

# 301: App Architecture (Conclusion)

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All right, that concludes this talk on app architecture.

## What You Learned

We went from a very monolithic architecture where all the code sits inside the view controllers:

*Slide: Bad architecture*

To something that is much more modular:

*Slide: Modular architecture*

This new design has many more objects, but they are all simpler because they do just one thing. If the parts are small, then each part is easy to understand and test in isolation.

Each of these sections, which we've called "layers", are mostly separate from each other. The networking layer doesn't know anything about the UI, the domain model doesn't know anything about the networking, and so on. The application layer brings all these pieces together.

You used the principles of decoupling, separation of concerns, and reducing dependencies to make your source code simpler, easier to debug, and easier to maintain.

To be fair, some of this stuff is overkill for many apps. If your app is simple enough, it may be perfectly fine to have the persistence logic inside your model objects, for example. Like any other design problem, these things are trade-offs.

Remember, MVC or Model-View-Controller is not the whole picture. Not everything has to be a model, a view, or a controller.

As a rule, if your code becomes hard to understand, or you don't know where to put some new piece of logic, often the solution is to break it up into separate objects.

Don't be afraid to break your app into lots of smaller pieces.

## Where To Go From Here?

*Slide with books*

If you're interested in learning more about software architecture, then here are some book recommendations.

- *Domain Driven Design* by Eric Evans
- *Patterns of Enterprise Application Architecture* by Martin Fowler

These books are really about much larger systems than just mobile apps, but they still are worth reading. You can't really go wrong with these two books. There's a lot of good insight in there.

As far as I know there isn't a book dedicated to architecture for mobile apps, which is why I'm currently writing one, and it will be published through RayWenderlich.com, so keep an eye on that.

I hope you found this talk useful. If you want to talk more about this stuff, then come see me afterwards. Or you can hit me up on Twitter. My handle is on that slide, @mhollemans.

Unfortunately, I can't really stick around to talk right now, because I have to give another presentation right after this one. But after that, feel free to come up to me any time.

Thanks!