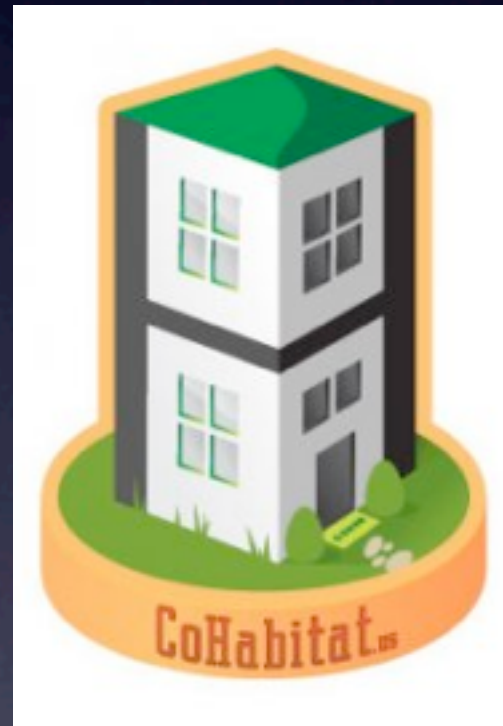


iOS Development Workshop

@



Brent Nycum

whoami

- Brent Nycum
- Masters and Bachelors in CSC
- Software Consultant @ Cyber Technology Group
 - <http://www.ctg-it.com>
- Adjunct Professor @ LSU-Shreveport

Contact

- brentnycum@gmail.com

Cohabitat

Cohabitat

- <http://cohabitat.us/shreveport/>
- It's like working from home, only cooler

Cohabitat

- Many thanks to John, Jessica and Tyler for everything

Android @ Cohab

- <http://bit.ly/Droid-at-Cohab>
- Mark Goadrich of Centenary
- August 25th - September 22nd (5 weeks)
 - Thursdays @ 5:30
- \$160
- Only 15 slots available

Techx20



First Thursday of the Month

Class

Class

- August 2nd - September 20th
- Tuesdays @ 6 PM



Class

- My wife is due on September 27th
- Check email and Cohab's Facebook in case anything happens

Requirements

Requirements

- No iOS Device required
 - Will be using simulators provided with the SDK
- Mac
 - Intel based Mac

Requirements

- Be familiar with Object-Oriented Programming
 - Classes, Methods, Inheritance, Superclass / Subclass

Requirements

- Run apps on your own device
 - iOS
 - iOS Developer - \$99
 - <http://developer.apple.com/ios>

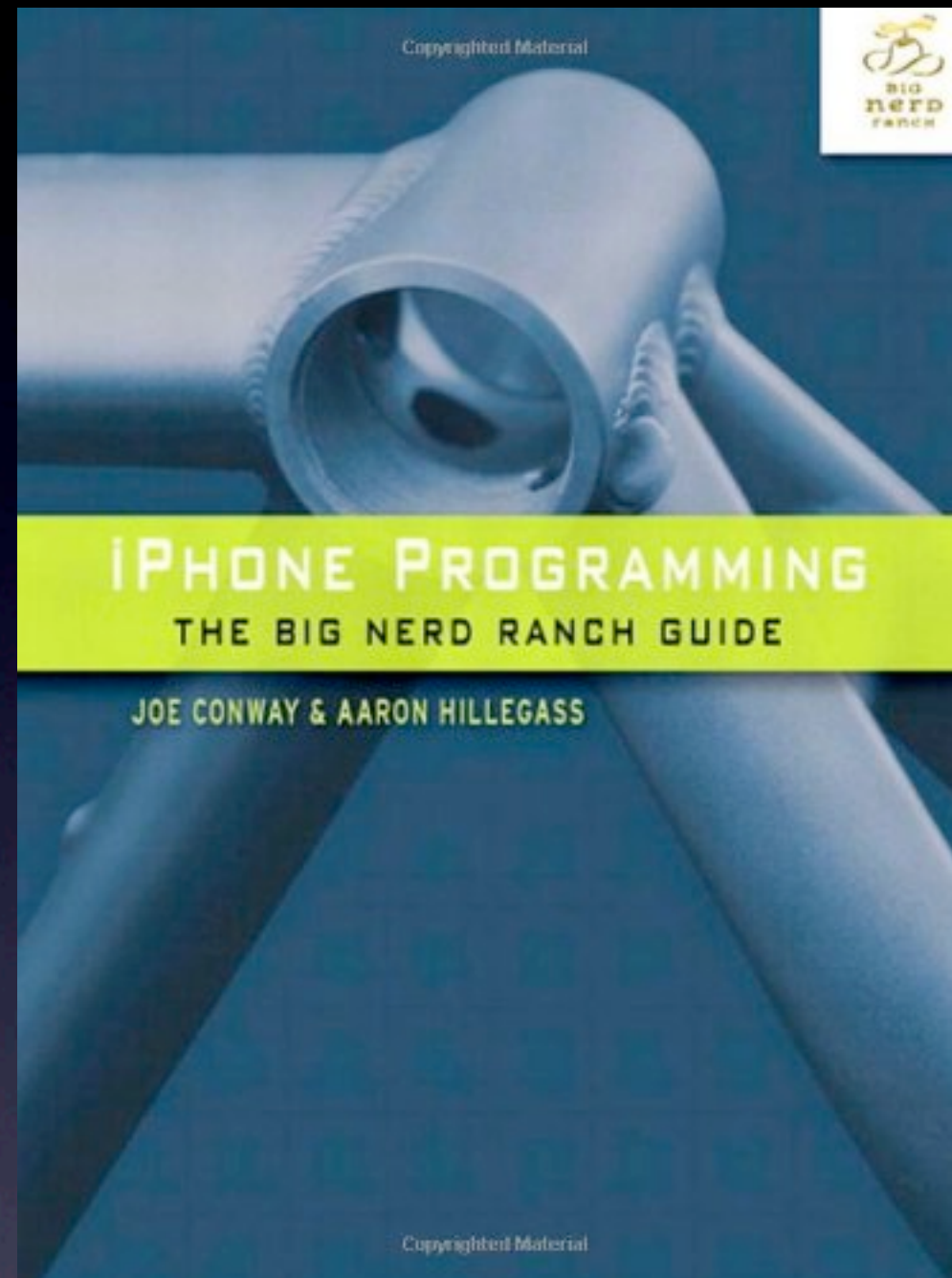
Software

- Xcode
 - 3.2.6
 - Free for everyone on Snow Leopard (10.6)
 - 4
 - Free for everyone on Lion (10.7)
 - Mac App Store
 - Or anyone with a paid iOS Developer Membership

Books

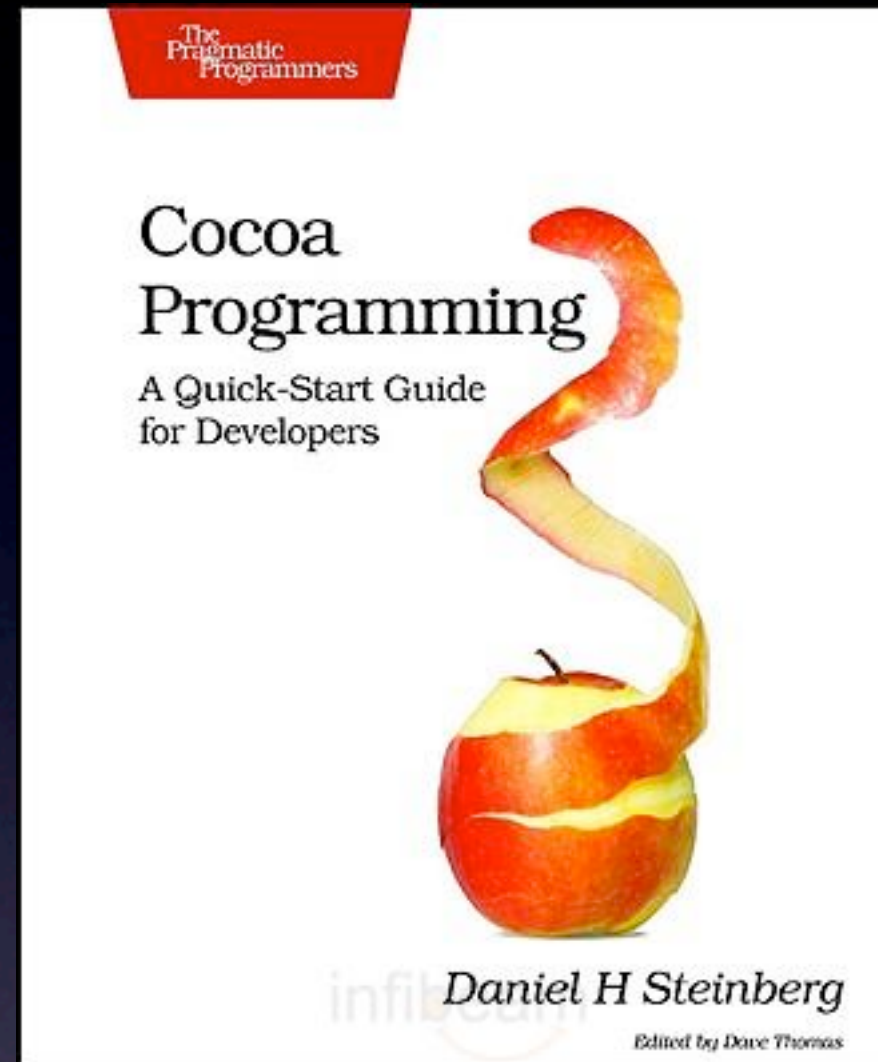
Books

- <http://pragprog.com/>
- <http://www.apress.com/>
- <http://www.bignerdranch.com/books>



iPhone Programming: The Big Nerd Ranch Guide

ISBN: 0321706242



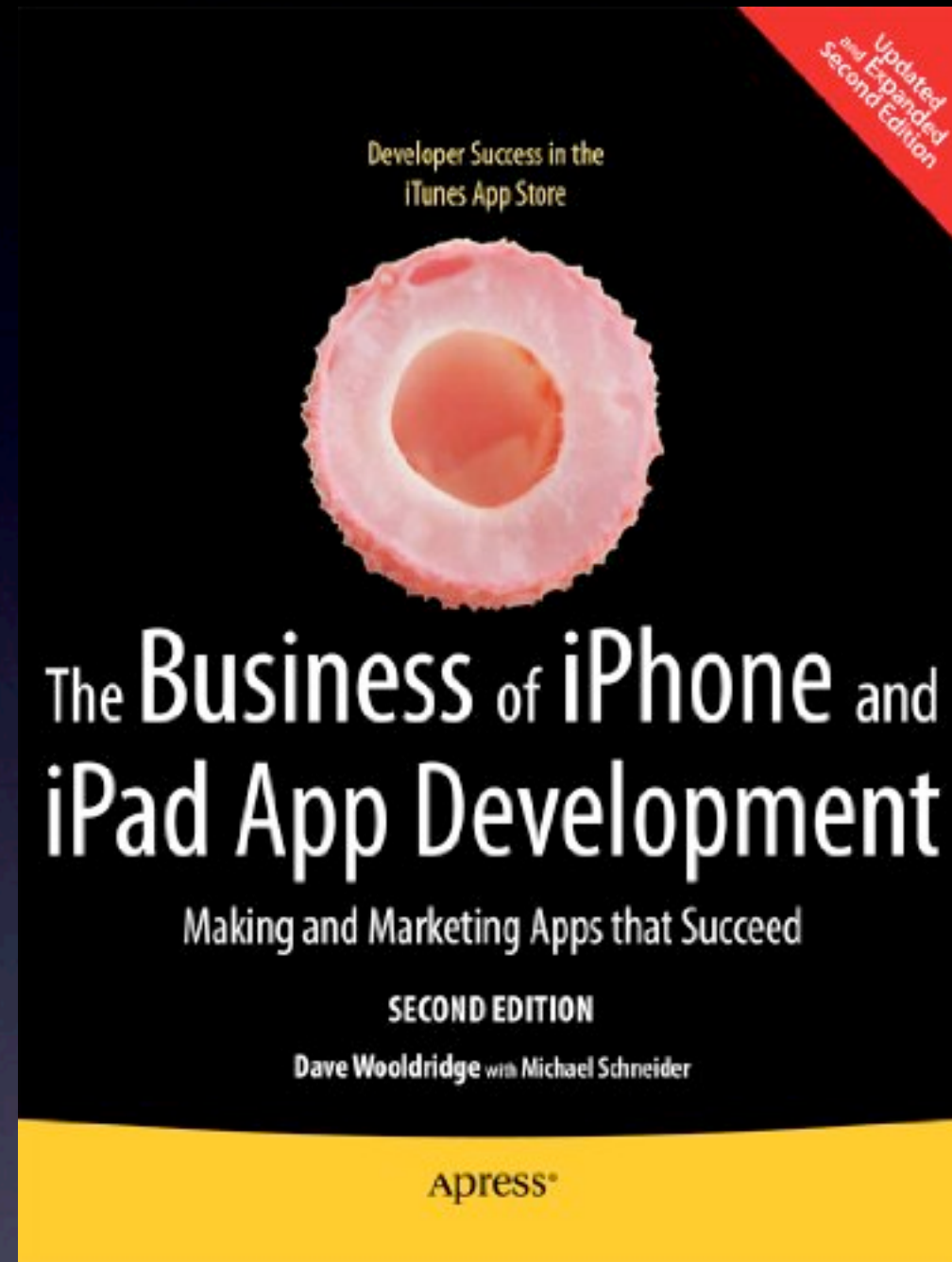
Cocoa Programming: A Quick-Start Guide for Developers

ISBN: 1934356301



iPhone SDK Development

ISBN: 1934356255



ISBN: 978-1-4302-3300-8

Apress Books

- iPhone Advanced Projects
- iPhone Cool Projects
- iPhone and iPad Apps for Absolute Beginners
- And many more...

Why Are You Here?



Piles of cash, baby!



What it's really like

Not really...

Rovio built 51 games before making Angry Birds



How many people do
traditional Desktop or Web
development?

How many people do mobile
development?

Full-time? Part-time?

How many people do iOS
development?

How many people do Android
Development?

Any other Mobile Experience?
BlackBerry
Windows

Fun Graphs

Graphs

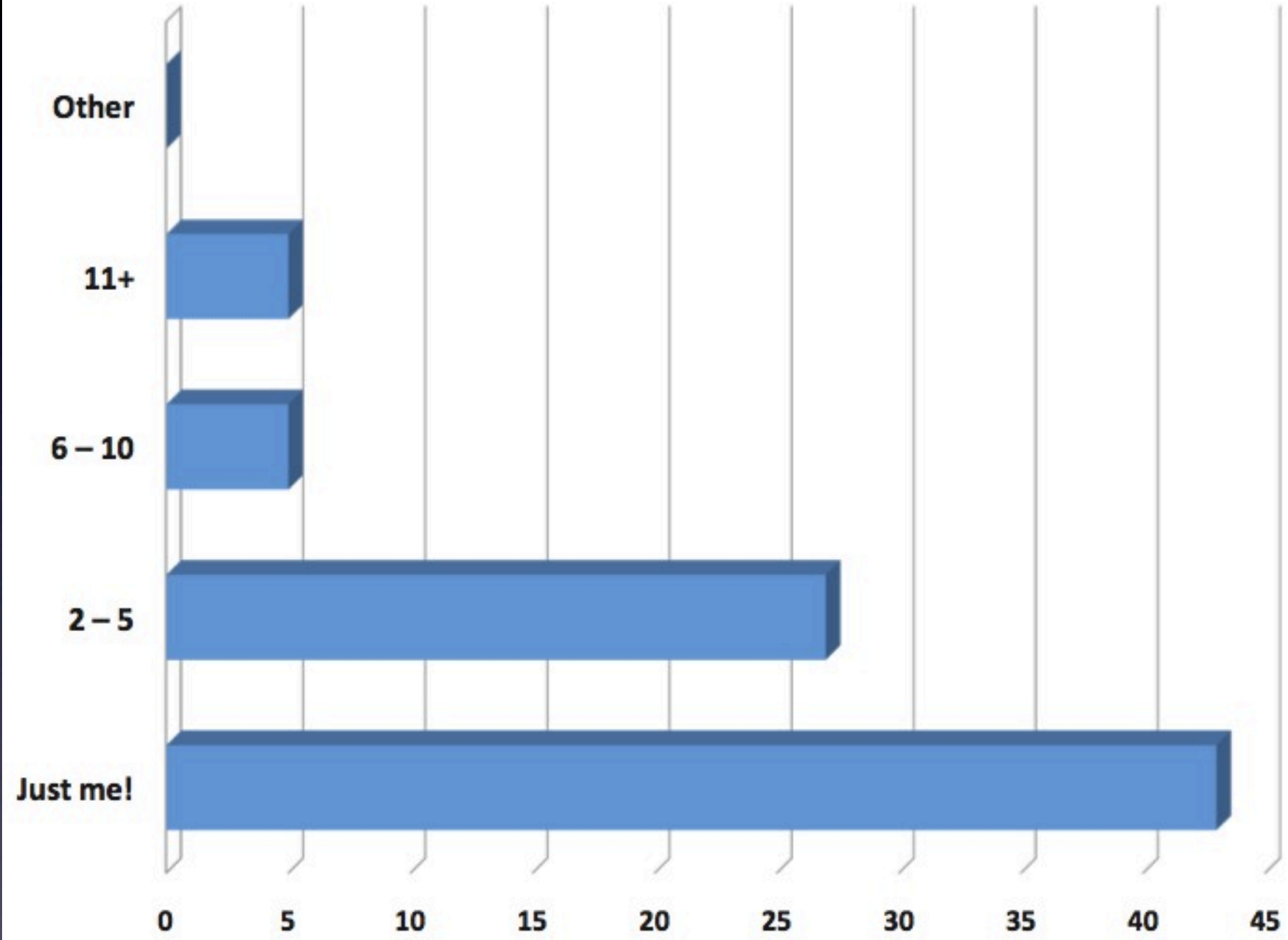
- From iPhone App Entrepreneur
- <http://rockablepress.com/books/iphone-app-entrepreneur/>
- eBook - \$19
- Paperback - \$24.95

Graphs

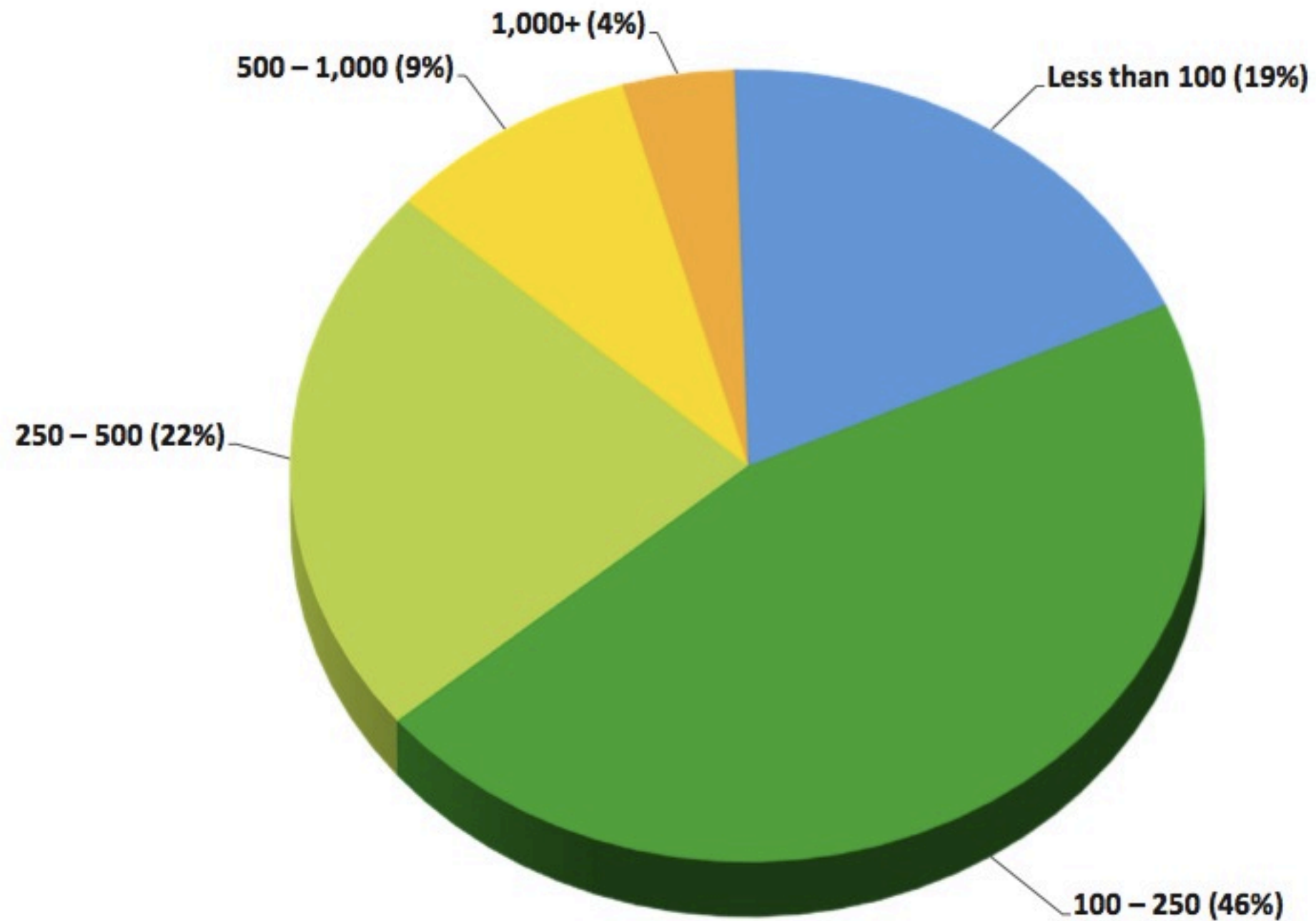
- From Developers
- From Users

Developers

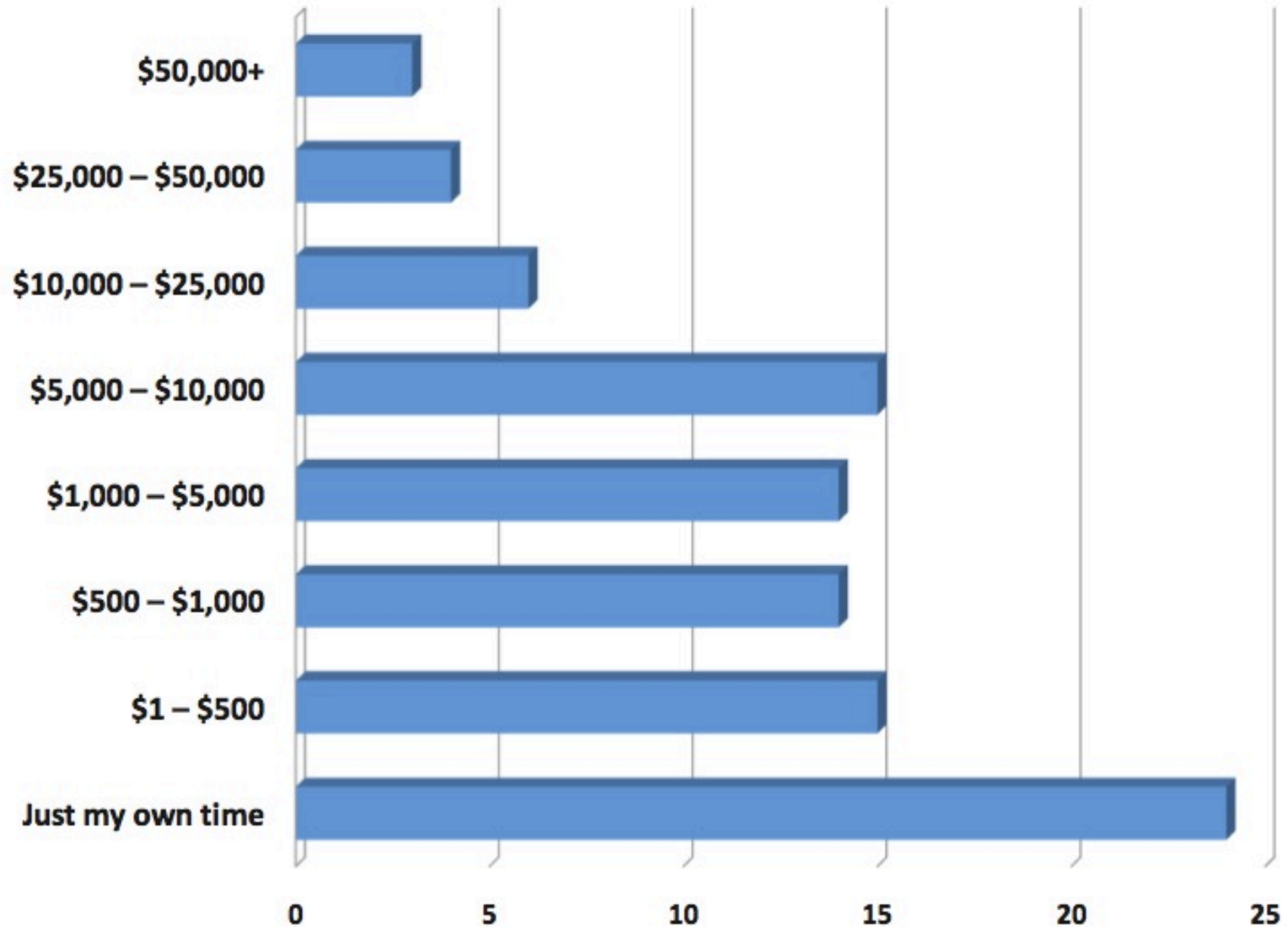
How many people are employed by your company?



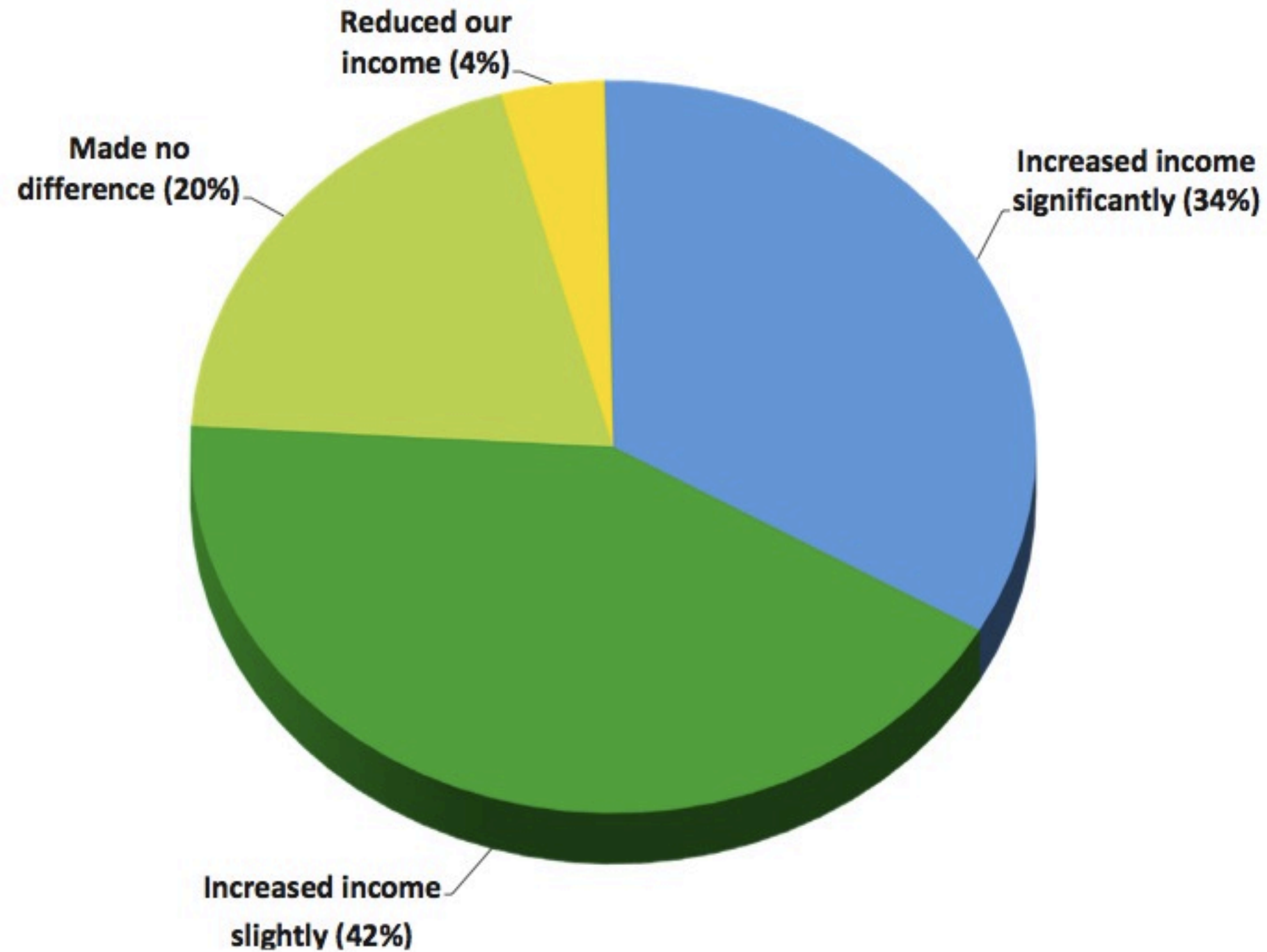
How many hours does it generally take to develop an iPhone application?



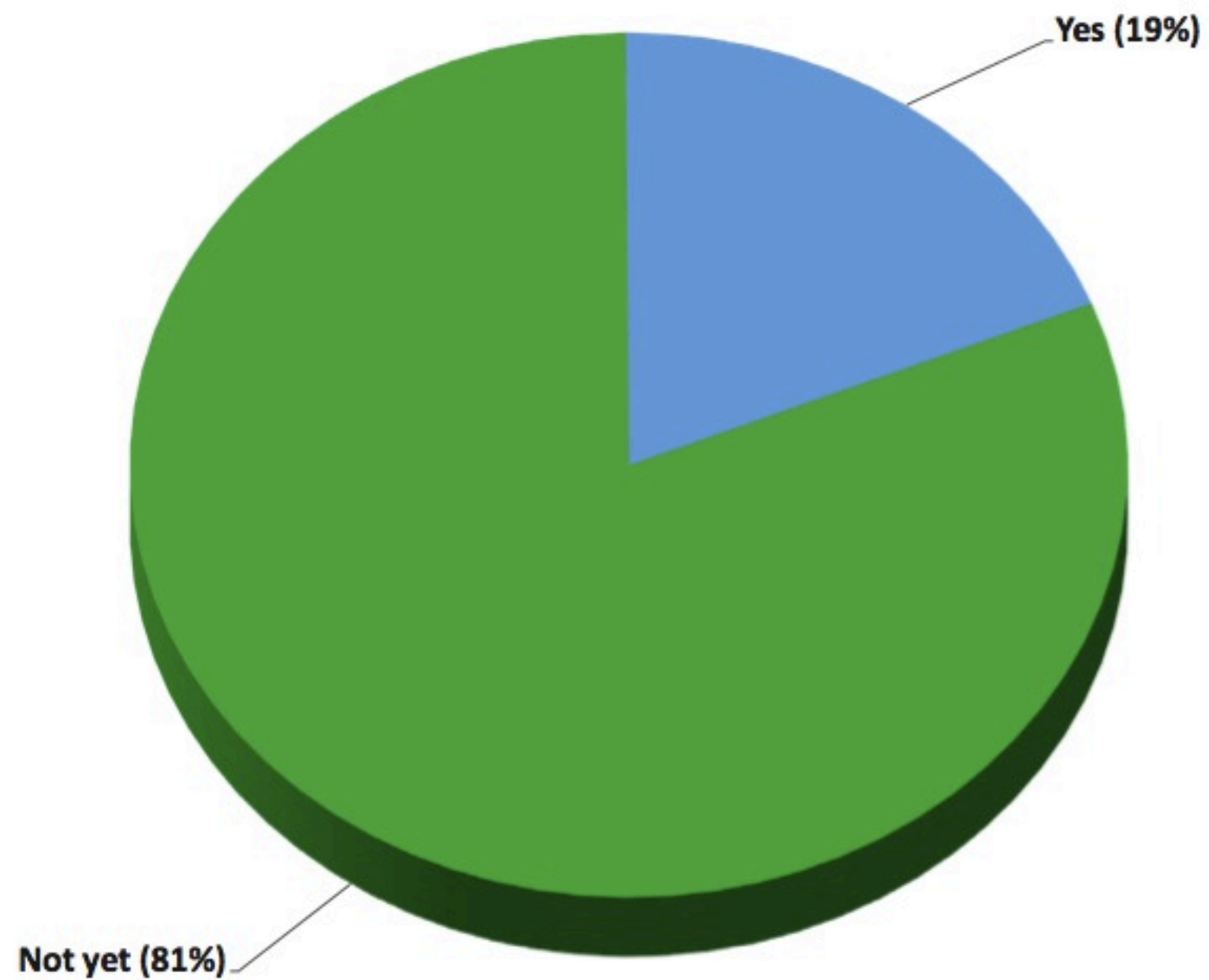
**In your experience, what is the financial cost
of developing an iPhone app?**



How has iPhone development affected your personal income or company revenue?



Could you make a living solely from your iPhone app's revenue?



What is your total monthly revenue from sales of iPhone apps in USD?

AVERAGE

\$6,875.22

MAX

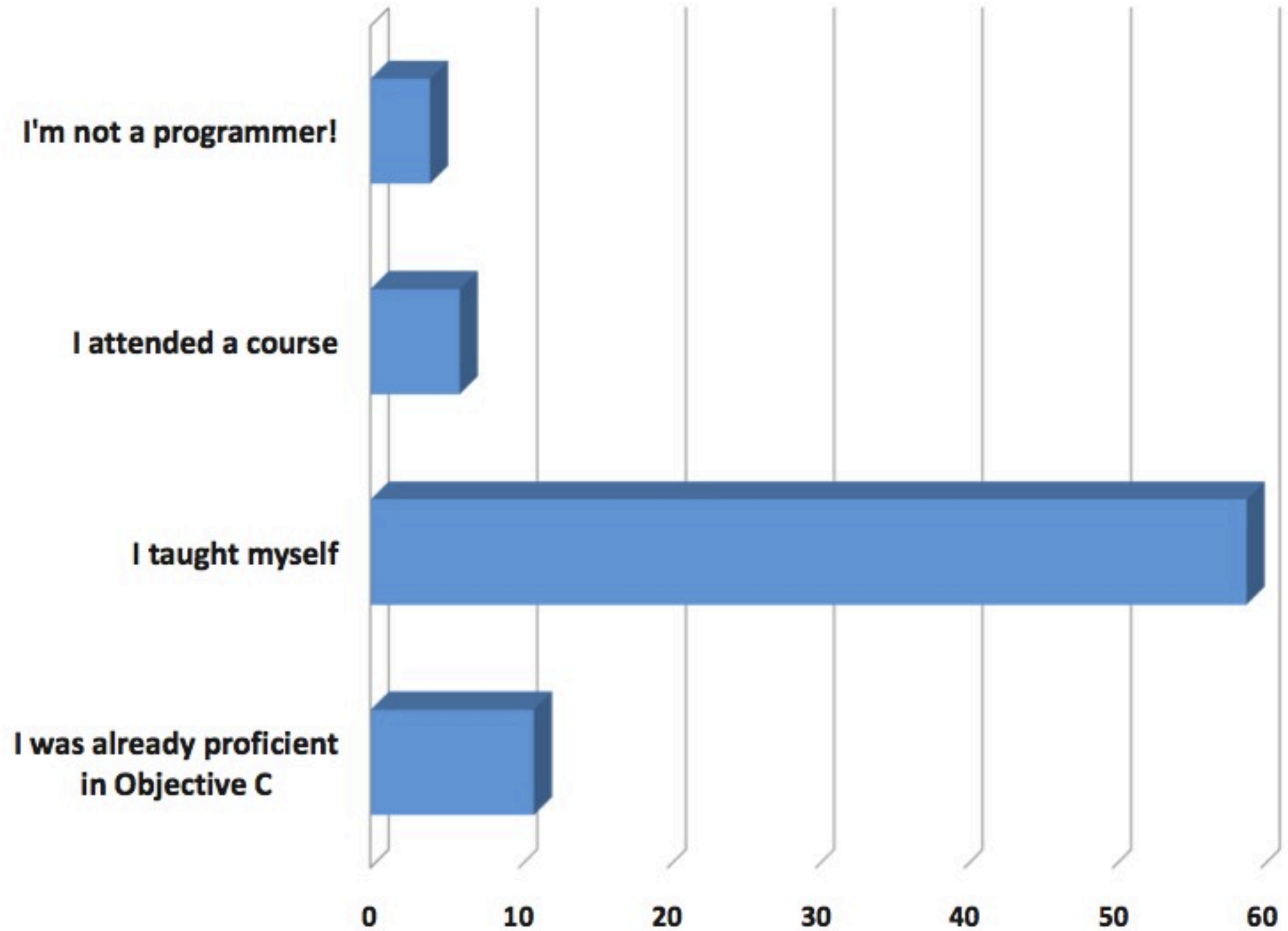
\$200,000.00

How many hours do you spend on support each day?

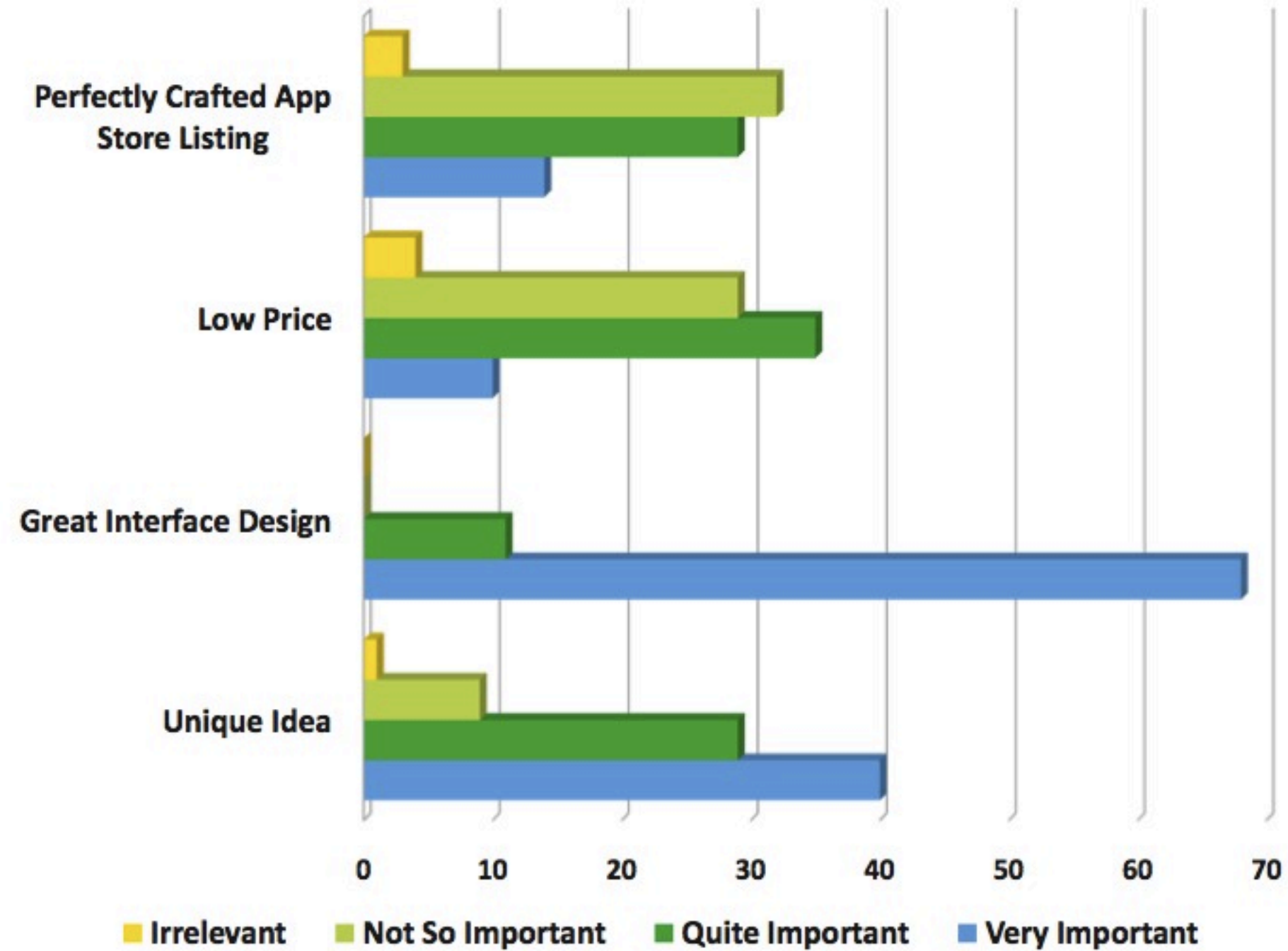
AVERAGE

2

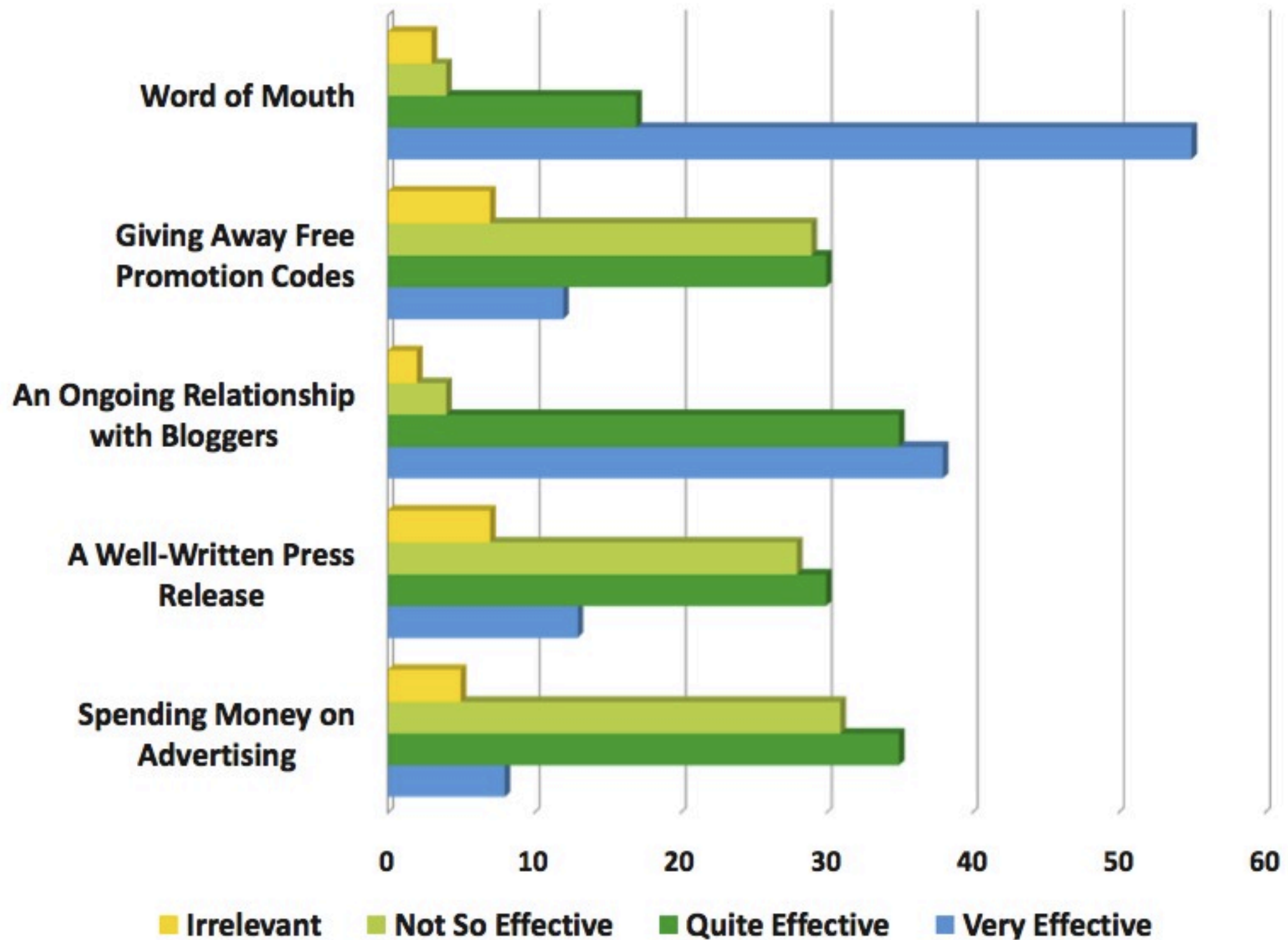
How did you learn to develop for the iPhone?



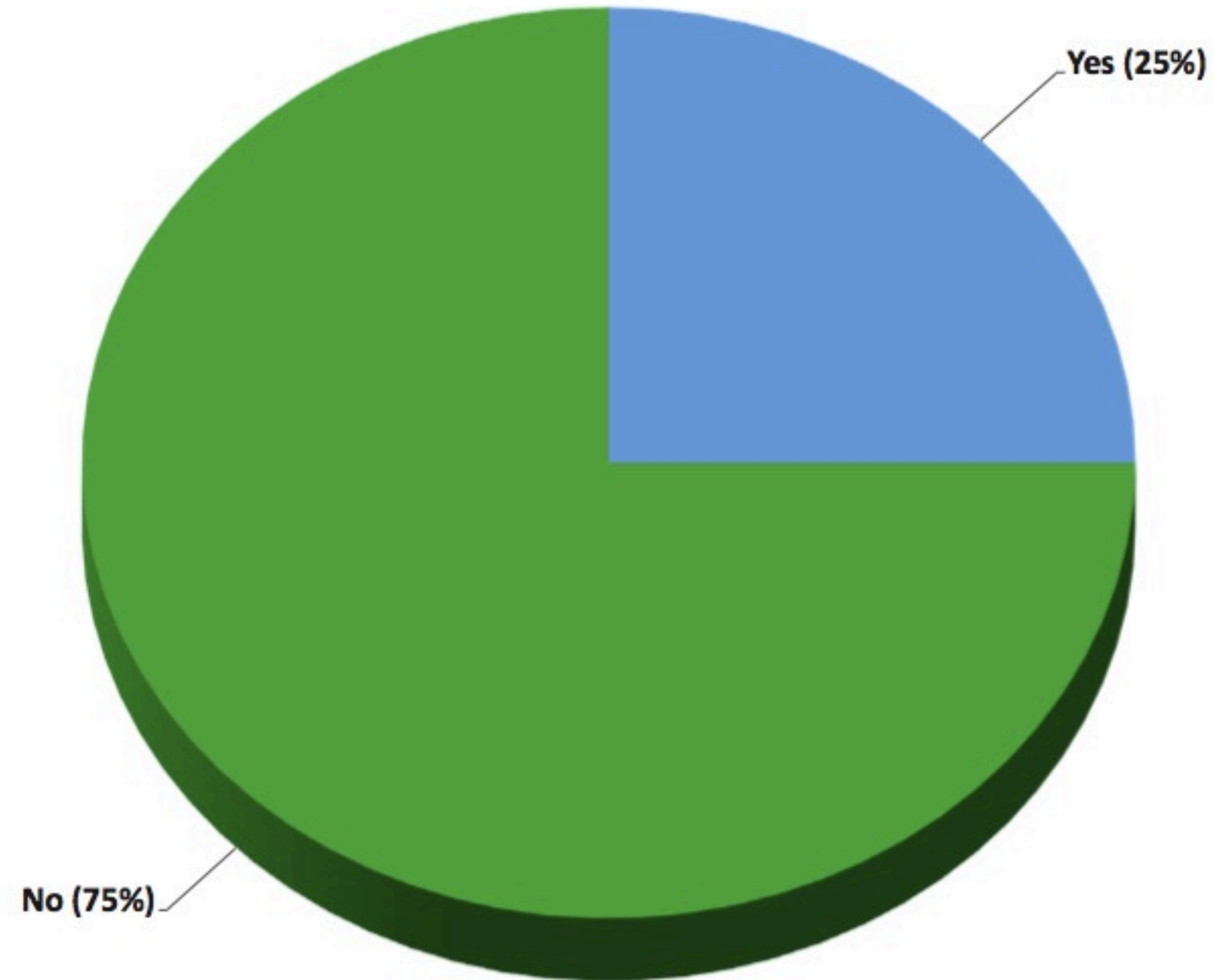
How important are these characteristics for your app to be a success?



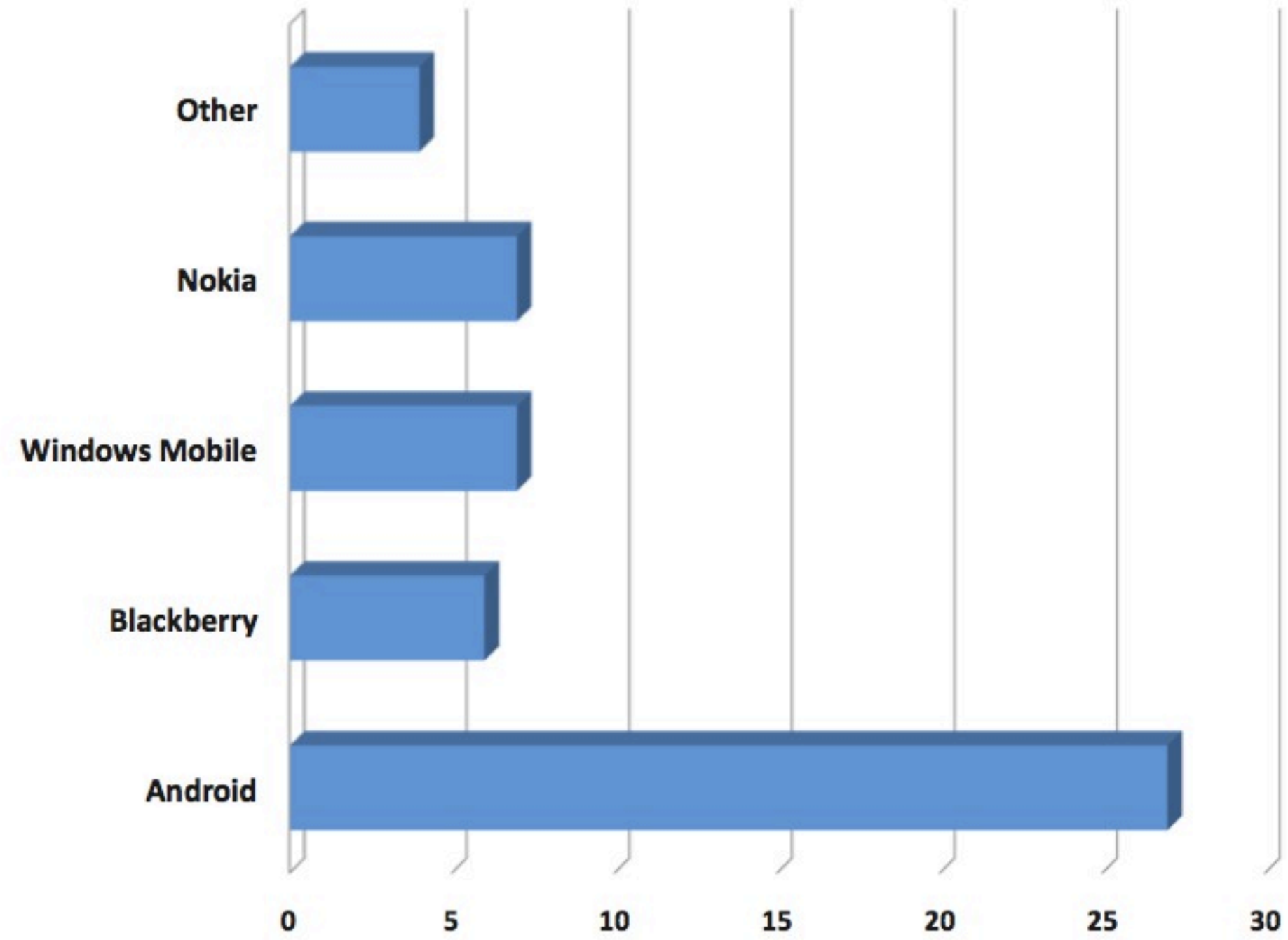
How would you rate the effectiveness of these promotion techniques?



Do you offer both a free and paid-for version of your application?



Do you develop for any of the following other mobile platforms?



Users

How many apps do you have on your iPhone?

(Those apps you have actually installed on your iPhone right now.)

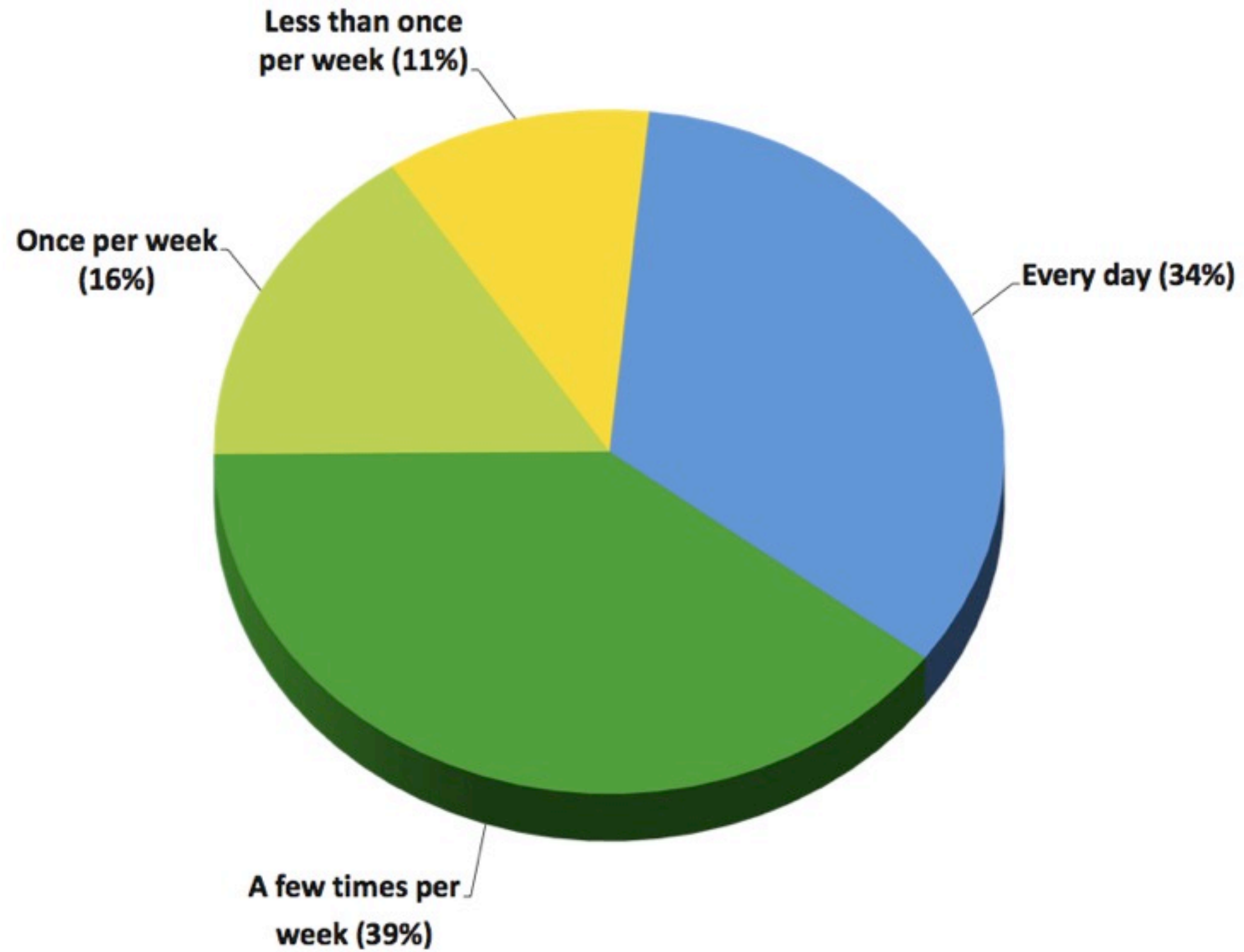
AVERAGE

67

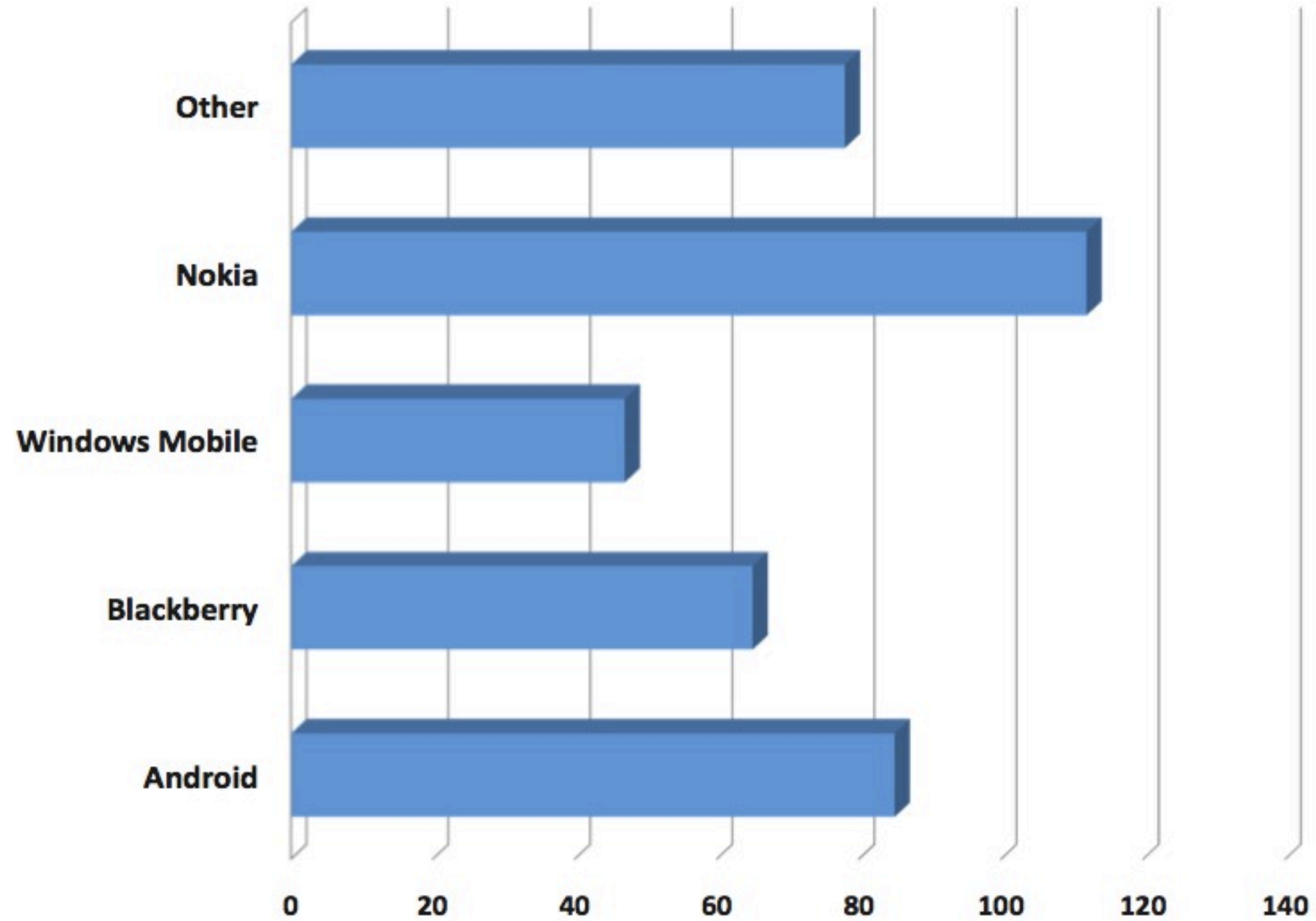
MAX

970

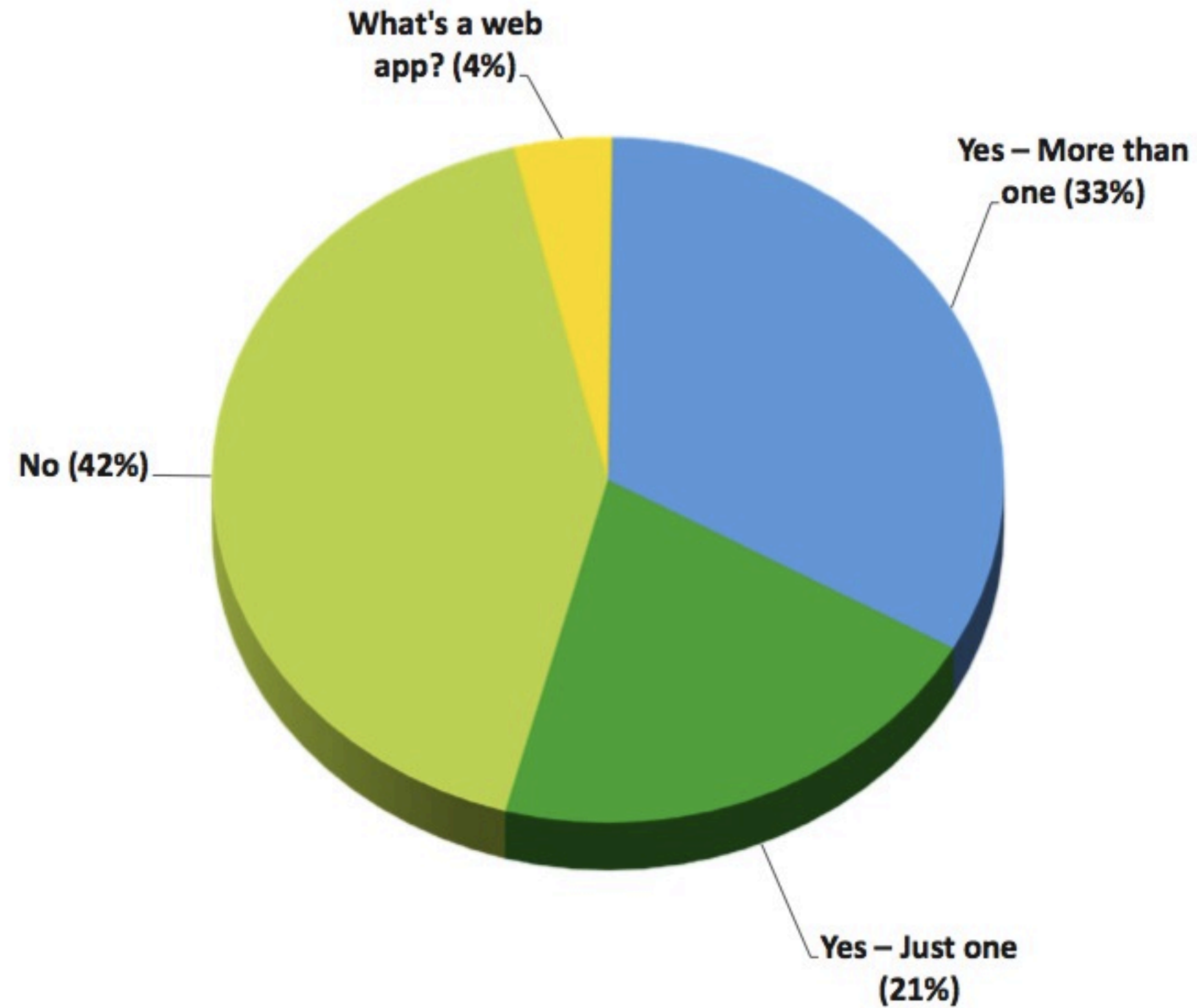
How often do you download app updates?



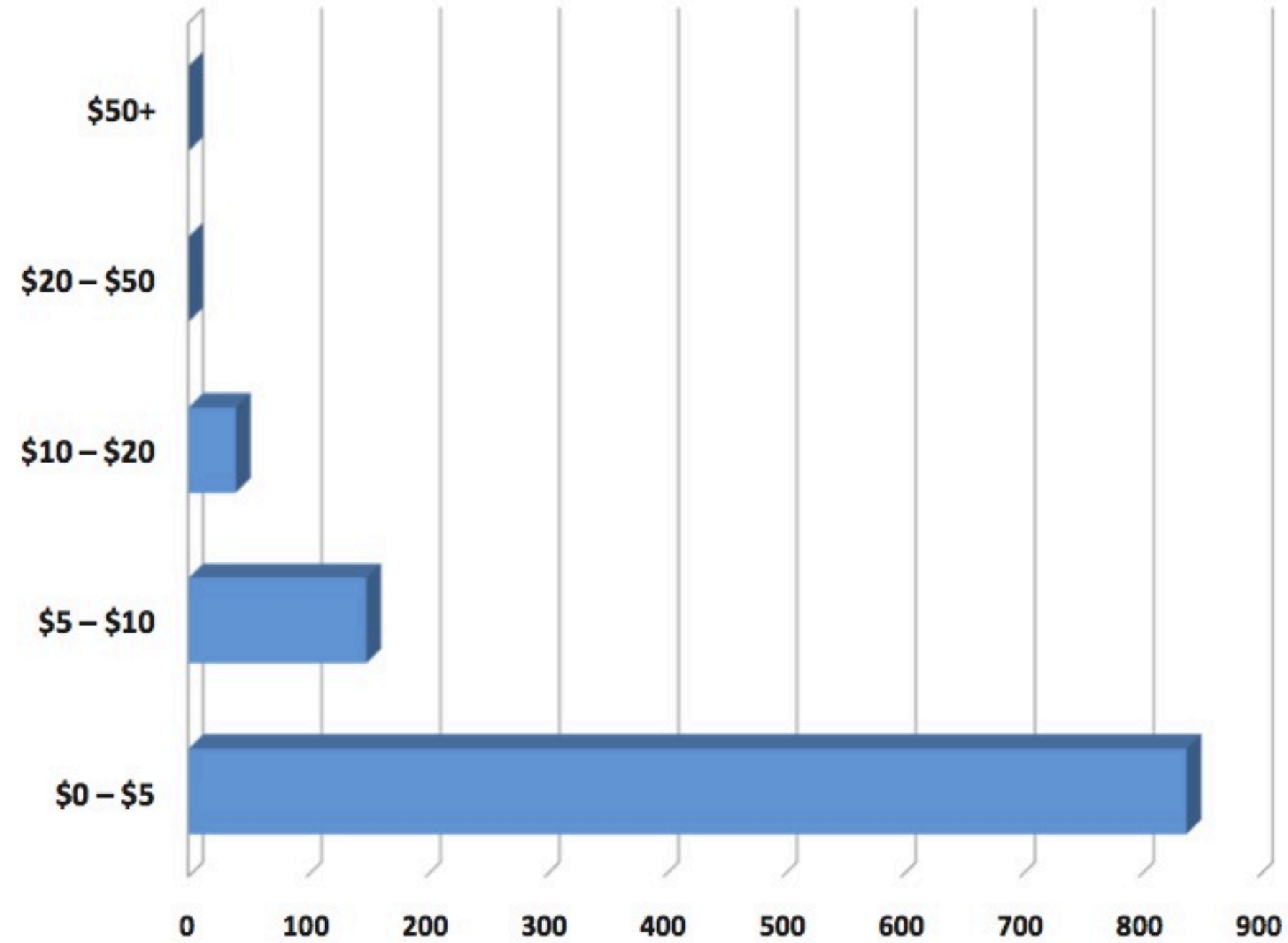
Do you use any of the following mobile platforms?



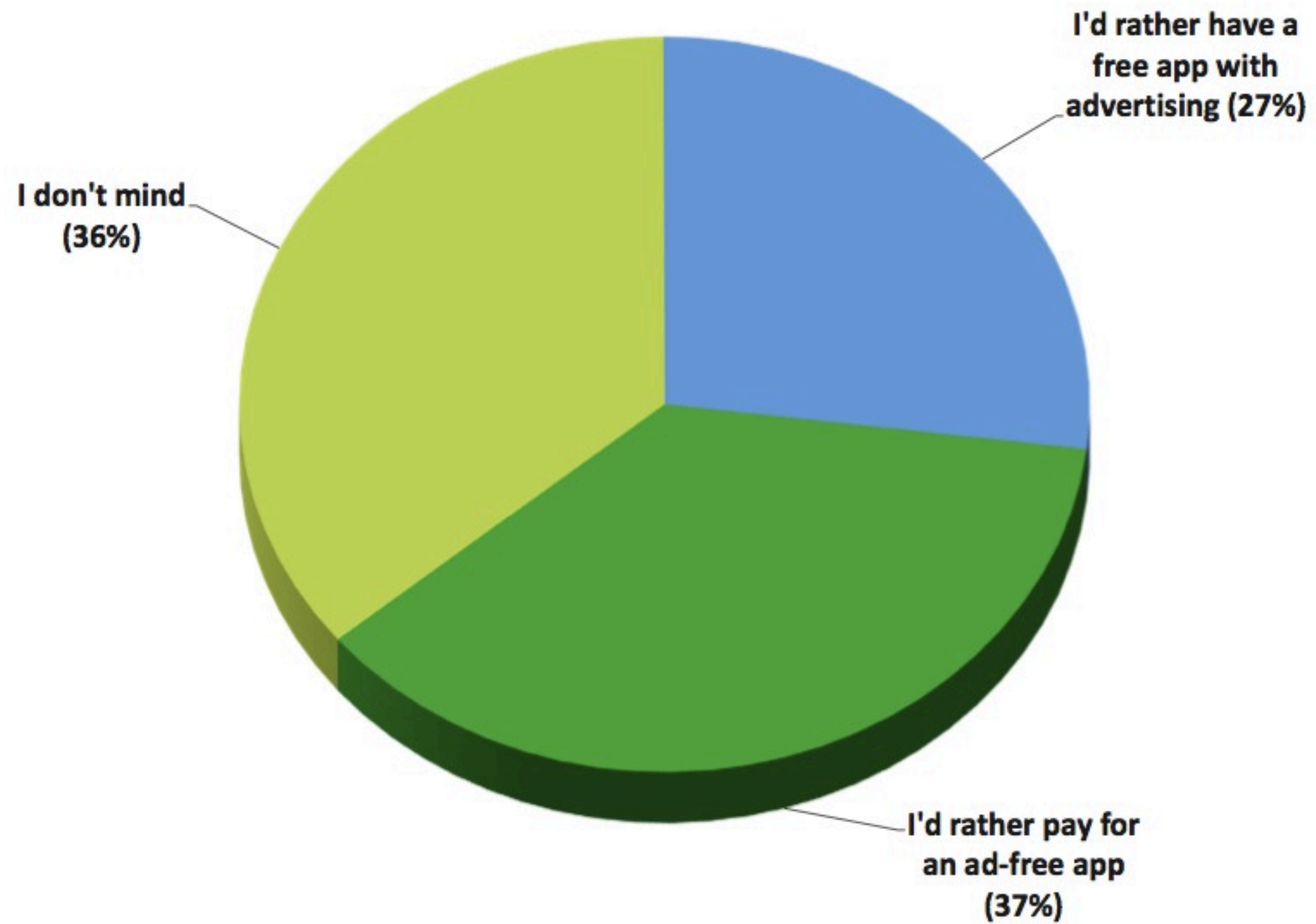
Do you have any web apps on your iPhone home screen?



How much do you usually spend on iPhone applications each week?



How do you feel about iPhone advertising?

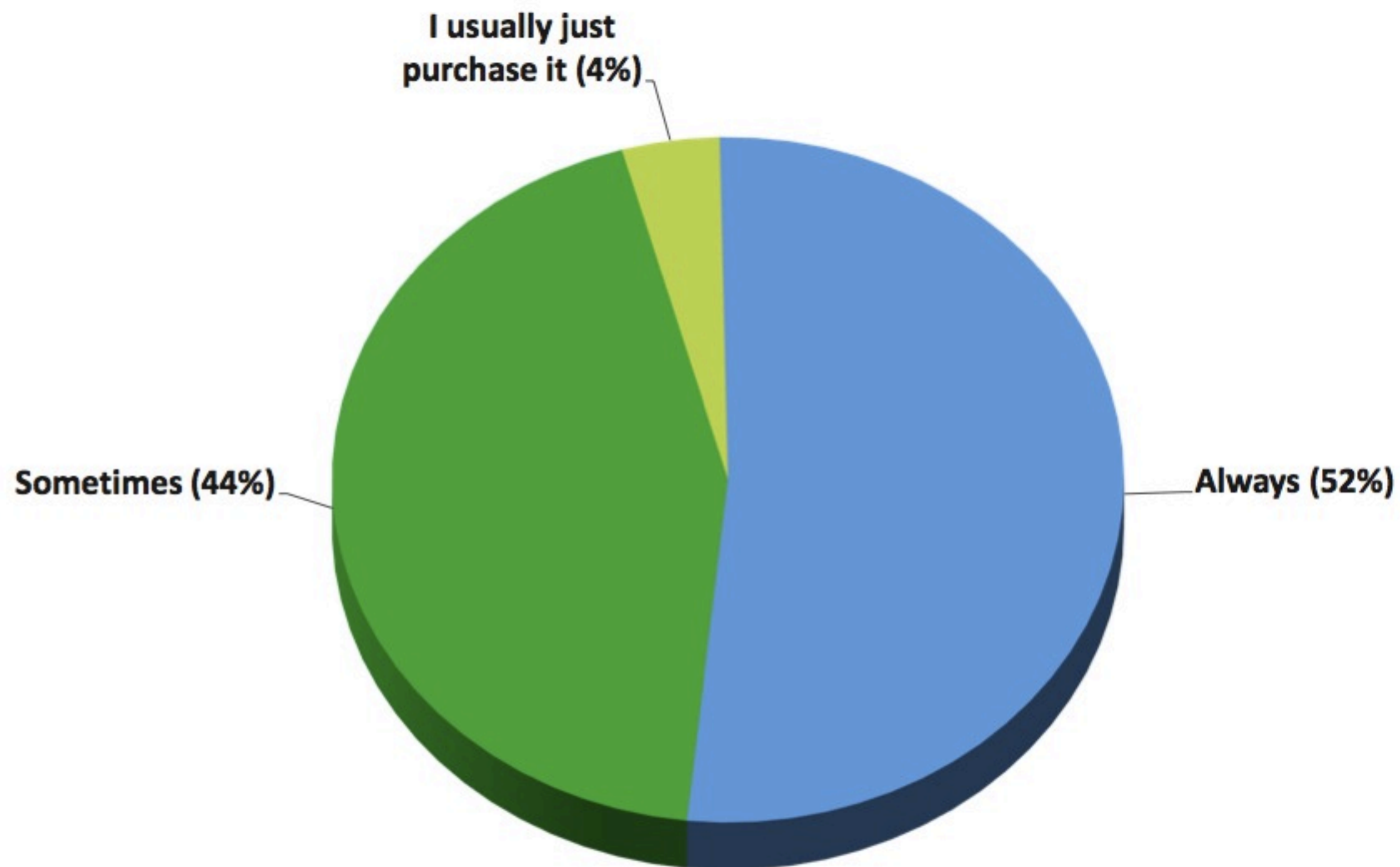


What's the most you have ever paid for an iPhone app?

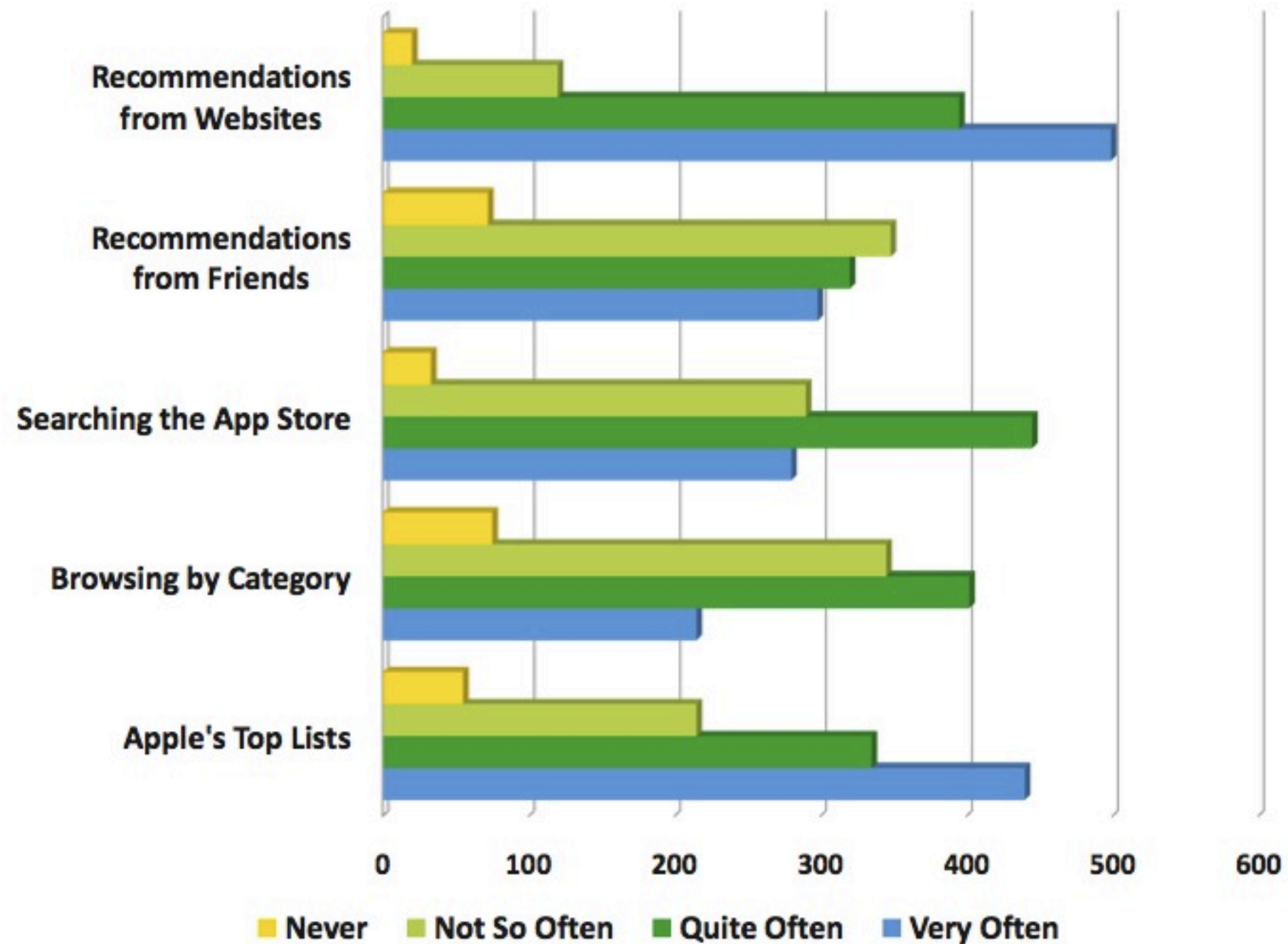
AVERAGE

\$14.58

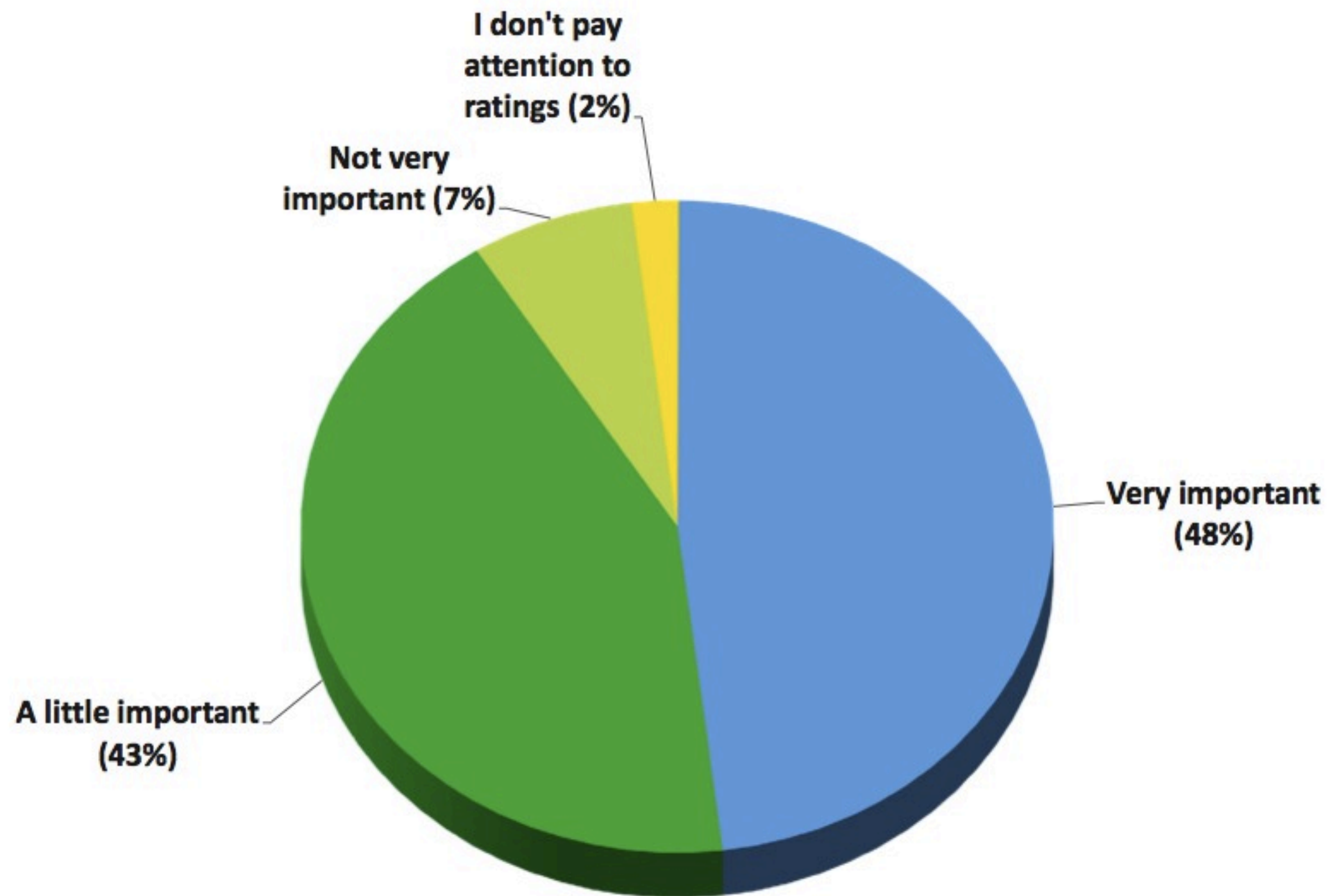
**If one is available, do you download a free version
of an app before purchasing it?**



How often do you use the following to find a new iPhone app?



How important are ratings when deciding whether to buy an app?



Programming

Native Apps

- Class will focus on building native apps
- Web apps won't be covered

Web Apps

- Runs on multiple platforms with the same codebase
- Quicker if already building a traditional web app
- No App Store
 - No Approval
 - No Free & Easy Publicity

jQuery Mobile

- <http://jquerymobile.com/>
- Unified UI across all popular mobile devices
- Built on jQuery and jQuery UI
- Default themes and themeable

Sencha Touch

- <http://www.sencha.com/products/touch/>
- Build using HTML 5 and Javascript
- Compatible with iOS,Android, BlackBerry

PhoneGap

- <http://www.phonegap.com/>
- Build Native apps with HTML and JavaScript
- Provides access to native APIs
 - Accelerometer, Camera, Compass, GPS, Storage
- Easy to deploy for multiple platforms
 - Android, BlackBerry, iOS, Palm, Windows

Source Control

- Client-server
 - Subversion
- Distributed (DVCS)
 - Git
 - Mercurial
 - Bazaar

Github

- If you are a student...
- <https://github.com/edu>
- Free Micro Plan
 - 5 Private Repositories
 - 1 Private Collaborator

Testing

- Not Required for class projects
 - But best practice
- Testing shows code is correct
- Provides a contract your code must satisfy

Continuous Integration

- <http://cruisecontrol.sourceforge.net>
- <http://jenkins-ci.org>
- <http://hudson-ci.org>

Prototyping



<http://www.uistencils.com>

Developer Tools

How many people are running
Lion?

How many people are paid iOS
Developers?



Xcode



Interface Builder

Free Account
Xcode 3.2.6

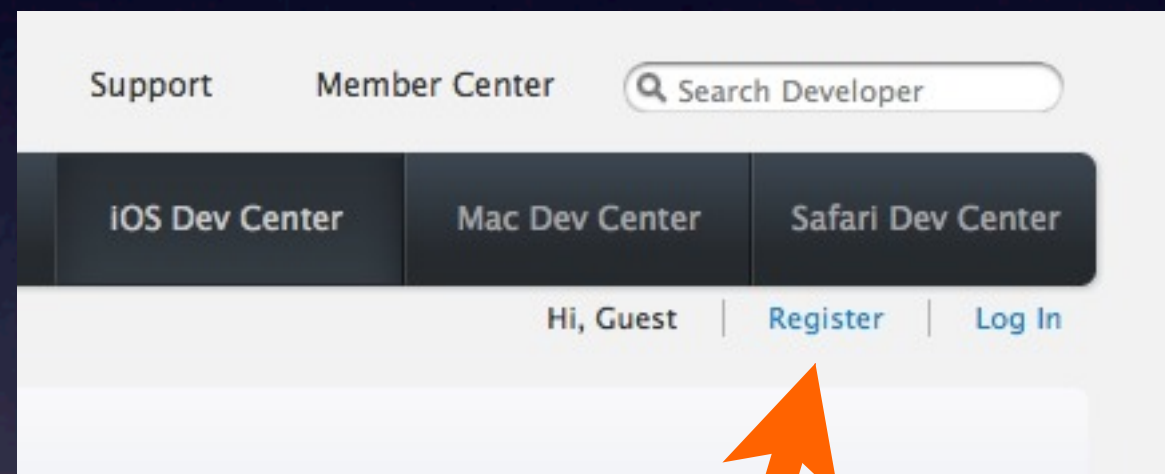
Sign Up

- developer.apple.com



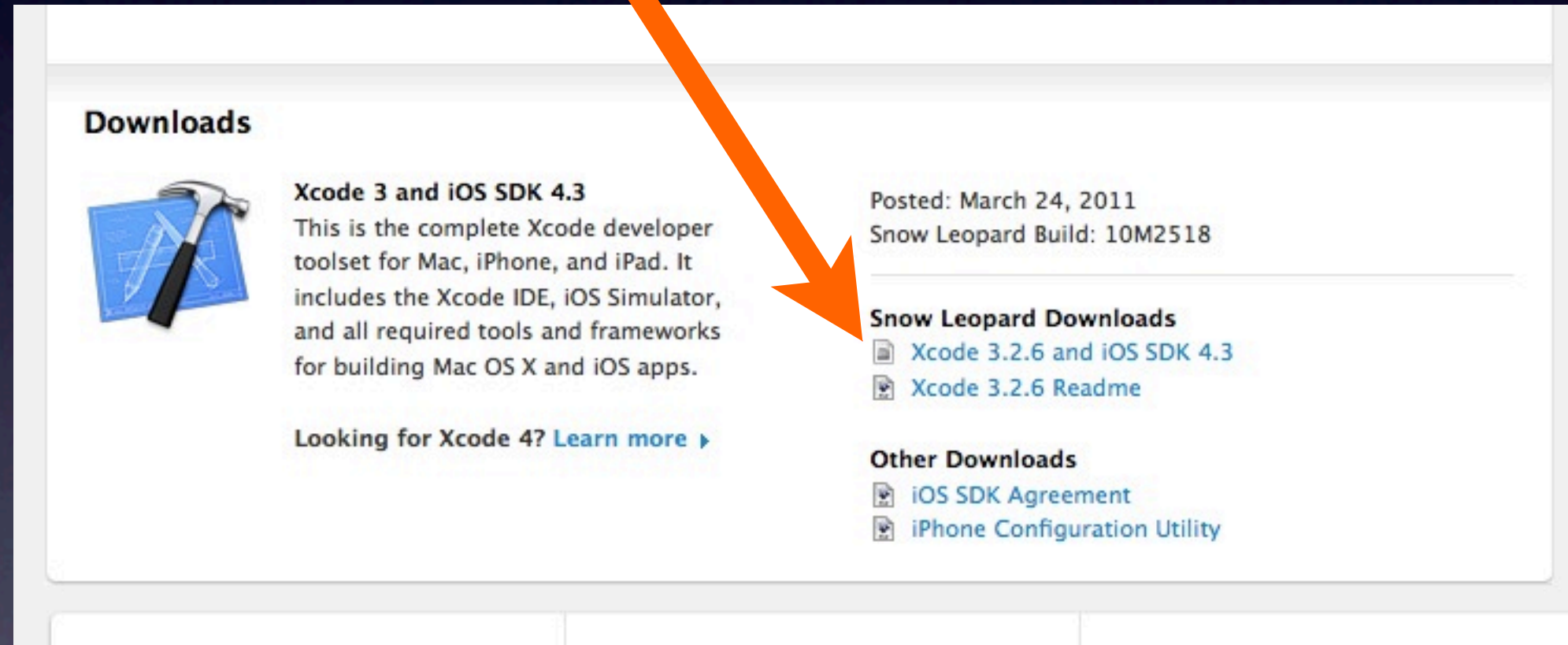
Sign Up

- Register for a free account



Sign Up

- Download Xcode



4.1 GB

Paid Account Lion Users

Xcode 4

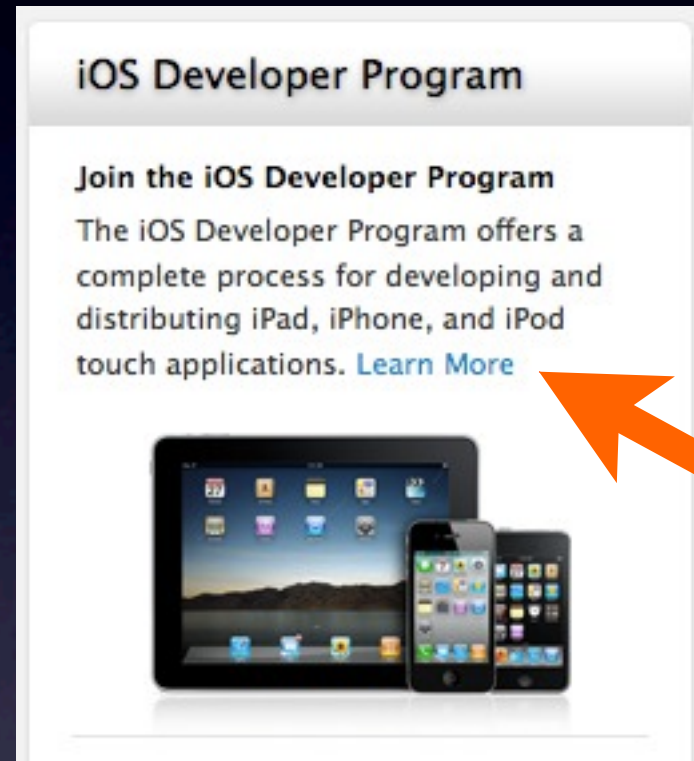
Paid Account

- Paid Account - \$99
- Run apps on your own device
- Release apps in the app store
- Access to Apple Developer Forums
 - Discussions with developers and Apple Engineers

Paid Account

- Access to Xcode 4
- Same Download Process as free account for Xcode 4

Paid Account



Right side after logging into Developer Portal

Paid Account

- Individual Account
- Company Account

Paid Account

Downloads



Xcode 4.1 for Lion

This is the complete Xcode developer toolset for Mac, iPhone, and iPad. It includes the Xcode IDE, iOS Simulator, and all required tools and frameworks for building Mac OS X and iOS apps.

[Download Xcode 4](#)

Posted Date: Jul 20, 2011

Build: 4B110

Included iOS SDK: iOS 4.3

Included Mac SDK: Mac OS X 10.7



Xcode 4.0.2 for Snow Leopard

[Download](#) ▶

[Looking for Xcode 3?](#) ▶

Posted Date: April 14, 2011

Build: 4A2002a

Included iOS SDK: iOS 4.3

Included Mac SDK: Mac OS X 10.6

Lion Users

- Look for Xcode 4 in the Mac App Store

Lion Users





Welcome to Xcode

Version 3.2.6 (1761)



Create a new Xcode project

Start a new software project for Mac OS X or iOS



Getting started with Xcode

Follow the tutorial to learn how to get productive quickly with Xcode



Apple Developer Connection

Visit the Mac and iPhone Dev Centers at developer.apple.com

Recent Projects

No recent projects

Open Other...

☒ Show this window when Xcode launches

Cancel

Open

New Project

Choose a template for your new project:

📱 iOS

Application

Library

👤 User Templates

MacFUSE

🍏 Mac OS X

Application

Framework & Library

Application Plug-in

System Plug-in

Other



Navigation-based Application



OpenGL ES Application



Split View-based Application



Tab Bar Application



Utility Application



View-based Application



Window-based Application

Product

iPhone

☐ Use Core Data for storage



Navigation-based Application

This template provides a starting point for an application that uses a navigation controller. It provides a user interface configured with a navigation controller to display a list of items.

Cancel

Choose...

New Project

Choose a template for your new project:

iOS

Application

Library

User Templates

MacFUSE

Mac OS X

Application

Framework & Library

Application Plug-in

System Plug-in

Other



Navigation-based Application



OpenGL ES Application



Split View-based Application



Tab Bar Application



Utility Application



View-based Application



Window-based Application

Product

iPhone



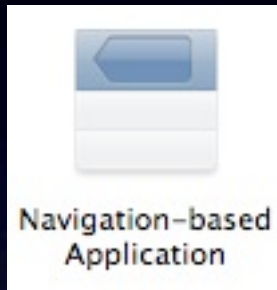
OpenGL ES Application

This template provides a starting point for an application that uses an OpenGL ES-based view. It provides a view into which you render your OpenGL ES scene, and a timer to allow you to animate the view.

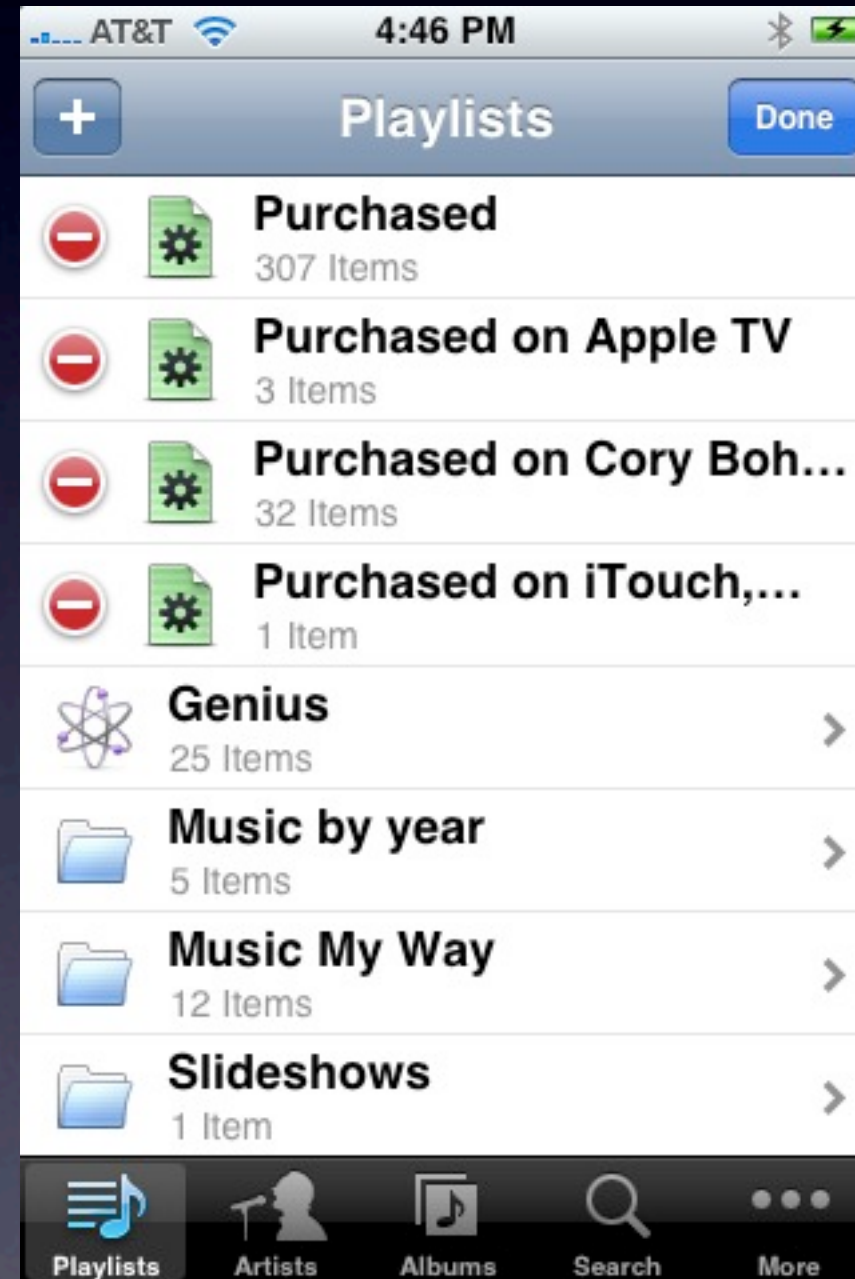
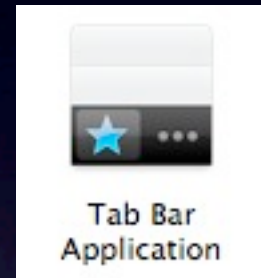
Cancel

Choose...

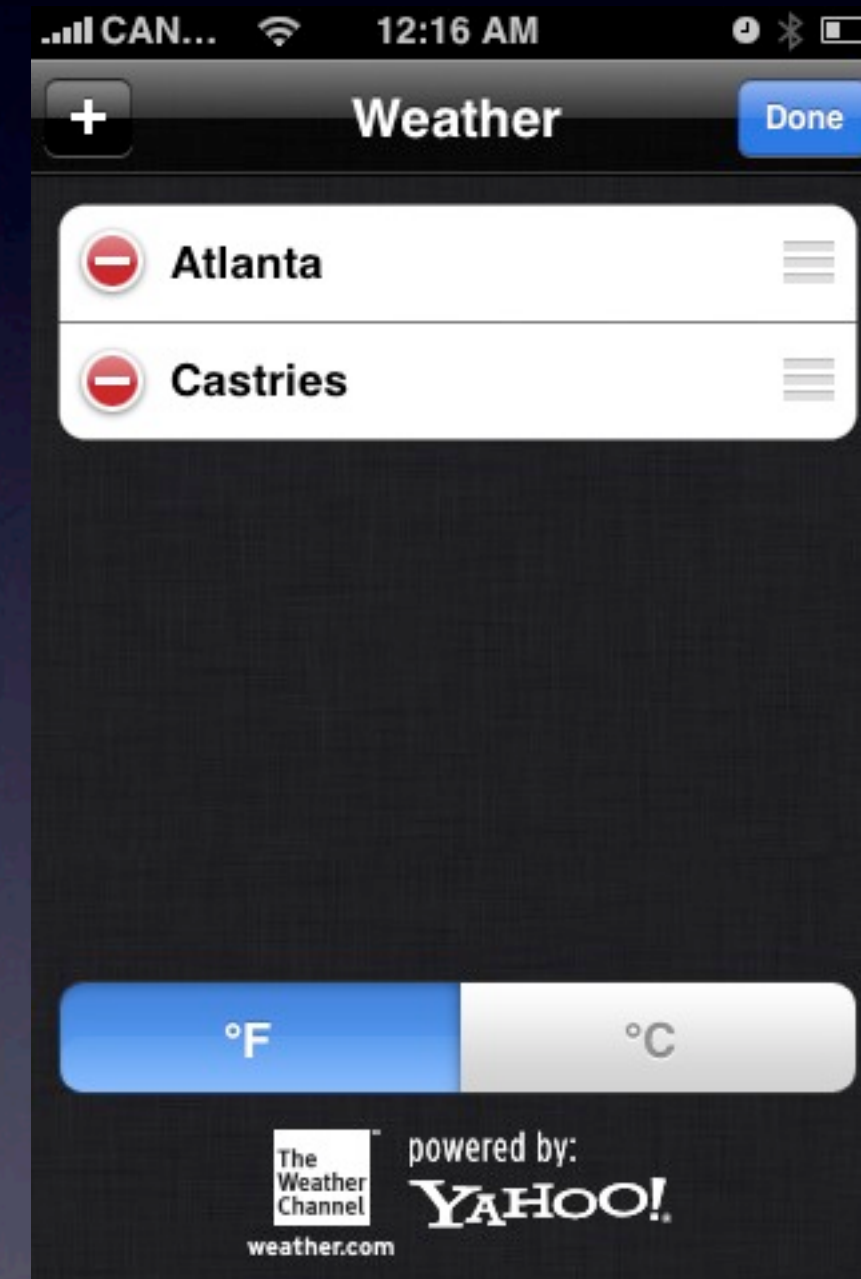
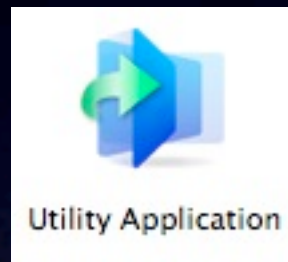
Navigation Based App



Tab Based App



Utility Based App



Design

iPhone Design

- Simple
- Quick
- Reliable

iPad Design

- Highly Visual
- Immersive
- Realistic
- Flexible

Make Controls Finger Tipped Size



Finger Tip Sized Controls

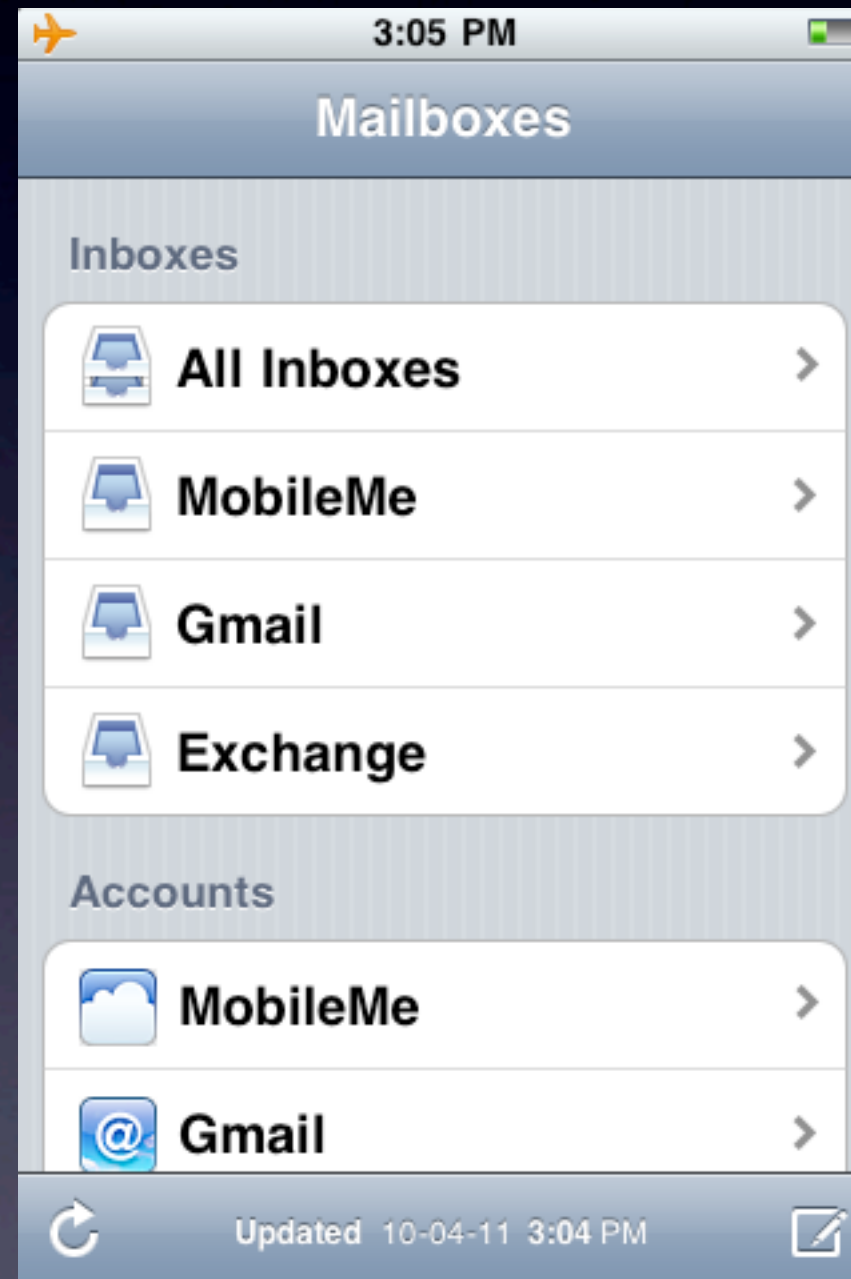


Minimum Size: 44 x 44 points

Vary Control Size By Usage

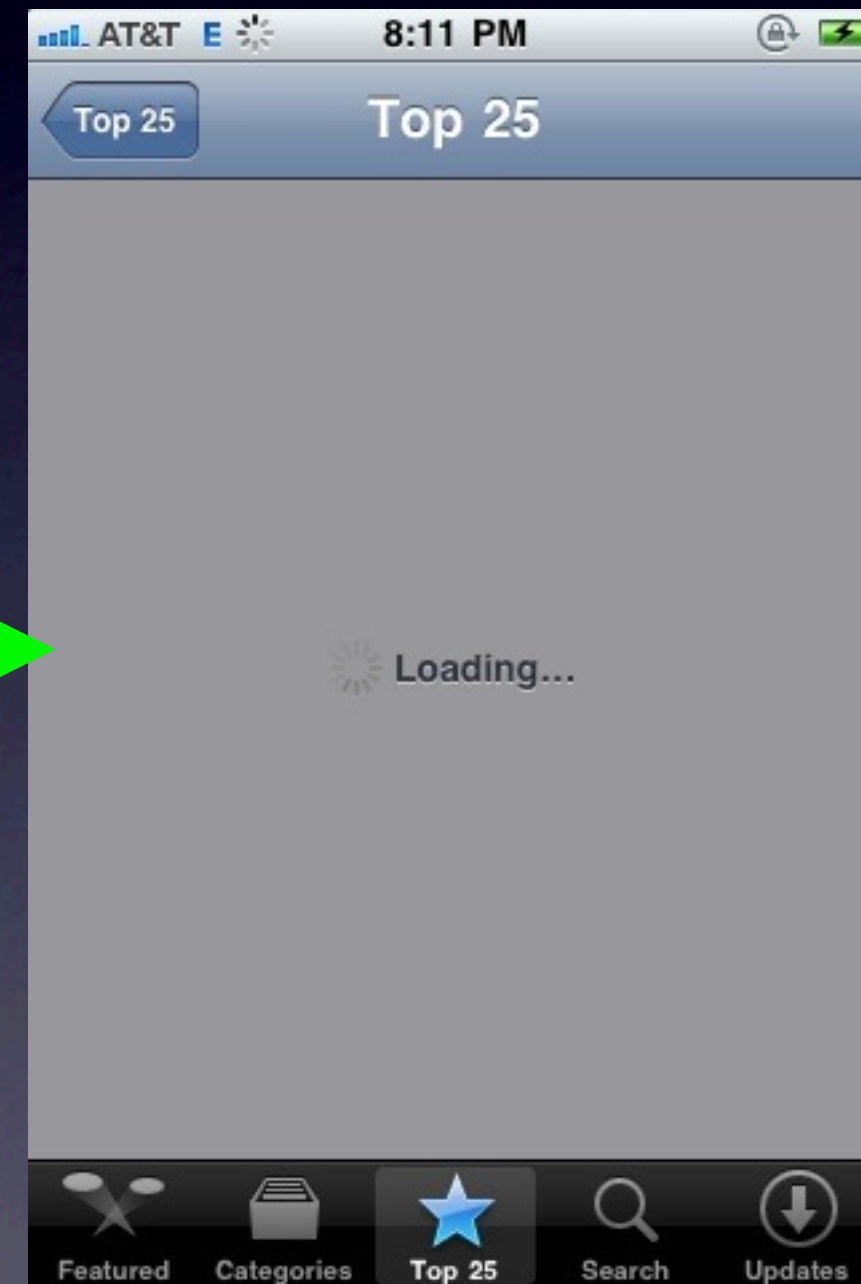


Streamline Navigation

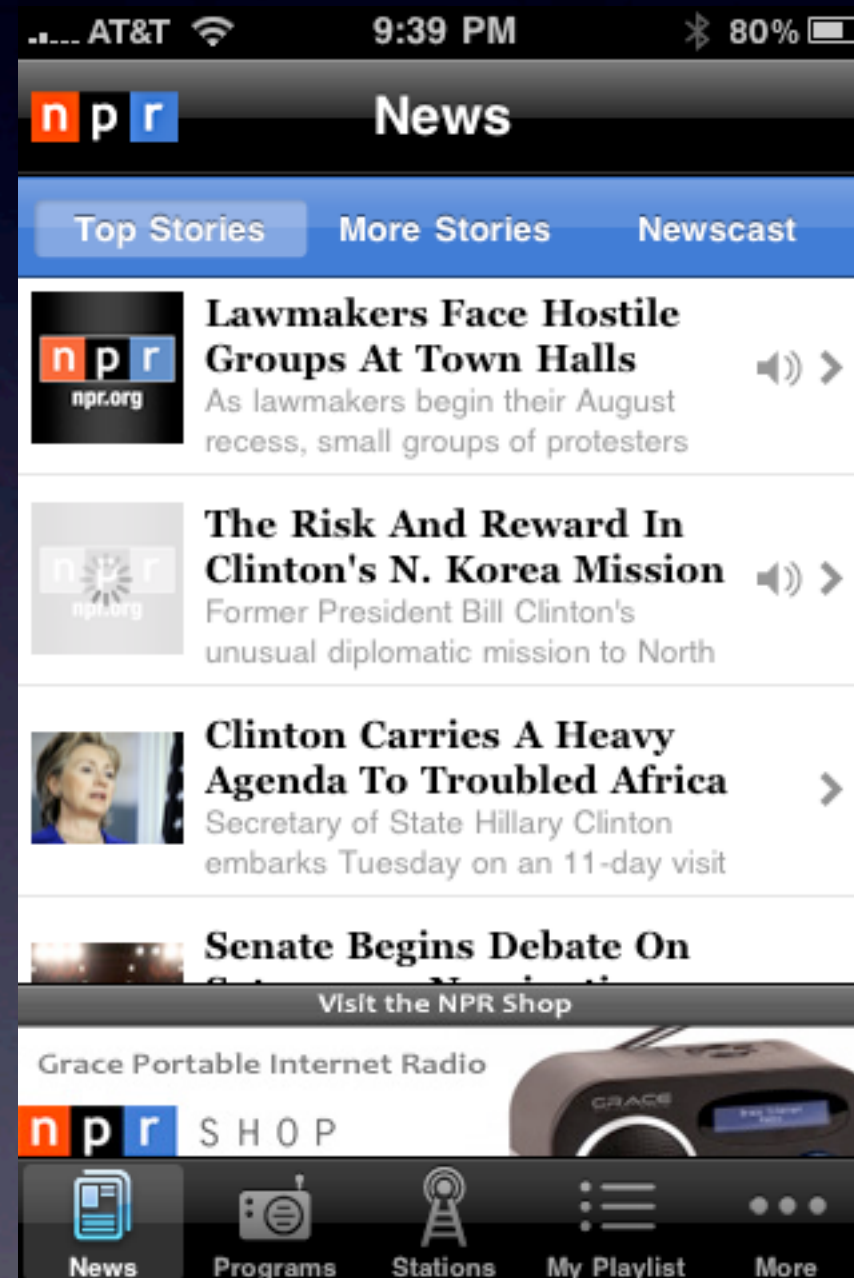


Plan for Slow Connections

Design to Feel Fast



Plan for No Internet Connection



Icons



The Heist



Design for Realism

Icons



Fruit Ninja

Custom UI



Weightbot



Convertbot



Tweetbot

Class Schedule

Class Schedule

- Developer Tools
- Model-View-Controller
- Objective-C
- Cocoa Touch

Topics

- Memory Management
- Navigation Controller
- Table Views
- Core Location
- More...

Resources

WWDC Videos

WWDC

- World-Wide Developers Conference
 - Normally in June of each year
 - San Francisco, CA
- Student Scholarships available

WWDC Videos

- Once logged into your developer account
- At the bottom of the screen



Requires an iTunes Account

WWDC Videos

- Mostly advanced topics
- Few beginner videos
- Free to every registered developer
- 110+ Videos Available

Forums

- <http://iphonedevsdk.com/forum>
- <http://forums.macrumors.com>
- <http://stackoverflow.com>

Creating a Business

LLC

- Limited Liability Company
- Protects your assets
- <http://sos.louisiana.gov>
- \$75

LSBDC

- Louisiana Small Business Development Center
- <http://lsbdc.org>
- Location in Business-Education Building @ LSU-S

Tax Credits

- Digital Media Incentive
- <http://www.louisianaeconomicdevelopment.com/opportunities/incentives--programs/digital-media-incentive.aspx>

Digital Media Incentive

- The Digital Media Incentive provides a tax credit of 25% of qualified production expenditures for state-certified digital interactive productions in Louisiana and 35% tax credit for payroll expenditures for Louisiana residents.

For Next Week

Next Week

- Have Xcode installed
- Will start learning Objective-C

Questions?