

Unity App开发利器 ——

UIWidgets技术分享

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2021-11-05





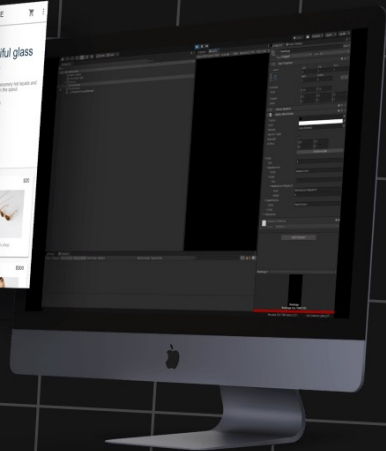
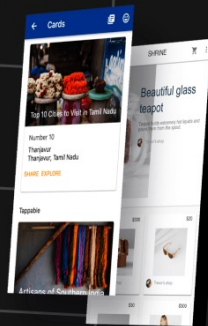
提纲

- 项目目标
- 特性亮点
- 技术方案
- 演示
- 总结

中国Unity研发

UIWidgets 可以做App的GUI 解决方案

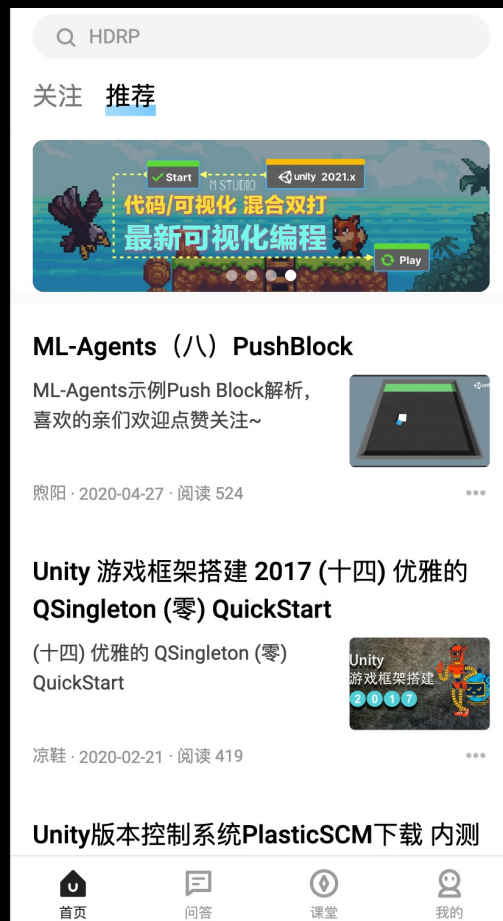
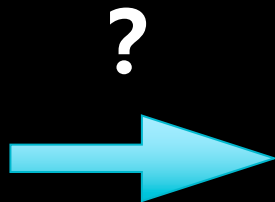
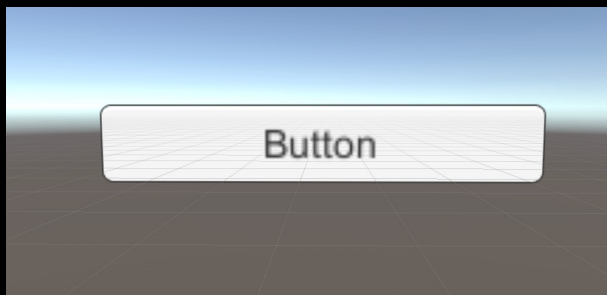
一款免费开源的Unity扩展组件，让您像开发App一样为Unity项目添加流畅、绚丽、多样的用户界面



项目目标

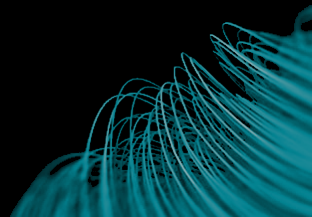


研发背景

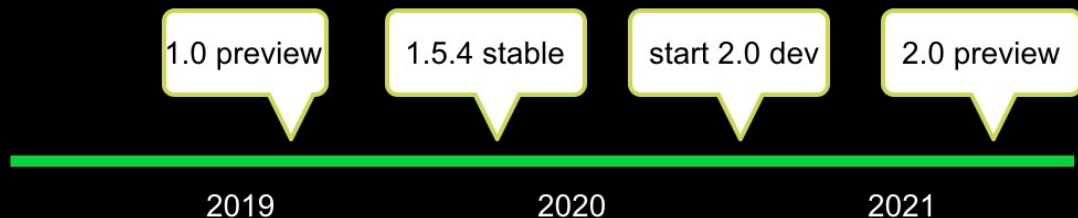


巨人的肩膀

“利用目前移动互联网中社区最成熟、发展最迅猛的前端开源新技术之一 **Flutter** 来助力Unity中UI内容的开发”



UIWidgets进化之路



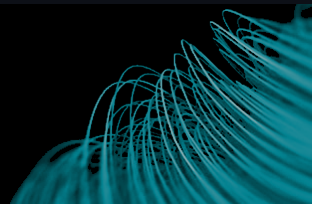
- 版本1.5.4
- 版本2.0

UnityTech / UIWidgets Public archive

Watch	92	Star	1.9k	Fork	250
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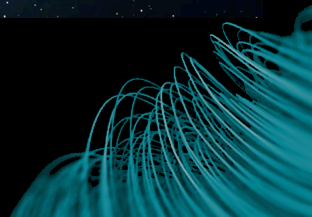
Unity-Technologies / com.unity.uiwidgets Public

Watch	21	Star	274	Fork	35
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UIWidgets的星辰大海

- App级别的UI渲染和交互效果
- 易上手、高性能的开发者体验
- 探索App + 3D场景的全新赛道



特性亮点



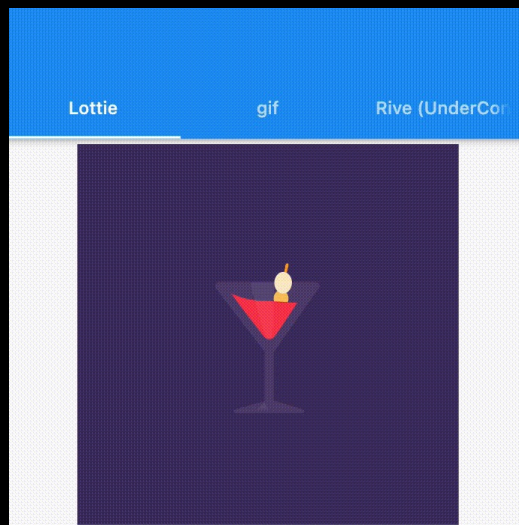
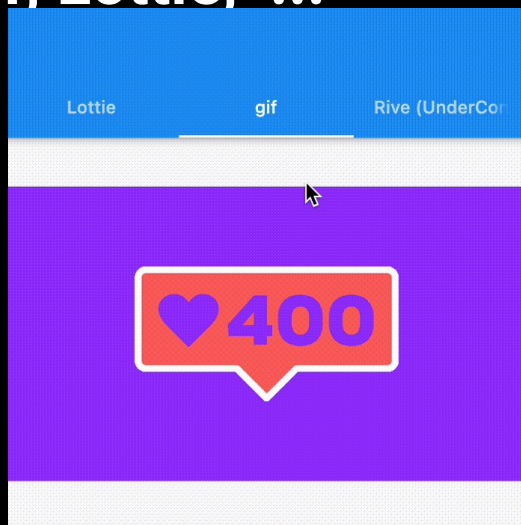
矢量图形绘制

- 图形、阴影、文字、图标：告别多余纹理



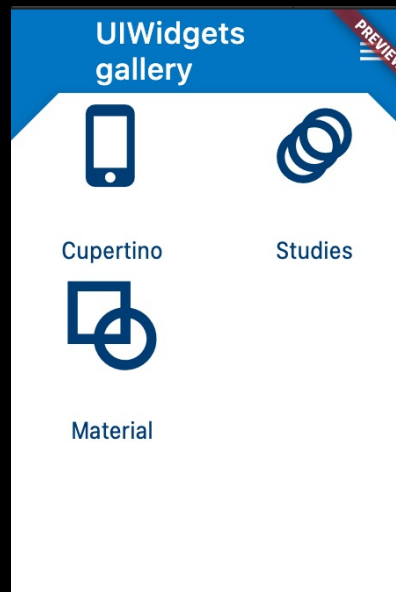
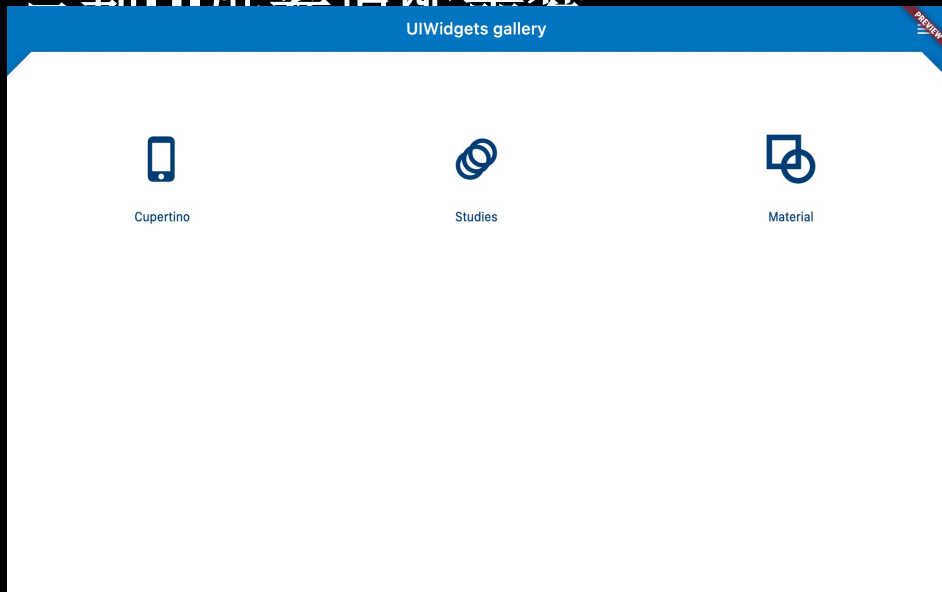
强大动画支持

- Gif, Lottie, ...

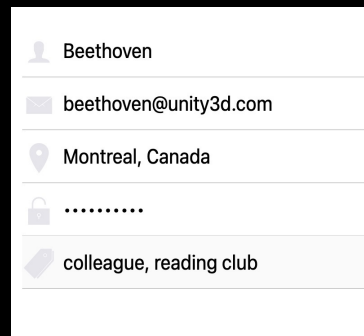
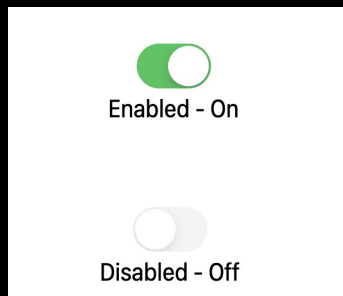
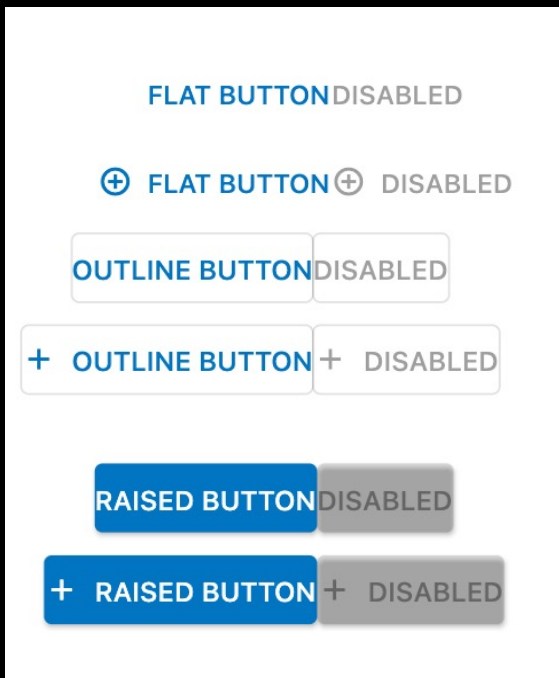


自适应高效布局

生成UI屏幕适配模板

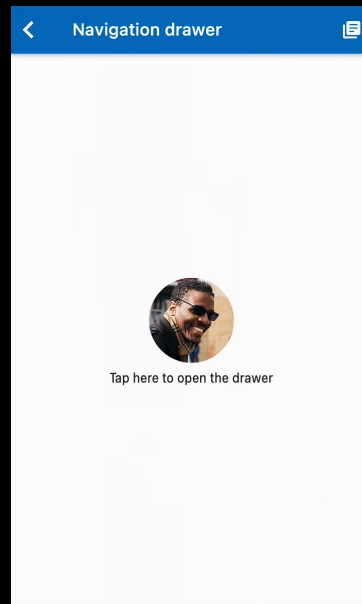
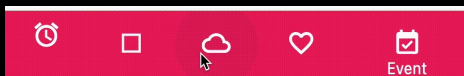
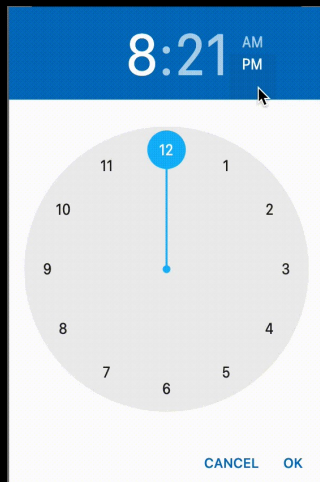
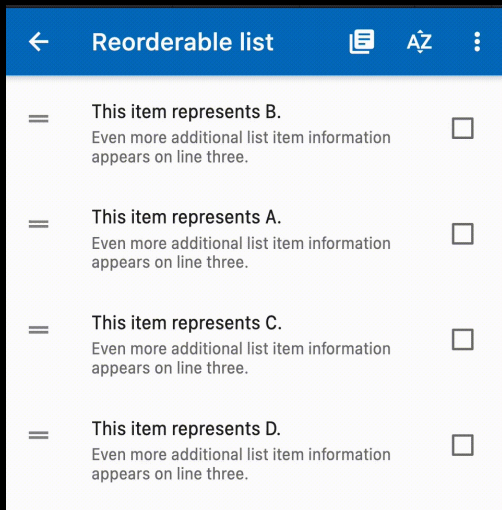


海量开源组件



August	1	2017
September	2	2018
October	3	2020
November	4	2021
December	5	2022
January	6	2023
February	7	2024
MARCH	8	2025

海量开源组件



海量开源组件（2）

● Flutter第三方社区海量资源

The screenshot shows the Flutter pub.dev search results page. At the top, there are filters for 'Dart', 'Flutter', and 'Any'. Below that, there are platform filters: 'Android', 'iOS', 'Web', 'Linux', 'macOS', and 'Windows'. The search results are sorted by 'LISTING RELEVANCE'. The first result is 'file_picker' by miguelruivo.com, with 1601 likes, 130 pub points, and 99% popularity. The second result is 'photo_view', with 1276 likes, 130 pub points, and 99% popularity.

Dart **Flutter** Any Advanced ▾

Android iOS Web Linux macOS Windows

RESULTS 20052 packages SORT BY LISTING RELEVANCE

file_picker 1601 130 99%
LIKES PUB POINTS POPULARITY

A package that allows you to use a native file explorer to pick single or multiple absolute file paths, with extension filtering support.

v 4.1.6 • Updated: Oct 21, 2021 [miguelruivo.com](#) [Null safety](#)

FLUTTER | ANDROID | IOS | LINUX | MACOS | WEB | WINDOWS

photo_view 1276 130 99%
LIKES PUB POINTS POPULARITY

Photo View provides a gesture sensitive zoomable widget. Photo View is largely used to show interactive images and other stuff such as SVG.

高效渲染

● 减少DrawCall优化

Statistics

Audio:

Level: -75.2 dB	DSP load: 0.1%
Clipping: 0.0%	Stream load: 0.0%

Graphics: 4002.5 FPS (0.2ms)

CPU: main 0.2ms render thread 0.1ms

Batches: 1 Saved by batching: 0

Tris: 2 Verts: 4

Screen: 1080x1920 - 23.7 MB

SetPass calls: 1 Shadow casters: 0

Visible skinned meshes: 0 Animations: 0



Q HDRP

关注 推荐

Unity 招聘进行时
2022 实习生计划

每日精选 榜单 博主

你想要的万圣节主题爆款Unity资源都在这里！5折！准备好了吗？

为了迎接一年一度的万圣节，Unity资源商店特地精选了一系列资源，从让人脊背发凉的骷髅到...

DAWN OF DEALS

Unity技术博客 · 1天前 · 阅读 313

全新Unity 2021.2 Tech Stream版现已上线

首页 问答 课堂 我的

多平台支持



技术方案



Github开箱即用

```
git clone https://github.com/Unity-Technologies/com.unity.uiwidgets.git
```

Search or jump to... Pull requests Issues Marketplace Explore

Unity-Technologies / com.unity.uiwidgets Public

Watch 21 Star 274 Fork 35

<> Code Issues 8 Pull requests 2 Discussions Actions Projects Wiki Security Insights Settings

master 44 branches 5 tags Code

zhxingwei	Merge pull request #259 from Unity-Technologies/siyao/Co...	67a2551 7 days ago	3,140 commits
.yamato	fix doc validation issue		6 months ago
Samples/UIWidgetsSamples_2019...	Merge pull request #239 from Unity-Technologies/hdc/minor-user-...		2 months ago
com.unity.uiwidgets	disable mobile		7 days ago
engine	update ios, android and windows		8 days ago
.gitattributes	update win build		6 months ago
.gitignore	delete dll & links from repo and fix .gitignore		10 months ago

About

UIWidgets is a Unity Package which helps developers to create, debug and deploy efficient, cross-platform Apps.

unity.cn/uiwidgets

android ios app webgl mobile ui cross-platform unity unity-editor flutter unity-engine uiwidgets

Readme

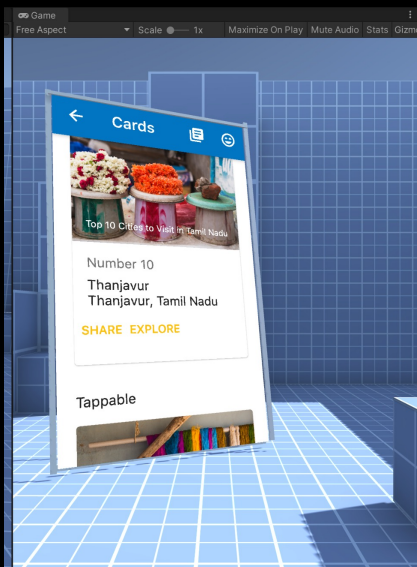


代码即UI

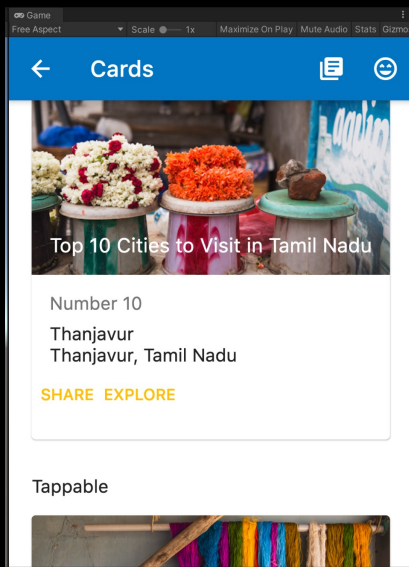
```
new MaterialButton(  
  shape: new RoundedRectangleBorder(  
    borderRadius: BorderRadius.all(20.0f)  
  ),  
  color: new Color(0xFF00FF00),  
  splashColor: new Color(0xFFFFF0011),  
  highlightColor: new Color(0x88FF0011),  
  child: new Text("Click Me"),  
  onPressed: () => { Debug.Log("pressed  
flat button"); },  
  onLongPress: () => { Debug.Log("long  
pressed flat button"); }  
)
```



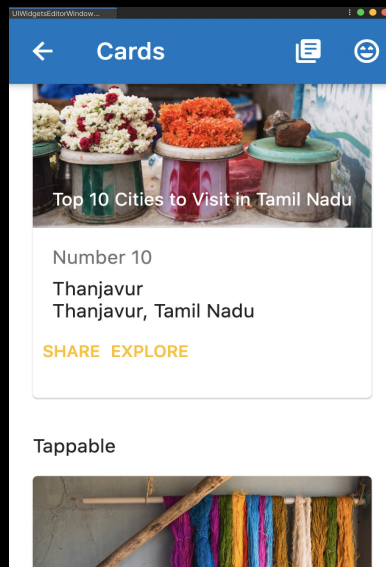
多种部署方式



3d场景



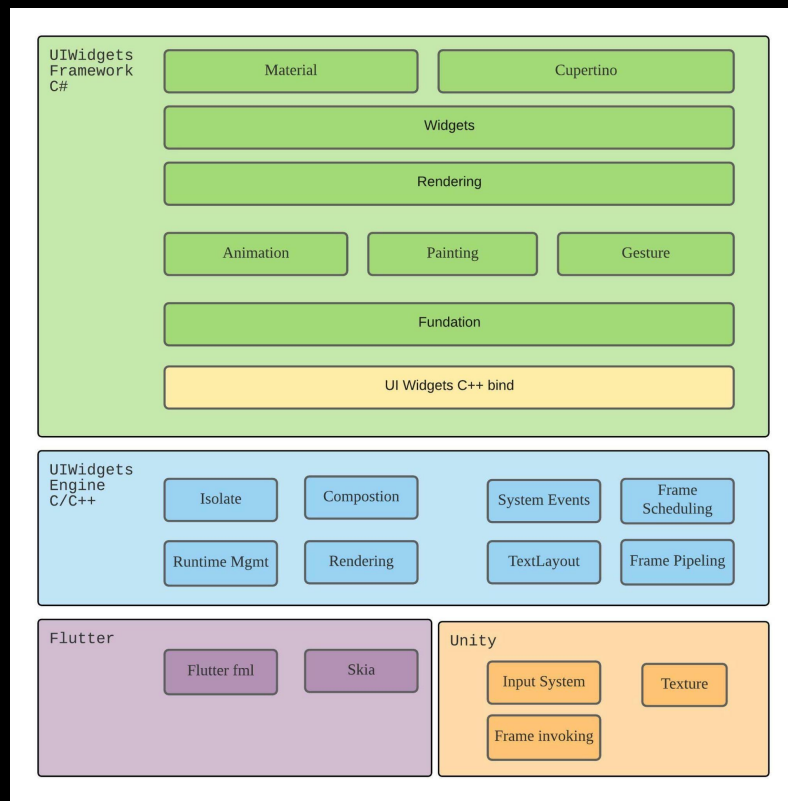
UGUI上
(ScreenOverlay)



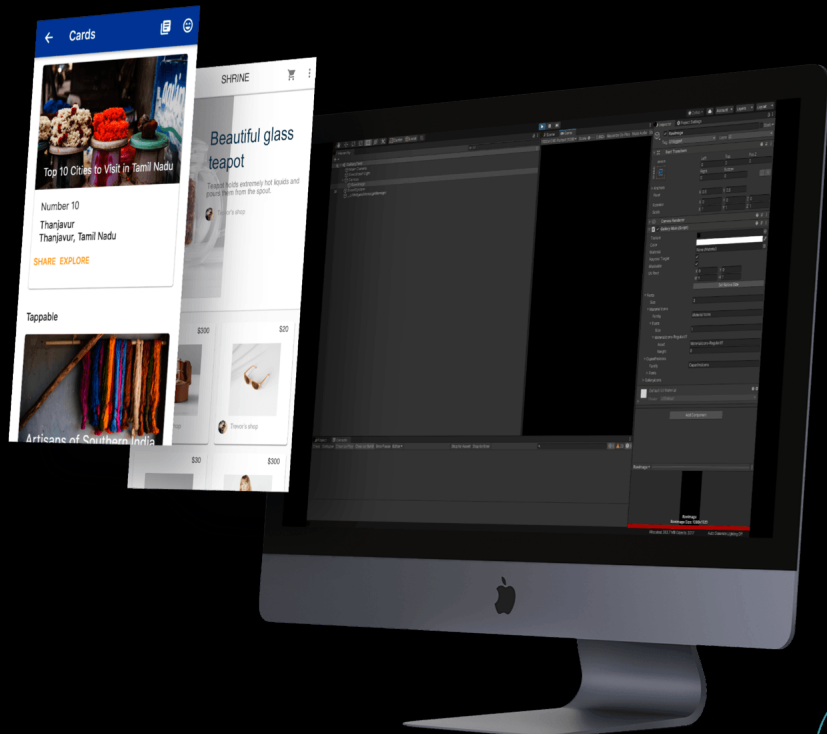
EditorWindow



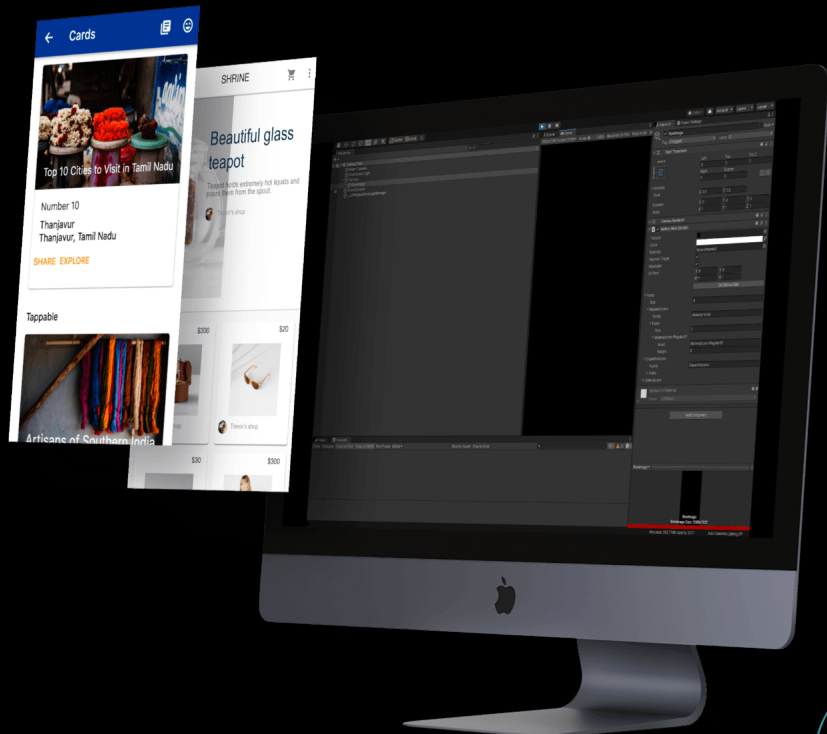
UIWidgets核心架构



演示



总结



TakeAways

- <https://github.com/Unity-Technologies/com.unity>
- 适用于带**3D**场景的**App**开发
- 适用于游戏中复杂**UI**界面
- 适用于移动互联网团队 + **Unity**



谢谢大家！

