

快速开发跨平台SDK

Golang在移动客户端开发中的应用

为什么用Golang?

- 可读性
- 编译速度快
- Gorouting
 - 天生适合大并发的后端服务



兼容多平台的挑战

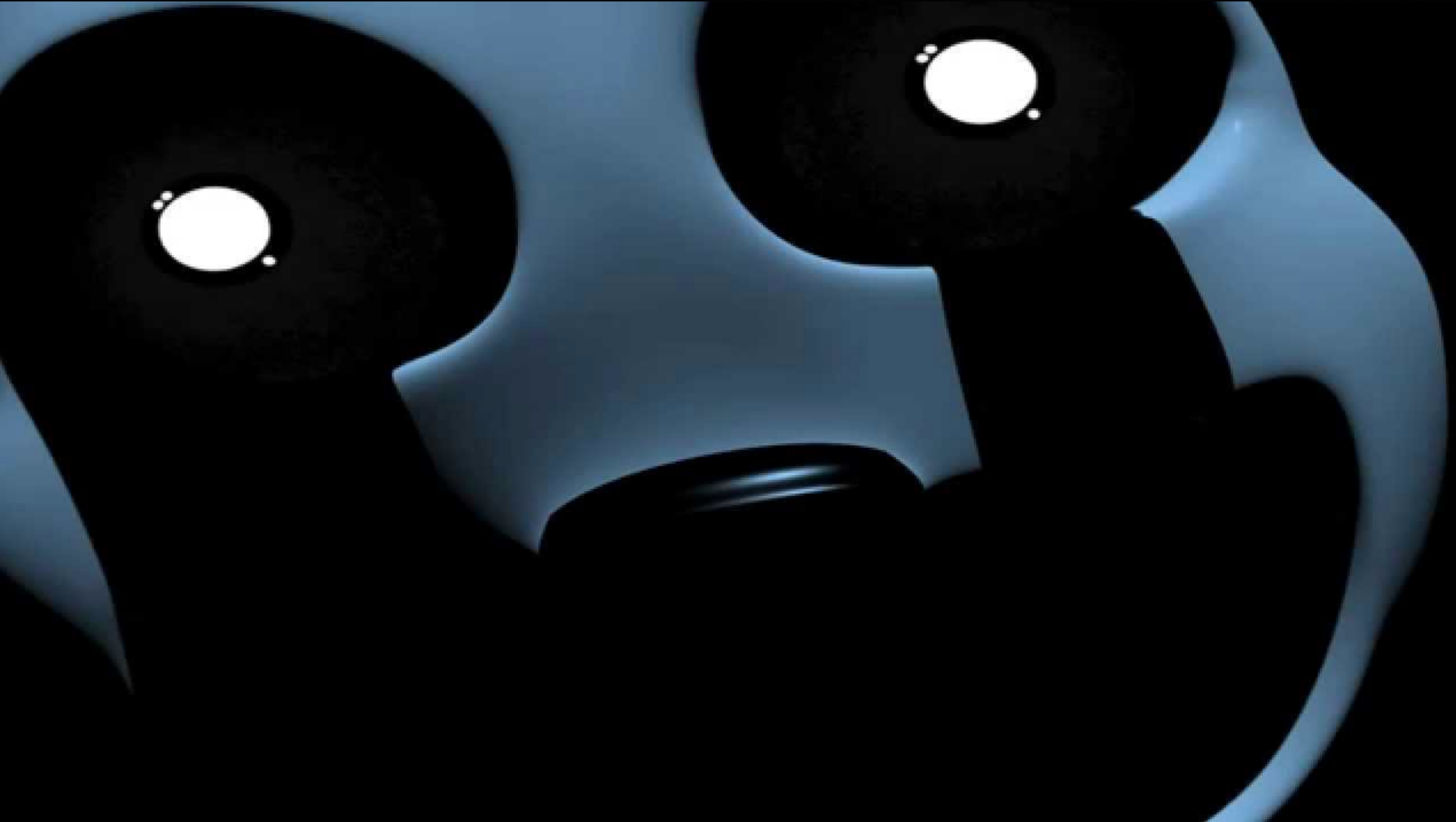
体验与开发效率的悖论

技能树

安卓	iOS
Java	Swift
JNI & C/C++	Object-C
Eclipse & IntelliJ	Xcode

典型解决方案

React Native	Javascript
Xamarin	C#
各自独立的前端开发团队	...@% ¥ #%...



-buildmode 和 -tags

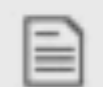
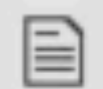

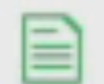

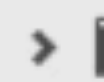
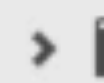
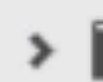


Golfing 1.5令人惊喜的新特性

Demo

```
// 编译静态链接库
```

```
$ go build -buildmode=c-archive\  
    github.com/tomasen/gomobile-demo/c/hello
```




```
$ go build -buildmode=c-archive\  
    github.com/tomasen/gomobile-demo/c/world
```


 .git c GopherC hello main.go world main.go hello.a hello.h helloworld.a world.a world.h GopherDemoAndroid GopherDemoIOS GopherDemoOSX GopherKit.framework misc android ios fakegopath pkg darwin_arm github.com

main.go

1

{

File 0 Project 1  1 Issue c/world/main.go* 1:1LF UTF-8 Go  master  11 updates

Gomobile

和 gobind

安装开发环境

```
// 安装 gomobile  
$ go get golang.org/x/mobile/cmd/gomobile
```

```
// 初始化开发环境  
$ gomobile init
```


编译项目

// 编译安卓版本

```
$ gomobile bind -target=android \  
    github.com/tomasen/gomobile-demo/sdk
```

// 编译iOS版本

```
$ gomobile bind -target=ios \  
    github.com/tomasen/gomobile-demo/sdk
```


编译项目

// 编译安卓版本

```
$ gomobile bind -target=android \  
    github.com/tomasen/gomobile-demo/sdk
```

// 编译iOS版本

```
$ gomobile bind -target=ios \  
    github.com/tomasen/gomobile-demo/sdk
```


编译项目

```
// Gomobile 的背后
```

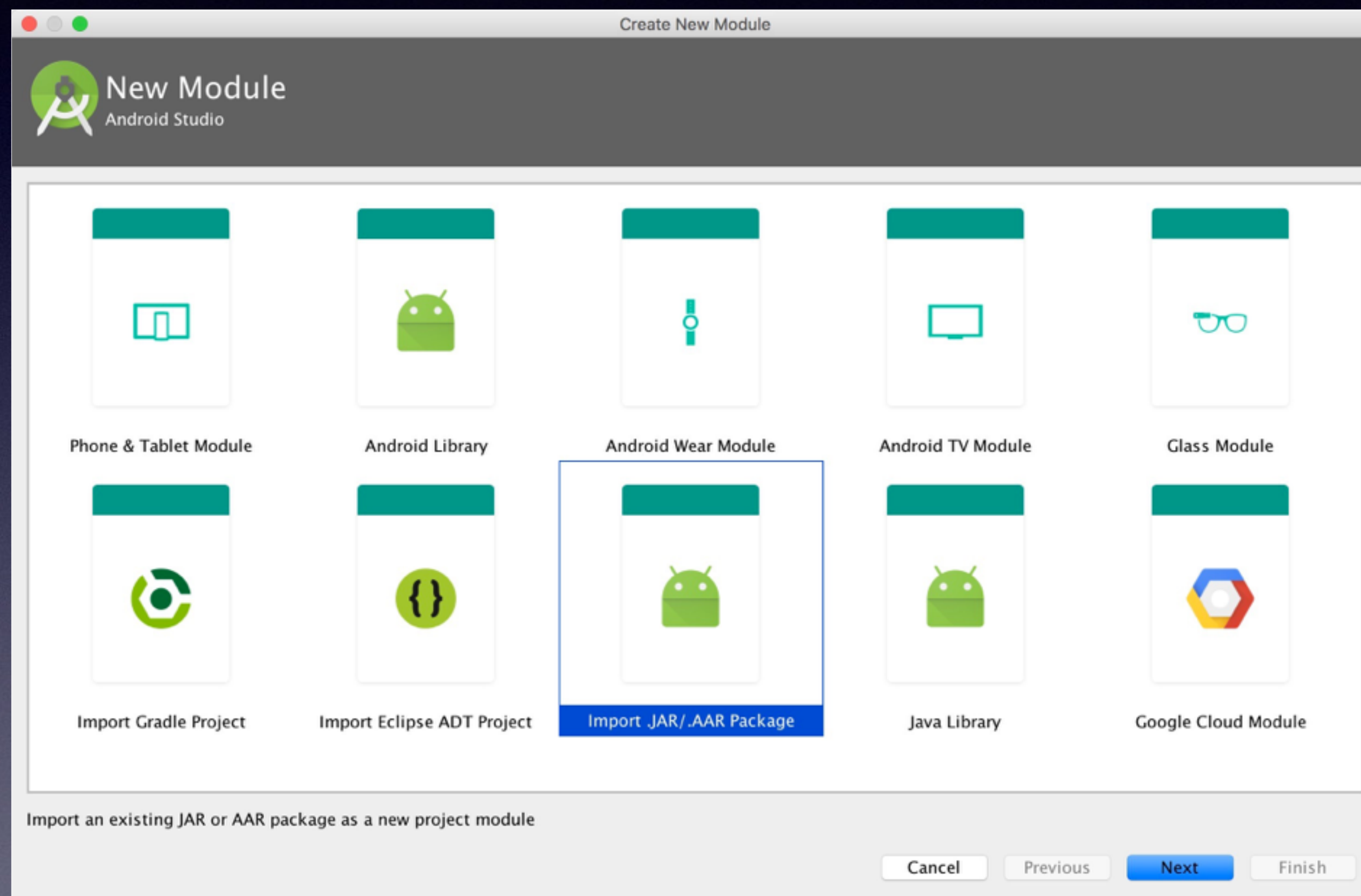
```
gobind -lang=java -javapkg=
```

```
gobind -lang=objc -prefix=
```

```
go build -buildmode=c-archive -tags=ios -pkgdir=
```

```
go build -buildmode=c-shared -tags=android -pkgdir=
```


安卓项目导入aar

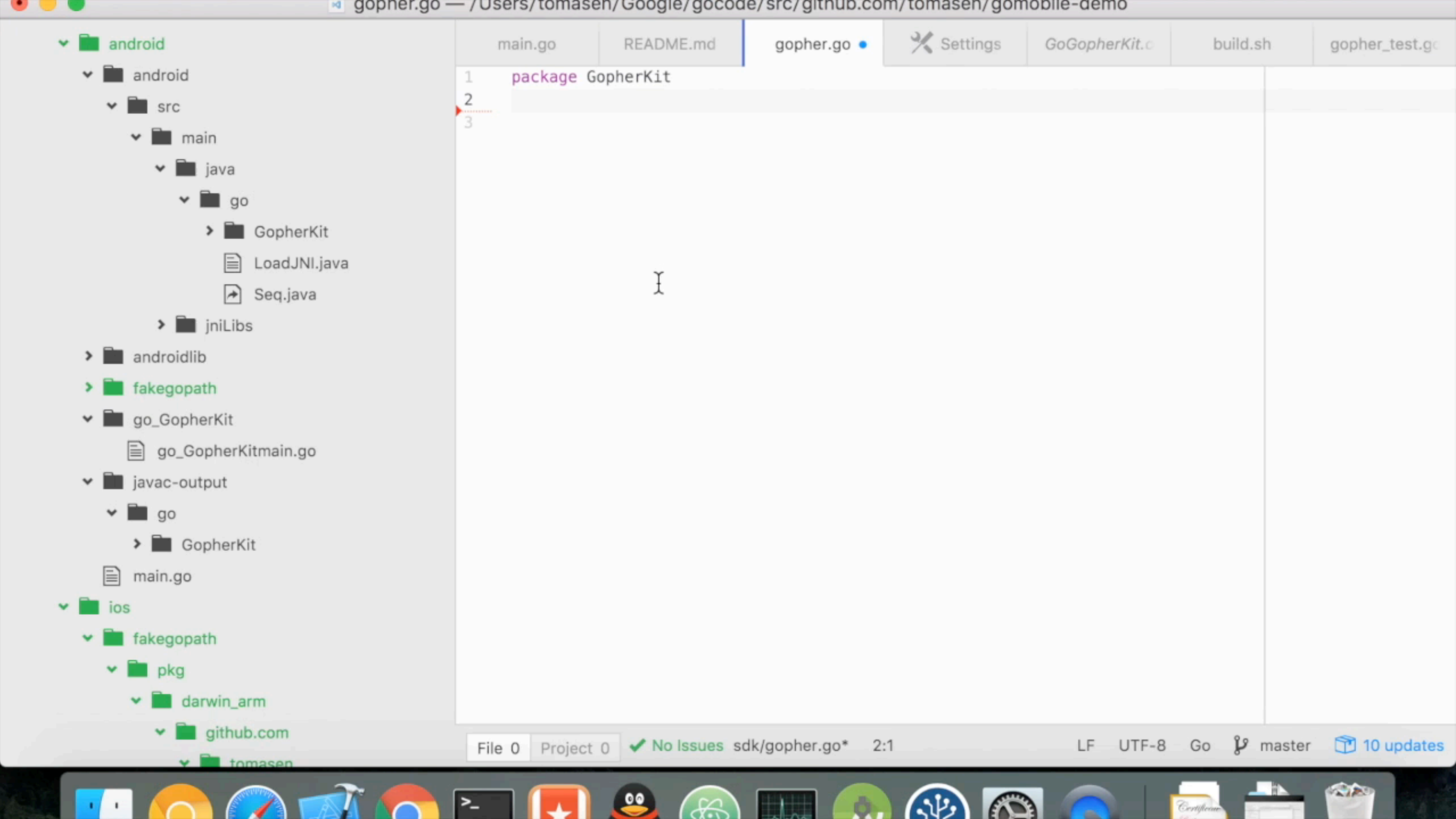


Possibility

同时兼容 iOS、安卓，甚至Mac、Windows 的SDK和链接库

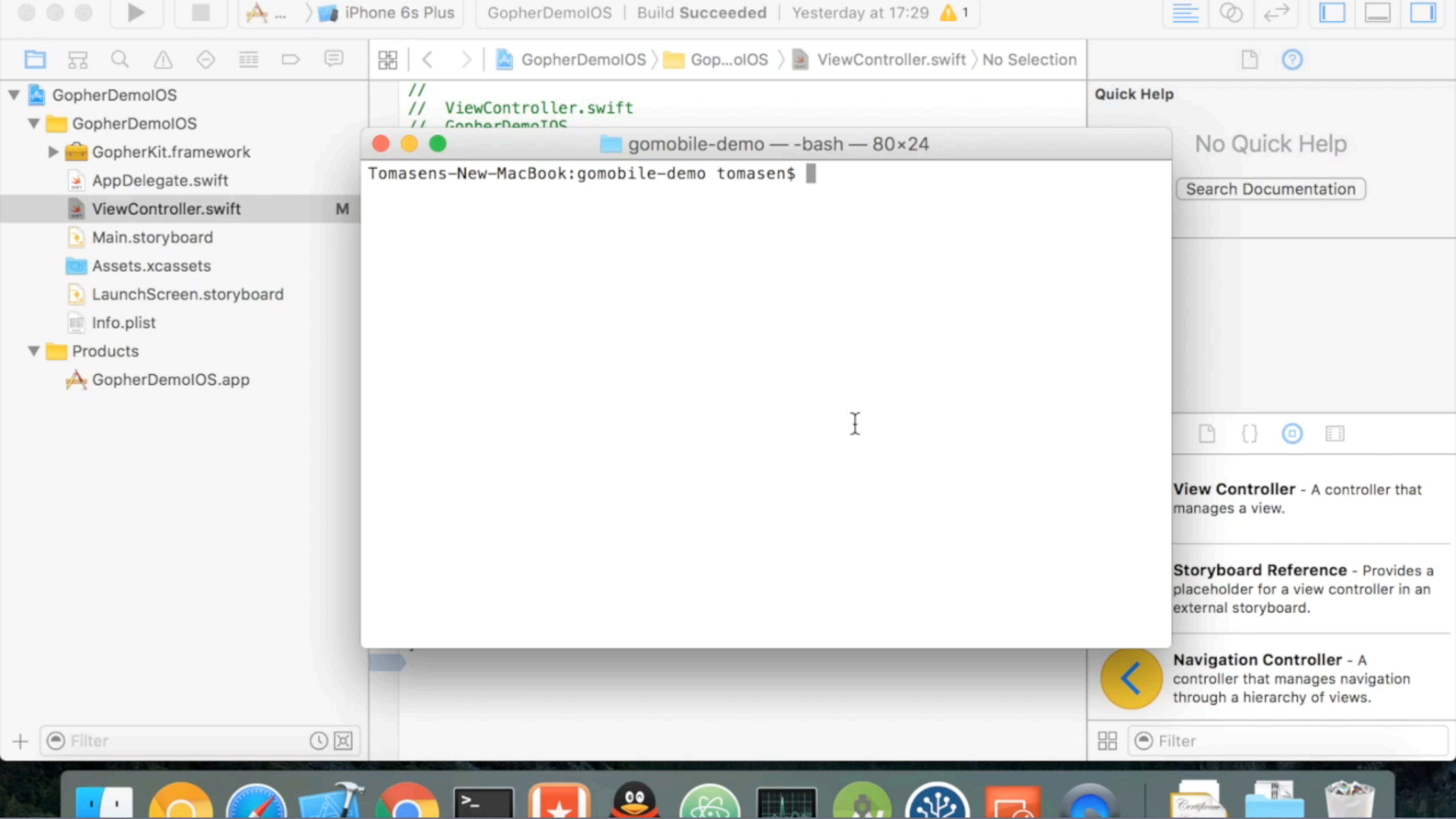
DEMO

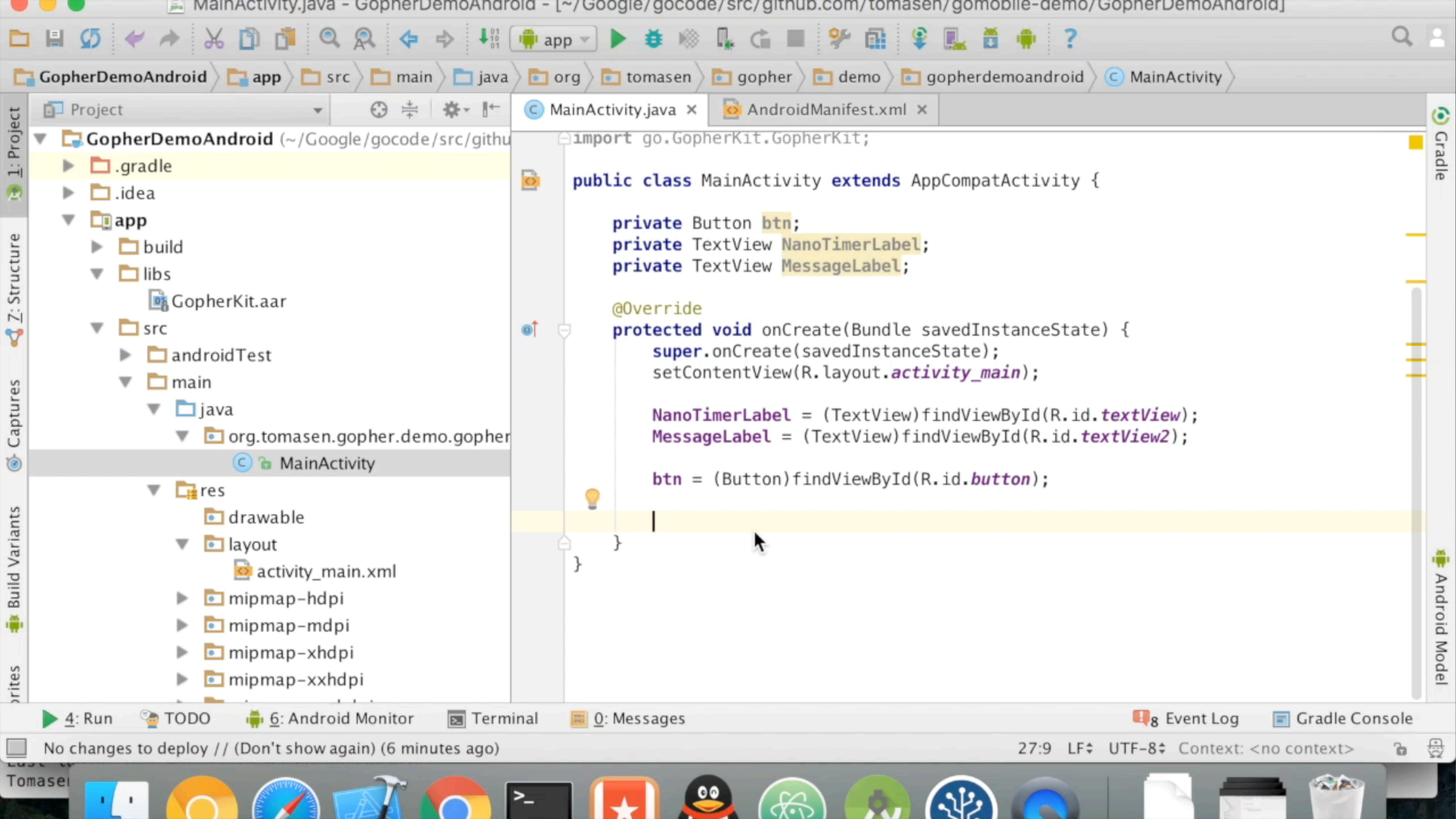
github.com/tomasen/gomobile-demo/



- android
 - android
 - src
 - main
 - java
 - go
 - GopherKit
 - LoadJNI.java
 - Seq.java
 - jniLibs
 - androidlib
 - fakegopath
 - go_GopherKit
 - go_GopherKitmain.go
 - javac-output
 - go
 - GopherKit
 - main.go
 - ios
 - fakegopath
 - pkg
 - darwin_arm
 - github.com
 - tomasen

```
main.go  README.md  gopher.go  Settings  GoGopherKit.c  build.sh  gopher_test.go
1  package GopherKit
2
3
```



未来的应用场景

- RESTFul API Client Library
- 同时访问主备服务器，使用更快的返回内容
- 后台资源下载
- 快速进行原型开发

Gomobile的缺点

- 每个项目只能有一个Gomobile库
- 通过Go与Java之间是通过类似RPC的方式通讯
- 性能还不是最优解



开始关注使用Golang!

- <https://github.com/tomasen/gomobile-demo/>
- <https://github.com/golang/go/wiki/Mobile>
- <http://blog.ralch.com/tutorial/golang-sharing-libraries/>
- <https://godoc.org/golang.org/x/mobile/cmd/gomobile>
- <https://github.com/golang/go/wiki/cgo>
- <https://docs.google.com/document/d/1y9hStonl9wpj-5VM-xWrSTuEJFUAXGOXOhxvAs7GZHE/preview>