

Open Source

An overview of why open source is key to building mobile software.

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Architect, Mutual Mobile

Shared Problems Deserve

Shared Solutions

What sort of problems?

Communication over a network

Responsive User Interface

Data Persistence

Testing

Dependency Management

What can you do with Open Source?

1. You can use it

2. You can contribute to it

3. You can share your own

1. Using Open Source

Open Source tools help you focus on the real work you need to do.

Networking



AFNetworking

AFNETWORKING

OkHttp

OkHttp

User Interface

Challenges Building User Interfaces

Consistency

Making an app feel familiar, both to your brand, and to the platform

Animation

Animation conveys meaning and makes your app more delightful.

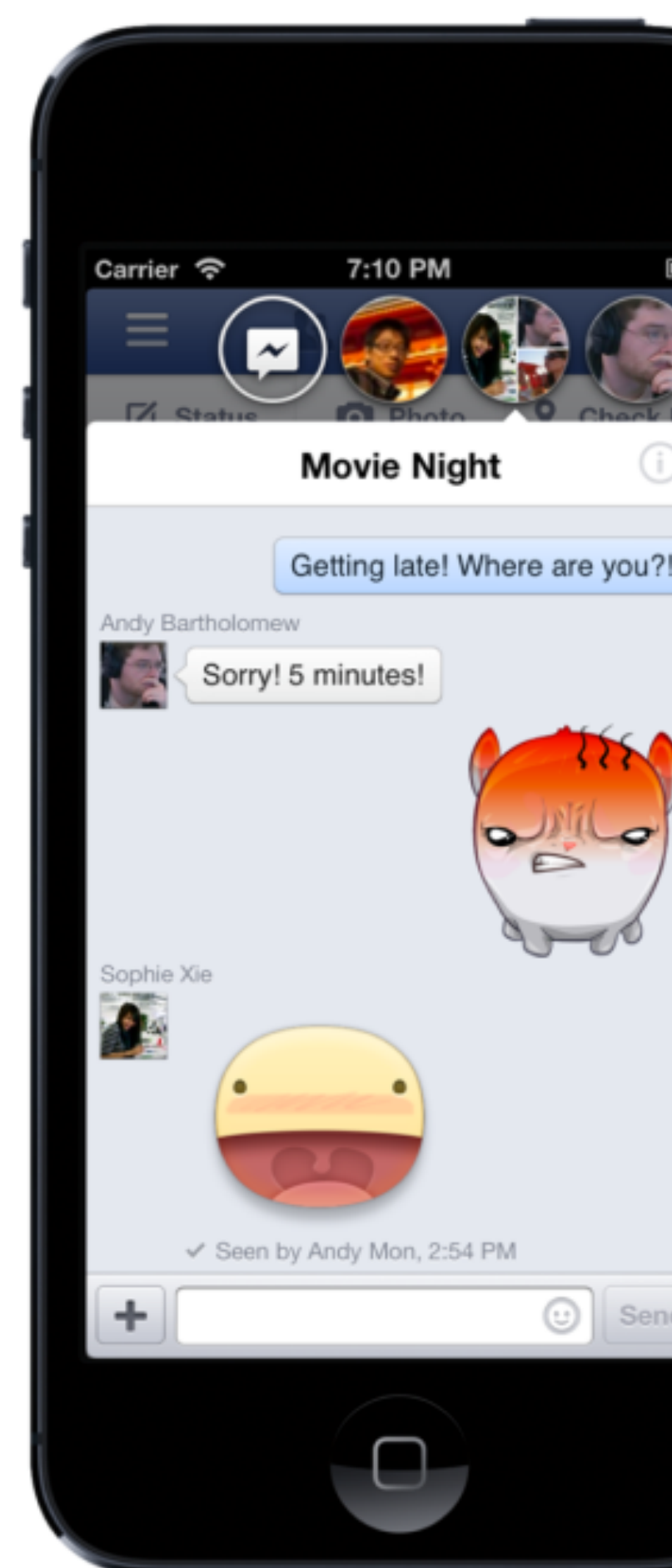
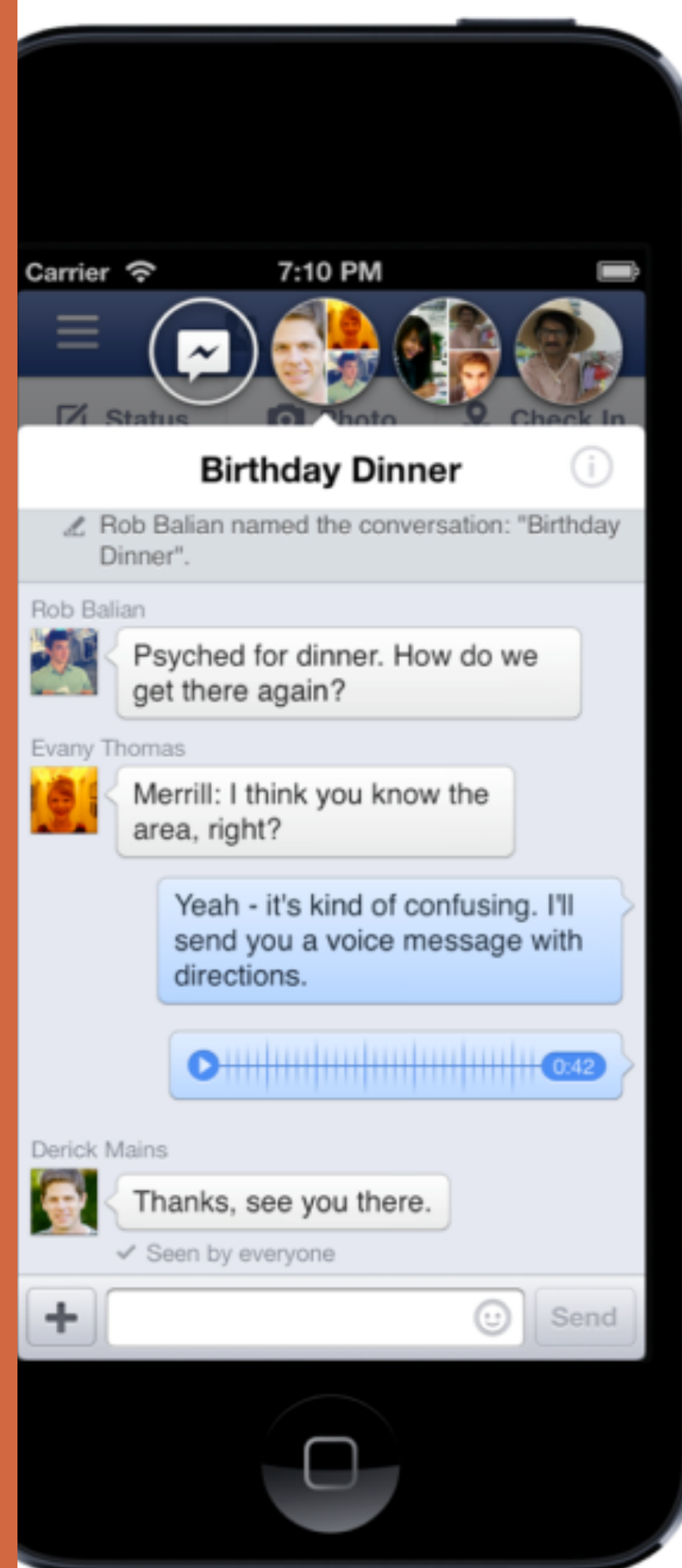
Performance

Interfaces should be fast. Great tools can help you do that.

Facebook

Immensely complex app

Polished UI



Tools

React

ReactNative

ComponentKit

Paper

**Different take on Facebook, with
an amazing interface**



Facebook

Ben Warren

Passing through beautiful Mt. Shasta on my w...



Johanna Hardy

Karaoke Girl premiered in Rotterdam last night! Feeling so fortunate to have worked on this film with such talented cast and crew. Thank you to friends and family for your love and support.



Matt Brown with Jodie Watson and Tom Watson in Portland, OR — Hanging out on the back porch.



Over Our light train fish

Tools

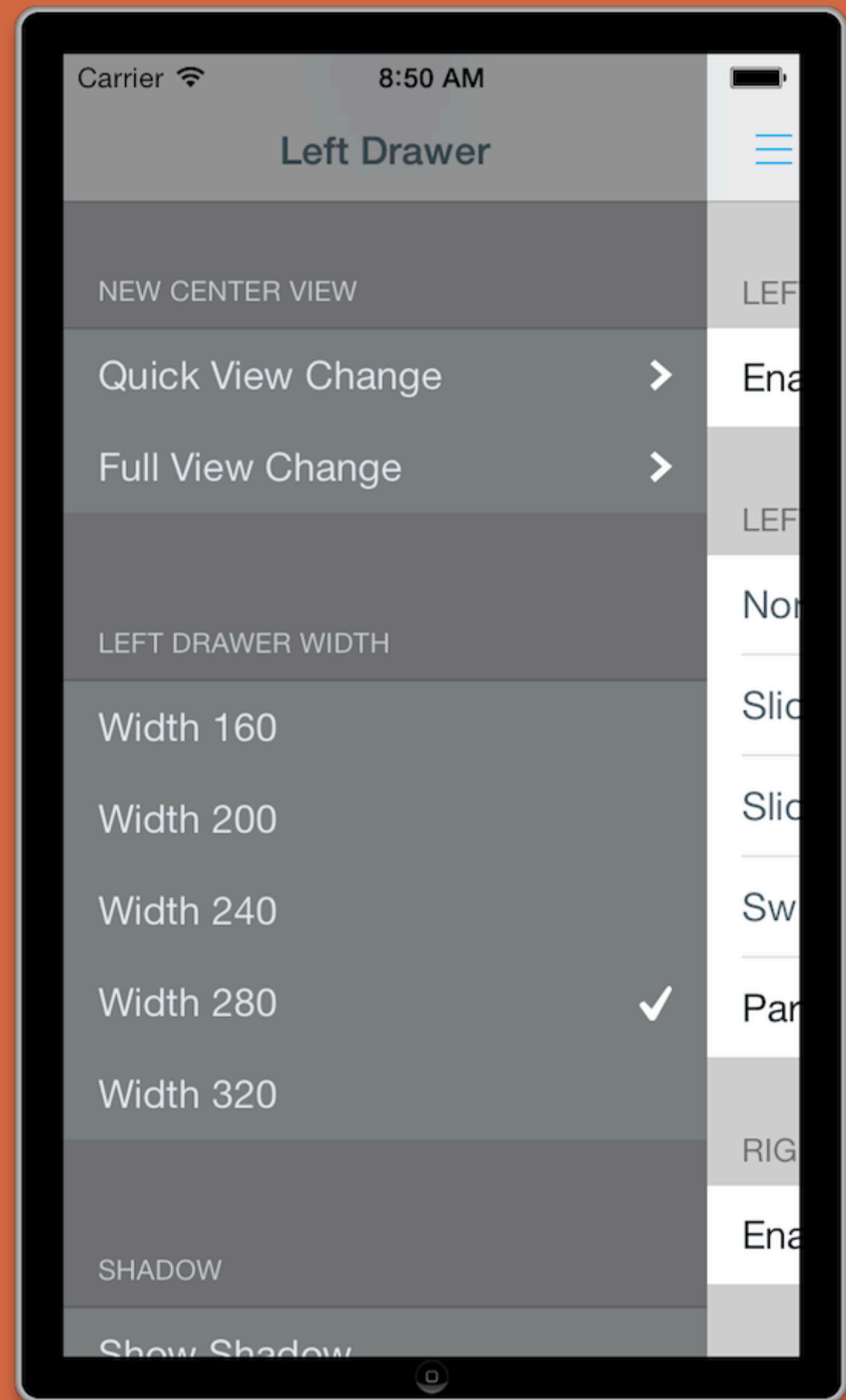
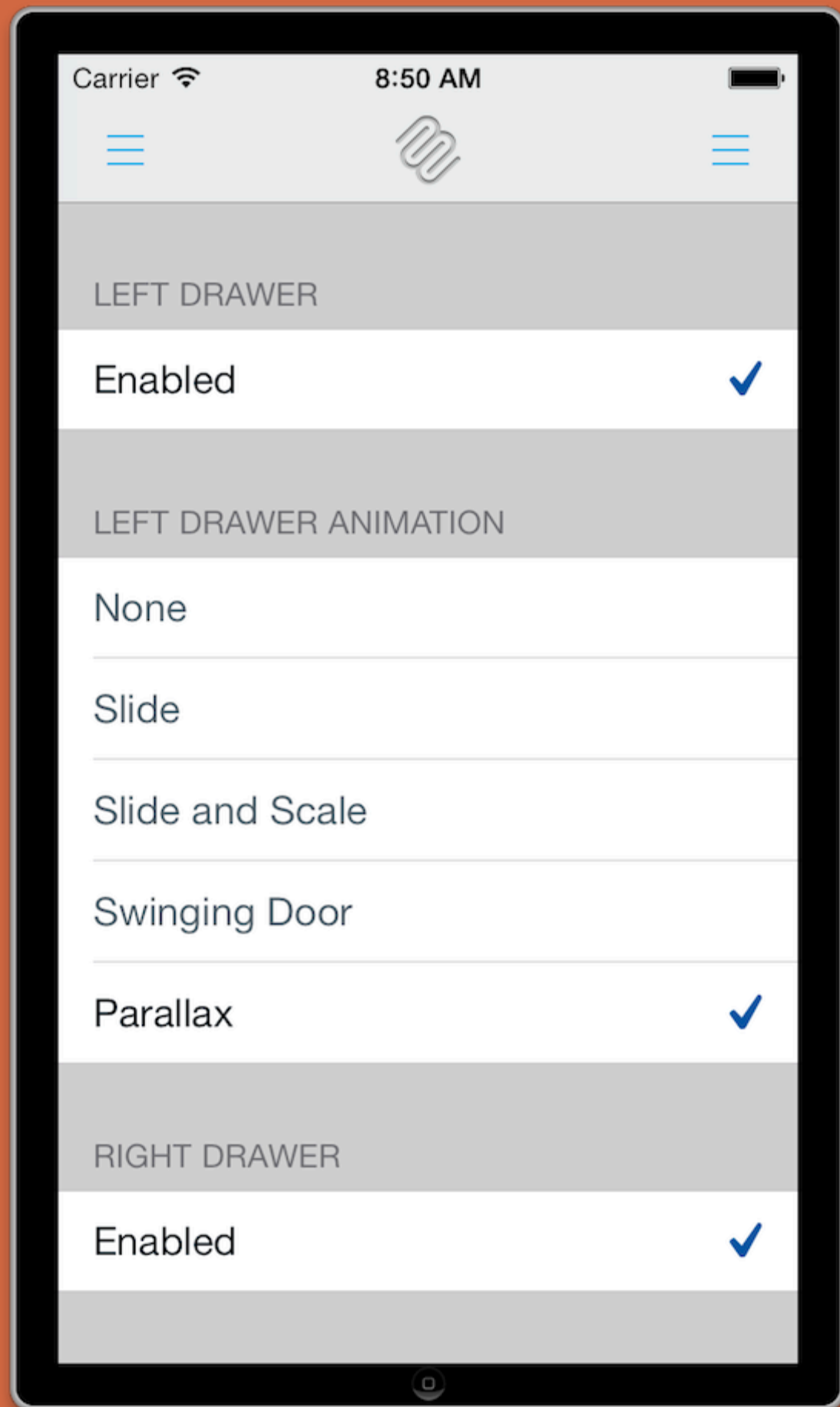
AsyncDisplayKit

Pop

Tweaks

MMDrawerController

You know those side menus on iOS apps? Yeah, this does that.



Super common problem

Thousands of apps do this.

**Super easy to use library
to build a side menu**

Over 3000 stars on GitHub

Data Persistence

SQLite

Used for...just about everything.

Realm

Competitor to SQLite

Partially open source, with a full company around it.

Designed for Mobile!

MMRecord

**Serialization between REST and
Core Data**

**We were solving the same
problem in all of our
projects**

**Ridiculously easy to
connect a web service to
Core Data**

**Used across many projects at
Mutual Mobile and hundreds of
other projects in the community.**

2. Contributing to Open Source

Are you using Open Source?

What could you do to make it better?

**Look at the libraries you
are using.**

Do they have any problems?

XMPPFramework

**Multithreading and crashing
problems**

Submitted updates to fix them

Urban Airship

**Super popular push notification
provider**

**Fixed several issues with
their SDK for iOS**

How to contribute back?

STOP!

Don't write code yet.

First Step:

Identify the Problem

**Is the problem in the library, or
with your implementation of it?**

Second Step:

Ask for Feedback

(Before you write code!)

Third Step:

**Make your contribution
easy to accept**

Submit clean code

**Match the style of the library
you're contributing to**

**Write tests if you're fixing
a bug**

**And of course, test your code
yourself**

Create beautiful programmer interfaces

**Eliminate typos, write
documentation, think about your
method names**

**So why should you
contribute?**

**Improve the tools that you
already use**

**Part of being a good citizen in the
developer community**

**Learn about how things
work**

**Open a library up and read it.
Figure out how it works.**

Learn something new.

Build your Portfolio

Contributing to open source is great practice.

It's good for your career!

3. Releasing Open Source

Share openly

Solve important problems

**Have you seen the same
problem twice?**

Do you have a solution for it?

Bingo!

Make it Easy to Use

The key to great open source is ease of use.

API

Make it Intuitive

Keep it Simple

Documentation

Write detailed header documentation.

Clearly explain how to use your library.

Examples

Include examples of how to use your library.

MMWormhole



Inter Process Communication

**How do you share information
between the watch app and the
iPhone app?**

**Apple didn't provide a
solution for this**

**Left to developers to figure out
how to do it**

We Solved It!

And we made it SUPER easy to use.

Shared with everyone

Posted on developer forums

Posted on Twitter

Used in Thousands of Apps

Best way to communicate between iPhone and Watch app

Summary:

Use excellent tools

**Give back to the
community**

Start something new

Thanks!

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