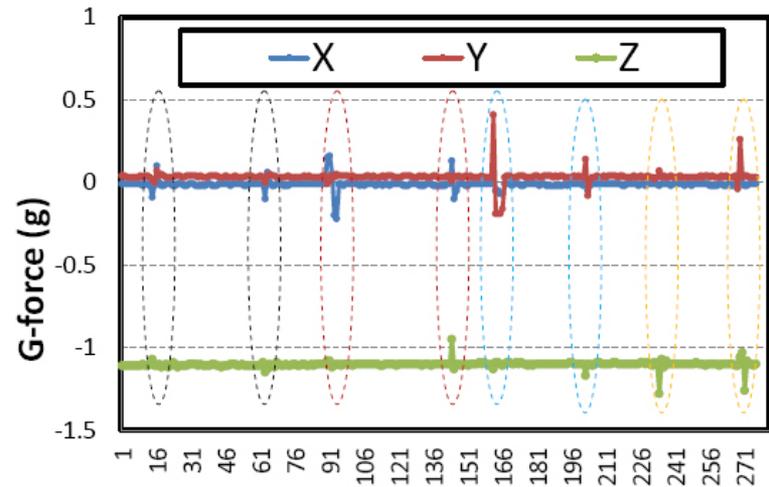
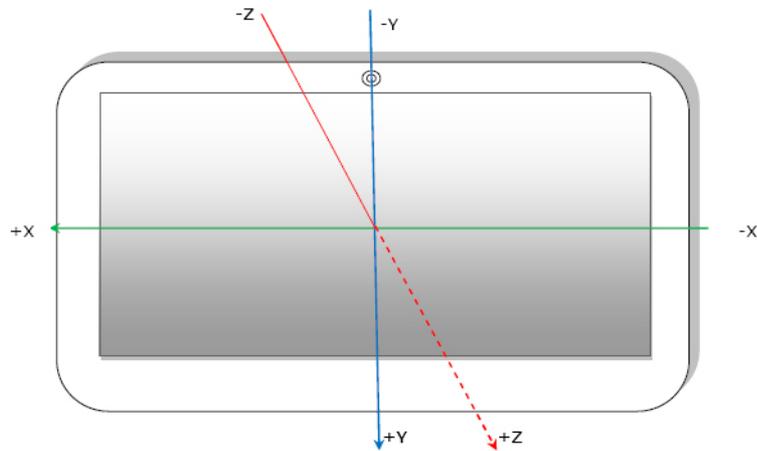




# Tablets are audio/visual



# Tablets feel the force



Accelerometer Reading Samples





# Tablets are connected



# Tablets last longer







The Tablet Lifecycle

**DESIGN, DEVELOP, TEST**



Step One:

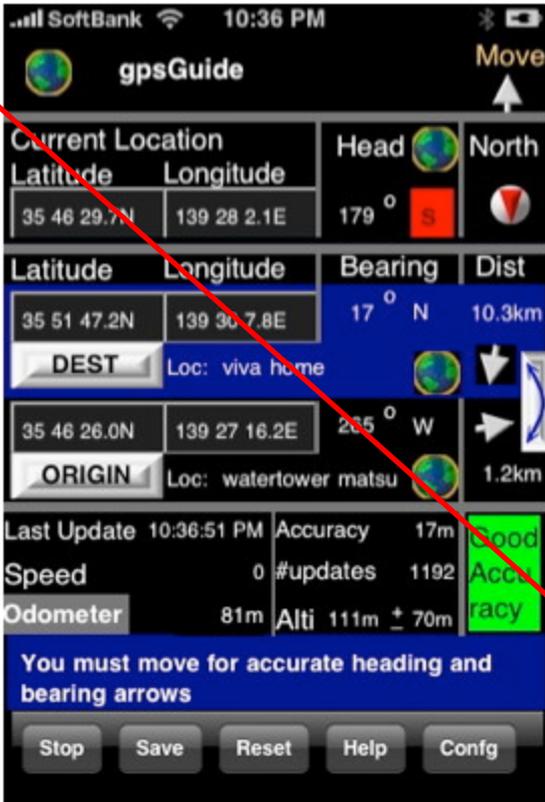
# **DESIGN FOR TABLETS**



# Apply the rules of interaction design

1. Control of focus
2. Task-centrism
3. Real vs Virtual

# Control of focus



- Don't show every feature simultaneously
- Rein in your context

# Use a strong heirarchy



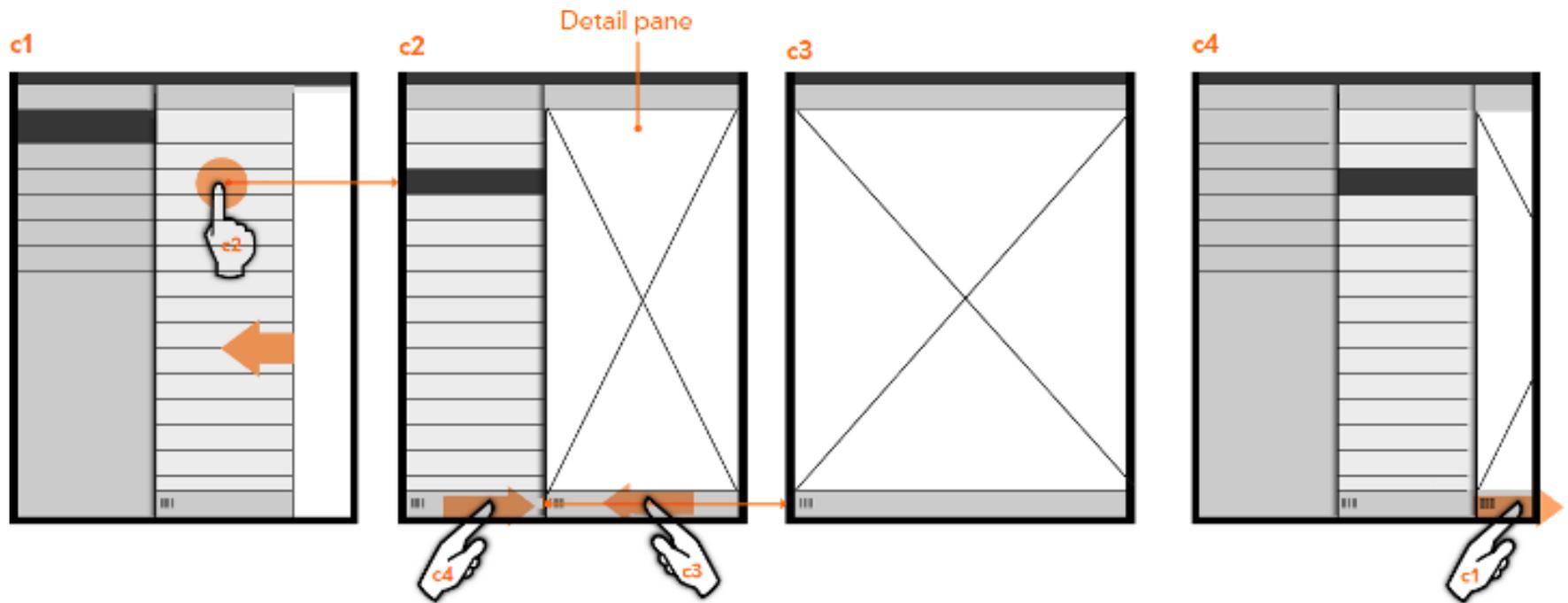


# Use a strong hierarchy



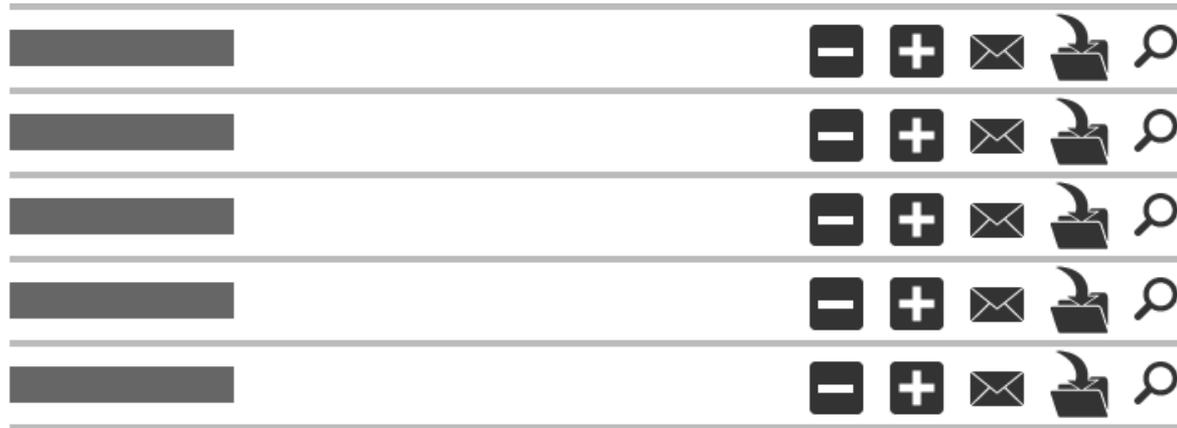
- Prioritize based on immediacy, frequency or threat
- Don't make multiple options equivalent

# Users work in modes





# Eliminate redundancy

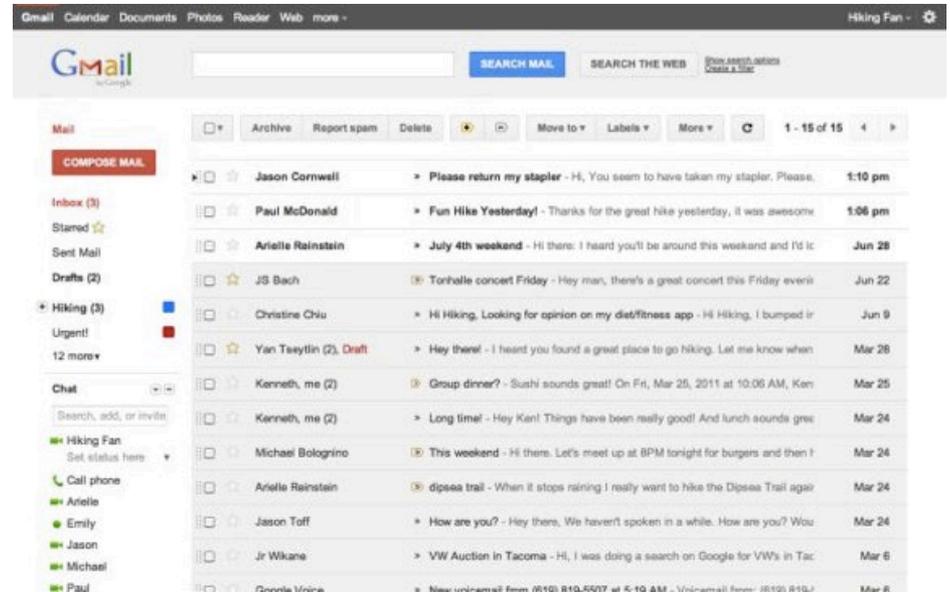




# Be task-centric, not tool-centric



# Separate Virtual vs Real





# Understand Touch

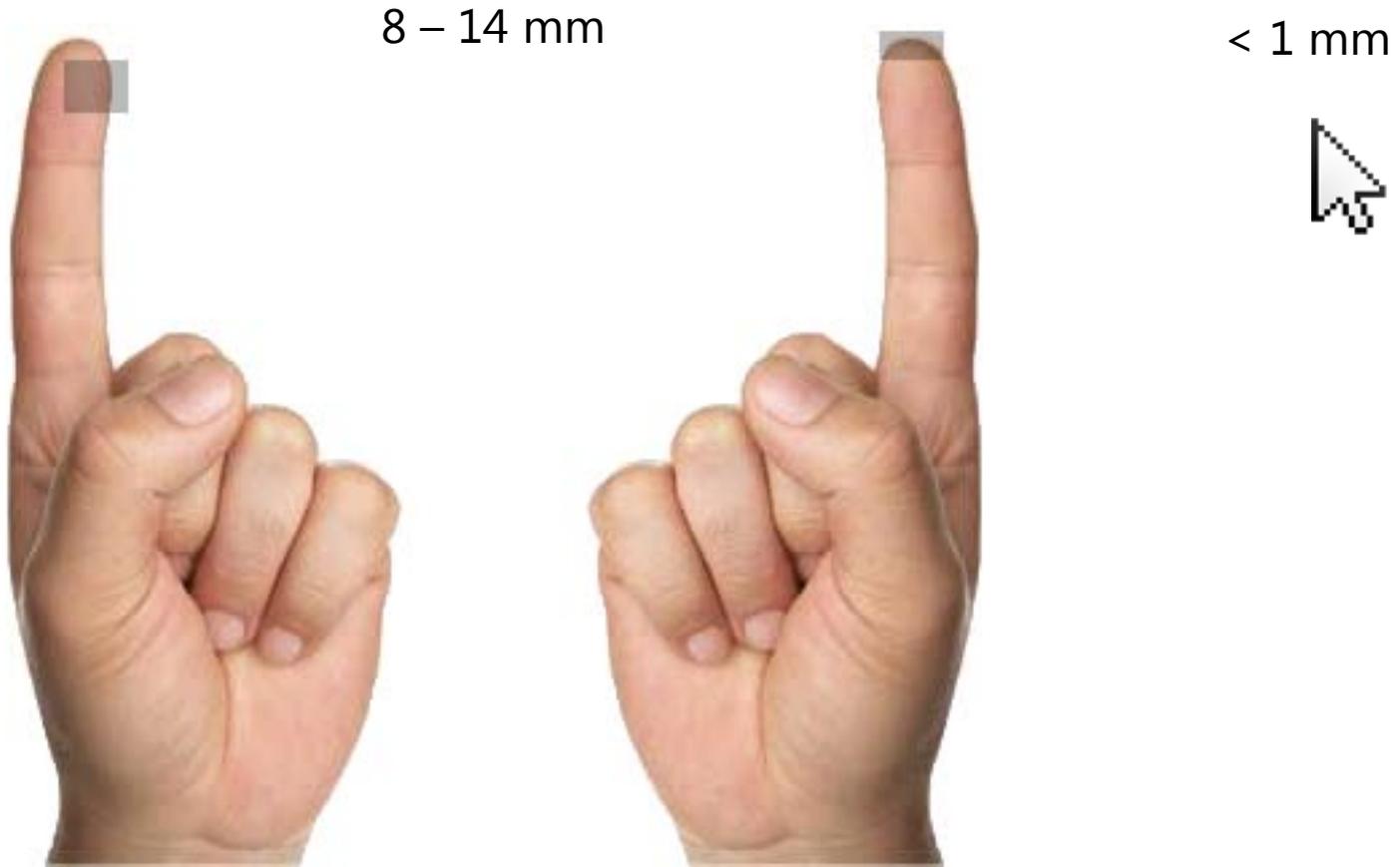


To interact is to obscure

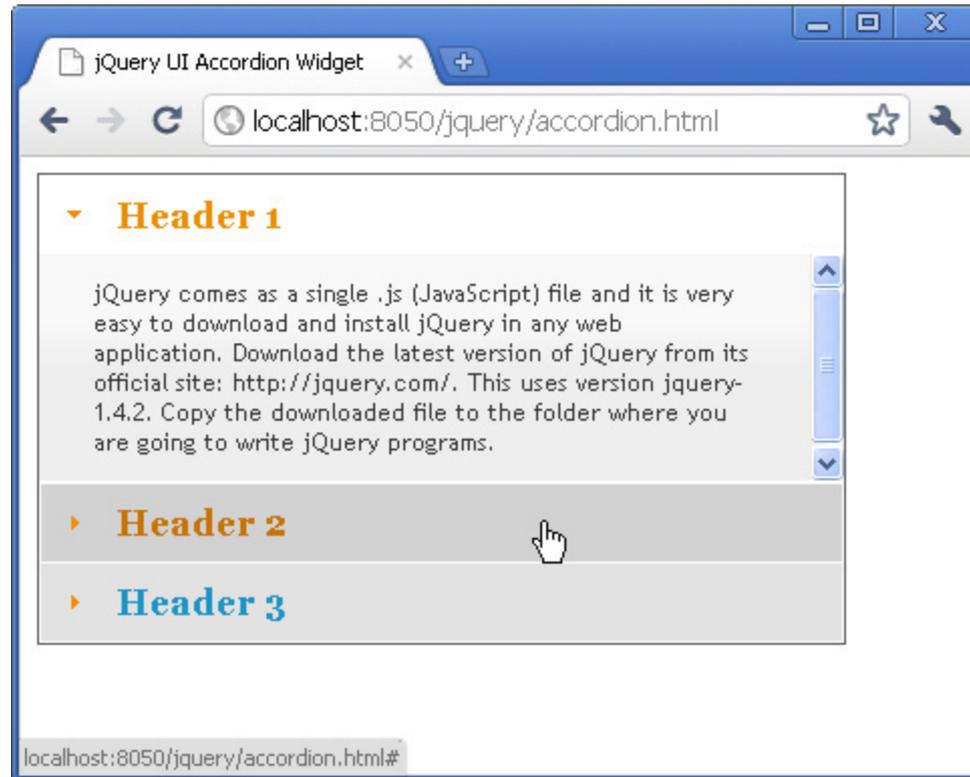




# Accuracy vs. Precision

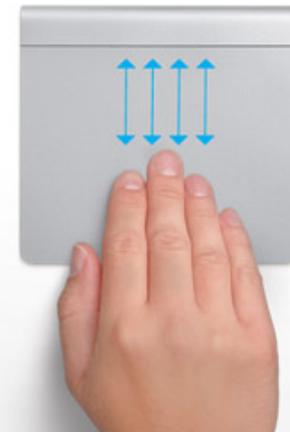


# No hover, no right click





# But, there are Gestures





# The right, the left, and the edge





# Brightness vs. Eye-strain



# Aesthetics Matter





You've designed; now:

# **DEVELOPING FOR TABLET**

# Development Platforms

- Native (iOS, Android, Windows 8/RT)
- HTML/CSS/Javascript
- PhoneGap
- Flex/AIR

# Going Native

- **iOS/Objective C** for iPad, iPad Mini
- **Android** for Samsung Galaxy Tab, Kindle Fire, Google Nexus 7
- **Windows 8/RT** for Microsoft Surface, Windows 8 Tablets



# Going Native

## **STRENGTHS**

- Concentrate on fewer device types
- Better performance
- Better access to hardware (Camera, microphone, etc)
- Apps don't need a network connection

## **DRAWBACKS**

- Developer license required
- Enterprise license for iOS
- Development efforts can't be transferred between platforms
- Manual upgrades

# HTML/CSS/JS

- Commonly known as a **web-app**
- Targets modern tablet browsers





# HTML/CSS/JS

## **STRENGTHS**

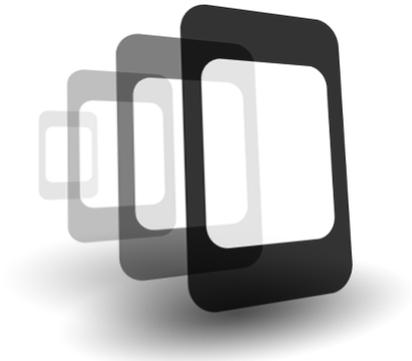
- Can run on most tablets, regardless of platform
- Can also run on desktops
- No app installation required
- Simplest development pipeline
- Users always get latest version of your app

## **DRAWBACKS**

- Not all browsers created equal
- Performance isn't always as powerful
- Requires data connection
- Access to hardware (camera, etc) varies

# PhoneGap

- Designed to close the 'gap' between mobile platforms
- Takes HTML/CSS/Javascript and pushes them towards specific platforms like apps



Phone**Gap**

# PhoneGap

## **STRENGTHS**

- Develop once, publish anywhere
- Robust documentation, examples and libraries
- Apps don't need a data connection

## **DRAWBACKS**

- Manual application install
- No automatic upgrades
- Better suited for data-driven apps



A few thoughts on

# TESTING TABLETS



# Testing Tablets

- Nothing beats testing on an actual device
- “Intuitive” isn’t necessarily a realistic goal
- Test against users as well as expected operation



Beware the

# **DRAWBACKS OF TABLET**



# Tablets will need to recharge



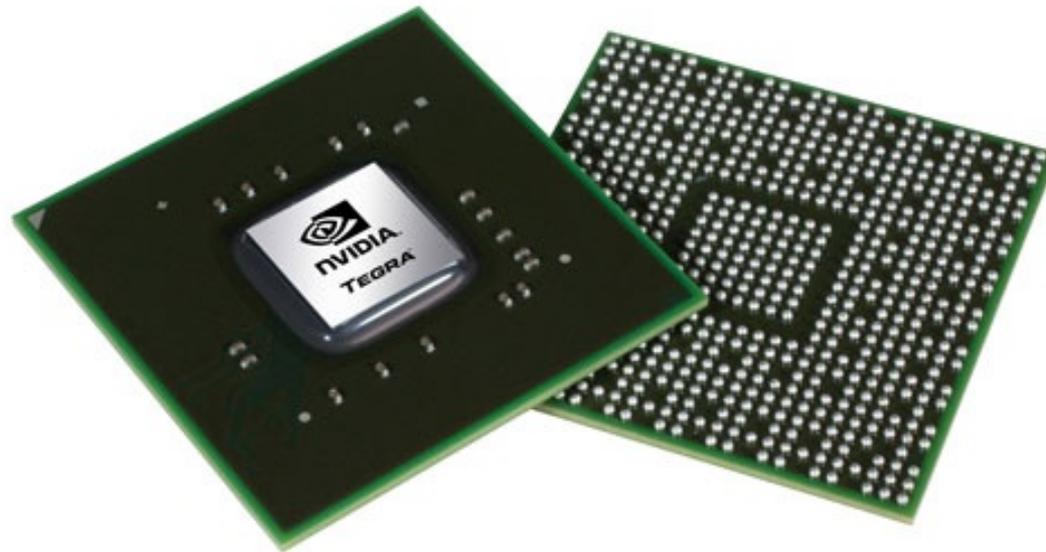


# Tablets have a limited display size





# Tablets have limited horsepower

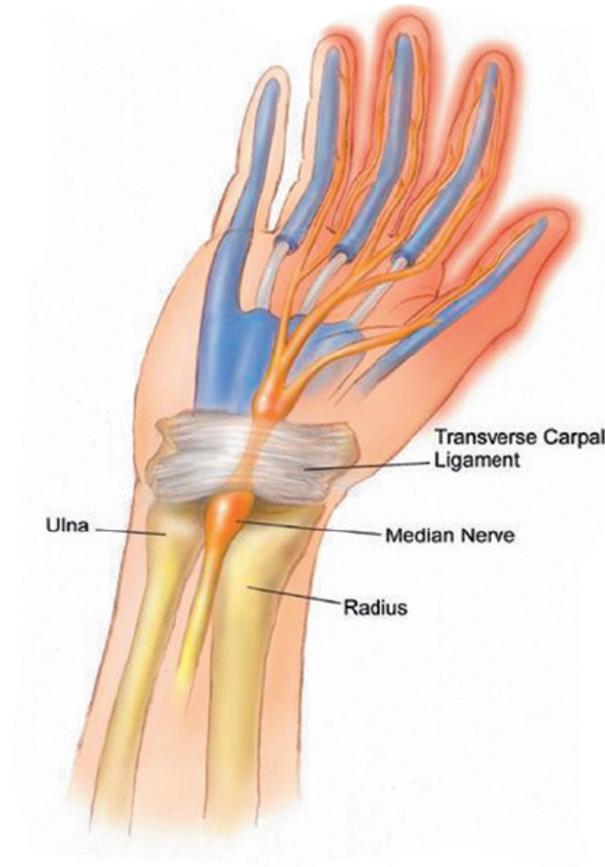


# Tablets struggle with physical media





# Tablets induce fatigue





# Tablets lack tactile feedback





Questions?

# Image References

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- <http://go.microsoft.com/?linkid=9713252>
- [http://library.forum.nokia.com/index.jsp?topic=/S60\\_5th\\_Edition\\_Cpp\\_Developers\\_Library/GUID-5486EFD3-4660-4C19-A007-286DE48F6EEF.html](http://library.forum.nokia.com/index.jsp?topic=/S60_5th_Edition_Cpp_Developers_Library/GUID-5486EFD3-4660-4C19-A007-286DE48F6EEF.html)
- [http://touchlab.mit.edu/publications/2003\\_009.pdf](http://touchlab.mit.edu/publications/2003_009.pdf)