

使用 Flutter 开发 Mac 桌面应用

Flutter 可以开发 Mac, Linux, Windows 桌面, 但是对于平台目前只能打对于的包, 以及调试本平台的包。

切换到 master 分支

首先必须切换到 master 分支。我之前在 dev 分支, 折腾了好久, 都只停留于理论概念阶段。直到有一次看到了简书中提到需要在 master 分支, 经过测试确实可以正常运行。其实当时主要是卡在本地找不到桌面模拟器这个环节。

```
WangQing@/Users/WangQing> flutter channel
Flutter channels:
  beta
  dev
* master
  stable
```

开启 Mac 开发桌面应用

Flutter 的 master 默认是关闭 桌面应用的, 我们可以使用下面的命令开启:

```
flutter config --enable-macos-desktop

flutter config --enable-linux-desktop

flutter config --enable-windows-desktop
```

这个默认会修改 flutter 的配置文件, 配置目录是: 当前用户名目录下的 .flutter_settings。

```
{
  "enable-web": true,
  "enable-macos-desktop": true
}
```


Flutter 查看本机的桌面模拟器

使用命令：

```
flutter devices
```

```
WangQing@/Users/WangQing> flutter devices 19-10-24 16:20
3 connected devices:

macOS • macOS • darwin-x64 • Mac OS X 10.14.6 18G95
Chrome • chrome • web-javascript • Google Chrome 78.0.3904.70
Web Server • web-server • web-javascript • Flutter Tools
```



创建带 Mac 桌面应用的 Flutter 工程

包名需要小写哦，否则就是不匹配 dart 的包名。

```
"HelloDesktopDemo" is not a valid Dart package name.

From the [Pubspec format description](https://www.dartlang.org/tools/pub/pubspec.html):

**DO** use `lowercase_with_underscores` for package names.

Package names should be all lowercase, with underscores to separate words,
`just_like_this`. Use only basic Latin letters and Arabic digits: [a-z0-9_].
Also, make sure the name is a valid Dart identifier -- that it doesn't start
with digits and isn't a reserved word.
```

```
flutter create --macos hello_desktop_demo
```

创建成功后：

```
hello_desktop_demo/.idea/workspace.xml (created)
Running "flutter pub get" in hello_desktop_demo... 1.7s
Wrote 96 files.

All done!
[✓] Flutter: is fully installed. (Channel master, v1.10.15-pre.230, on Mac OS X 10.14.6 18G95)
[✓] Android toolchain - develop for Android devices: is fully installed. (Android SDK version 28.0.3)
[✓] Xcode - develop for iOS and macOS: is fully installed. (Xcode 10.2.1)
[✓] Chrome - develop for the web: is fully installed.
[✓] Android Studio: is fully installed.
[✓] Android Studio: is fully installed. (version 3.5)
[✓] IntelliJ IDEA Ultimate Edition: is fully installed. (version 2018.1.1)
[✓] VS Code: is fully installed. (version 1.39.1)
[✓] Connected device: is fully installed. (3 available)

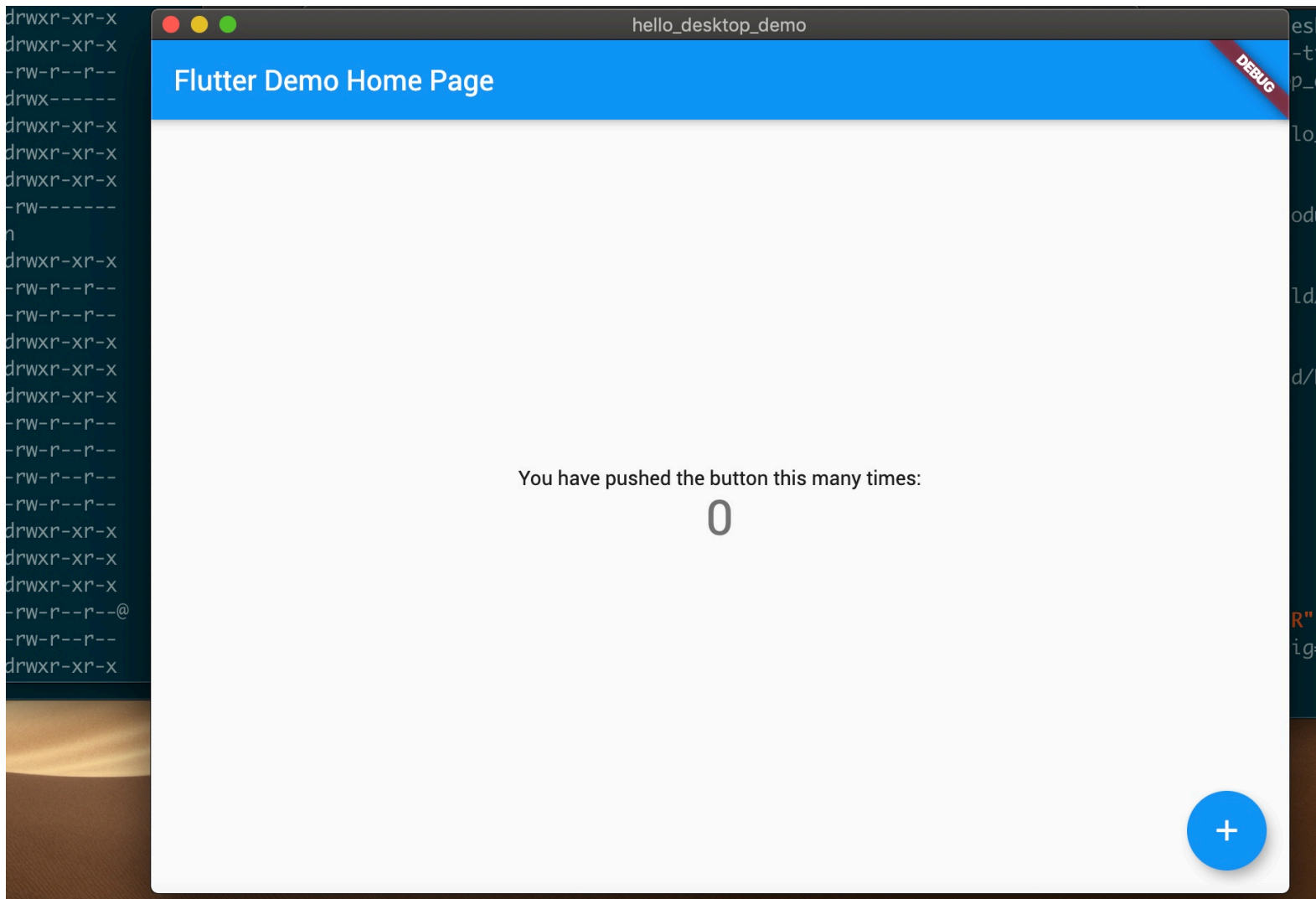
In order to run your application, type:

$ cd hello_desktop_demo
$ flutter run

Your application code is in hello_desktop_demo/lib/main.dart.
```

让项目支持 Mac 桌面应用

Mac 相对支持的较好，创建项目后立刻就能运行起来。Windows 相对来说 需要安装 VS。Linux 也是需要对应组件。



发布平台包

因为各自平台的构建不同，打包命令也不同，这里仅以 Mac 应用为例。

编译出对应平台的安装包：

```
flutter build macos
```

```
flutter build linux
```

```
flutter build windows
```

构建成功

```
/usr/bin/codesign --force --sign - --entitlements /Users/WangQing/Desktop/desk/test/hello_desktop_demo/build
acos/Build/Intermediates.noindex/Runner.build/Release/Runner.build/hello_desktop_demo.app.xcent --timestamp=none
/Users/WangQing/Desktop/desk/test/hello_desktop_demo/build/macos/Build/Products/Release/hello_desktop_demo.app

Touch /Users/WangQing/Desktop/desk/test/hello_desktop_demo/build/macos/Build/Products/Release/hello_desktop_demo
pp (in target: Runner)
  cd /Users/WangQing/Desktop/desk/test/hello_desktop_demo/macos
  /usr/bin/touch -c /Users/WangQing/Desktop/desk/test/hello_desktop_demo/build/macos/Build/Products/Release/he
o_desktop_demo.app

RegisterWithLaunchServices /Users/WangQing/Desktop/desk/test/hello_desktop_demo/build/macos/Build/Products/Relea
/hello_desktop_demo.app (in target: Runner)
  cd /Users/WangQing/Desktop/desk/test/hello_desktop_demo/macos
  builtin-lsRegisterURL /Users/WangQing/Desktop/desk/test/hello_desktop_demo/build/macos/Build/Products/Releas
hello_desktop_demo.app


** BUILD SUCCEEDED **

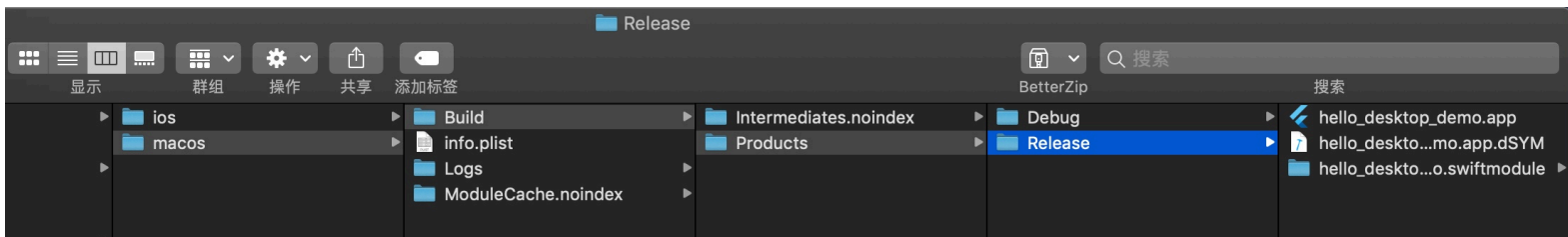
Building macOS application...
```

输出对应的 Mac 应用包

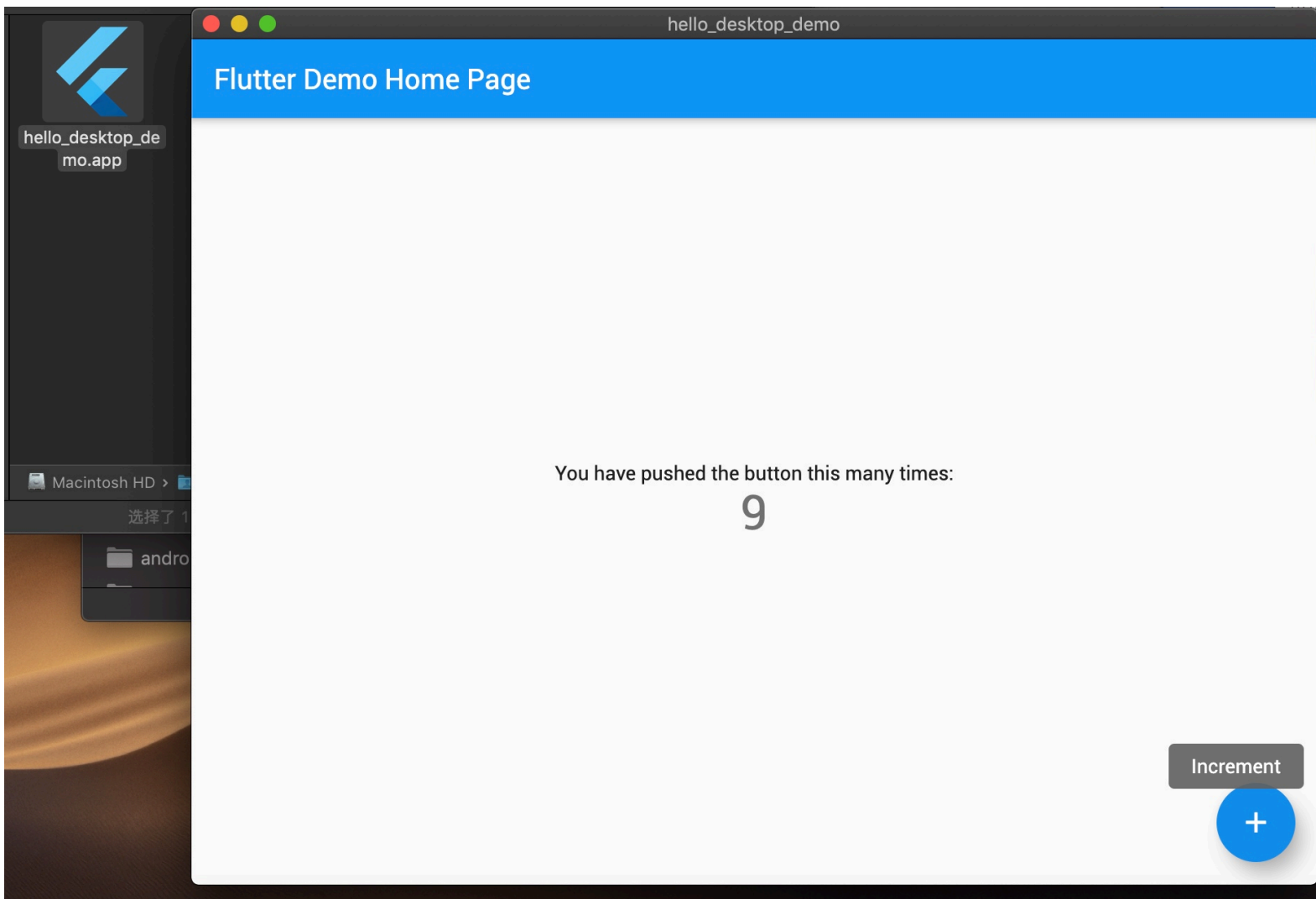
WangQing@bogon:///Users/WangQing/Desktop/desk/test/hello_desktop_demo/build (zsh)

```
.
├── ios
│   └── Runner.build
│       └── Release-iphoneos
│           └── Runner.build
│               └── dgph
├── macos
│   ├── Build
│   │   ├── Intermediates.noindex
│   │   │   ├── Runner.build
│   │   │   │   ├── Debug
│   │   │   │   └── Release
│   │   └── XCBuildData
│   │       ├── 356d88196bd5efce3d6f4f7ad2446ce9-desc.xcbuild
│   │       ├── 356d88196bd5efce3d6f4f7ad2446ce9-manifest.xcbuild
│   │       ├── BuildDescriptionCacheIndex-7fc343541ba0b0fe6638e4ec0f93df65
│   │       ├── PIFCache
│   │       ├── build.db
│   │       ├── ec1529cb8dd63c1b4f69aa7214a9e694-desc.xcbuild
│   │       └── ec1529cb8dd63c1b4f69aa7214a9e694-manifest.xcbuild
│   └── Products
│       ├── Debug
│       │   ├── hello_desktop_demo.app
│       │   └── hello_desktop_demo.swiftmodule
│       └── Release
│           ├── hello_desktop_demo.app
│           ├── hello_desktop_demo.app.dSYM
│           └── hello_desktop_demo.swiftmodule
```





直接运行 Mac 应用



可以编译出对应版本，在 项目目录中的 build/对应平台/release 目录下。这里只能编译和本机相同平台。

- Linux平台编译出的为一个可执行文件
- Windows平台编译出的为.exe文件
- Mac平台编译出的为.pgk文件

小结

构建桌面应用程序还不是特别稳定，如果遇到问题，可以查询官方文档，这里只作为介绍。