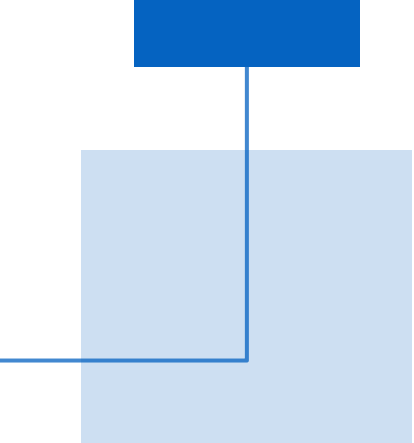


游戏项目实践 实践课14

- AR开发实践

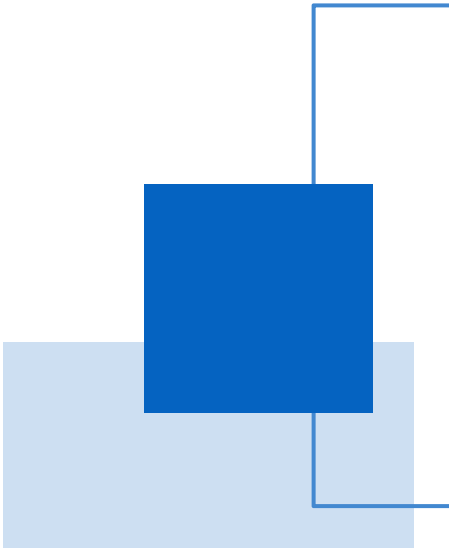


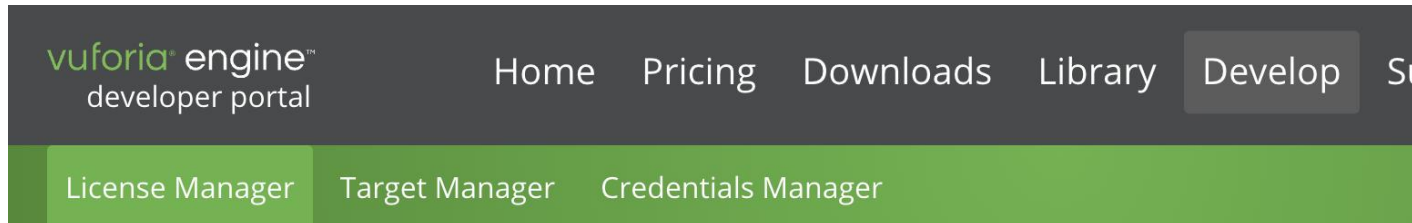
1

注册AR开发库 Vuforia账户

<https://developer.vuforia.com/>

(当前网站账户注册有些问题)





License Manager

[Get Basic](#)

[Learn more](#) about licensing.
Create a license key for your application.

License Manager / Game014

Game014

[Edit Name](#) [Delete License Key](#)[License Key](#)[Usage](#)

Please copy the license key below into your app

```
AROGg/T/////AAABmeaFgoQoyk/ygdMwdPIJ7odfDtH8ddV+uQjjeF9SziverFmP0iI1myHpdjtQVo/bo4Ws6ho8YSMGS+yRAjY3SwH  
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```

练习1-1

1. 注册并登陆

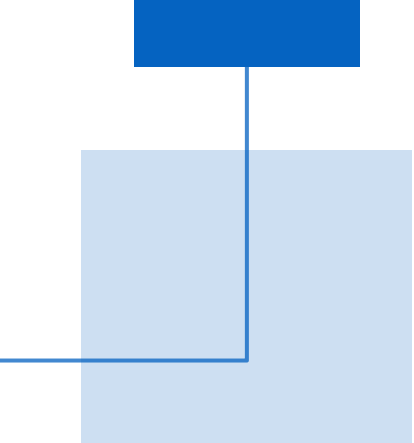
<https://developer.vuforia.com/>

2. License Manager

3. Get Basic

4. 创建

5. 复制License Key



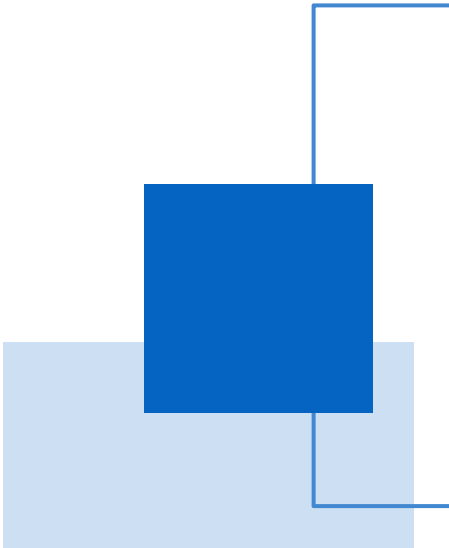
2

Unity中使用Vuforia 库

Vuforia介绍:

<https://assetstore.unity.com/packages/templates/packs/vuforia-core-samples-99026#content>

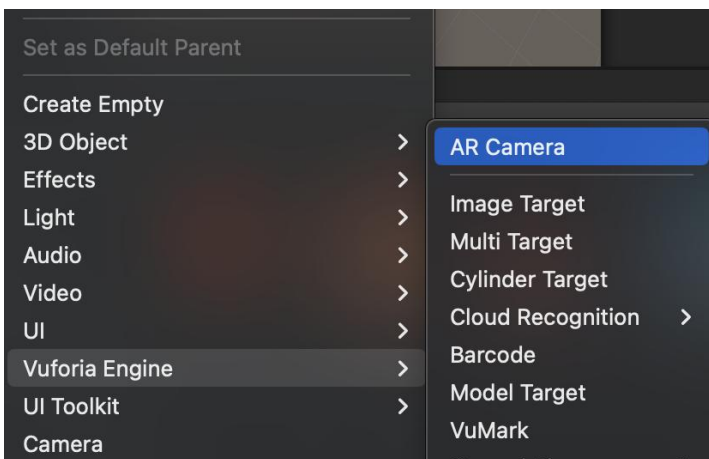
Unity的版本建议2022.3以上



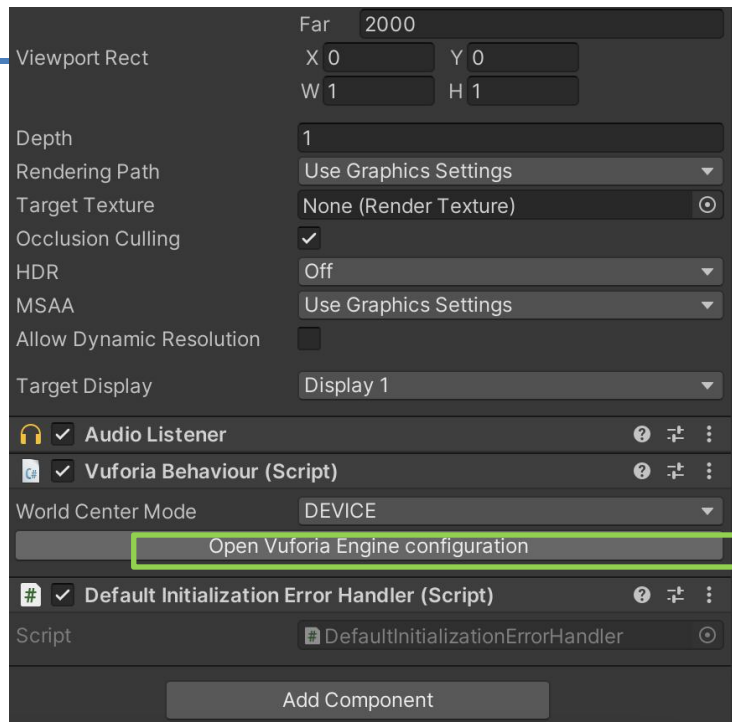
使用Vuforia

练习2-1

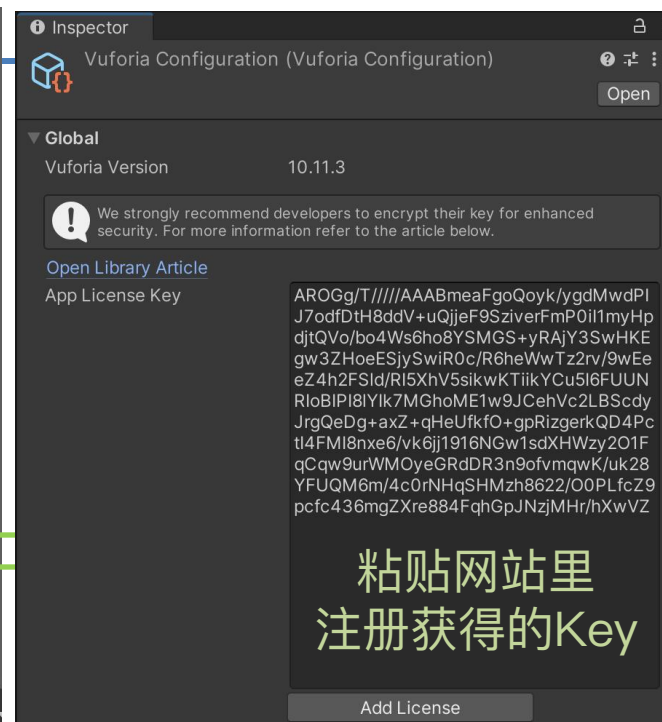
1. 导入14-Vuforia-package-10-19-3.unitypackage
 - 如果课程网站下载慢, 可在[官网下载](#)
 - [导入](#)时如果提示需要Update, 请选择Update
2. 创建ARCamera
 1. 打开Vuforia引擎设置
 2. 设置License Key
 3. 设置真实的摄像头 (Camera Device)



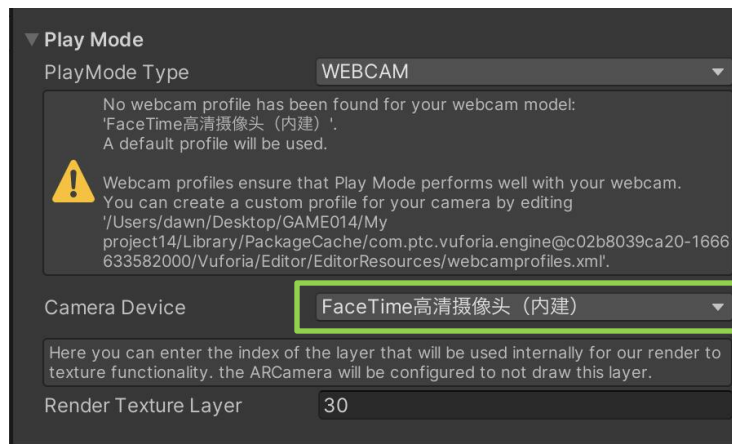
创建ARCamera



打开Vuforia引擎设置



设置License Key



设置摄像头

使用Vuforia

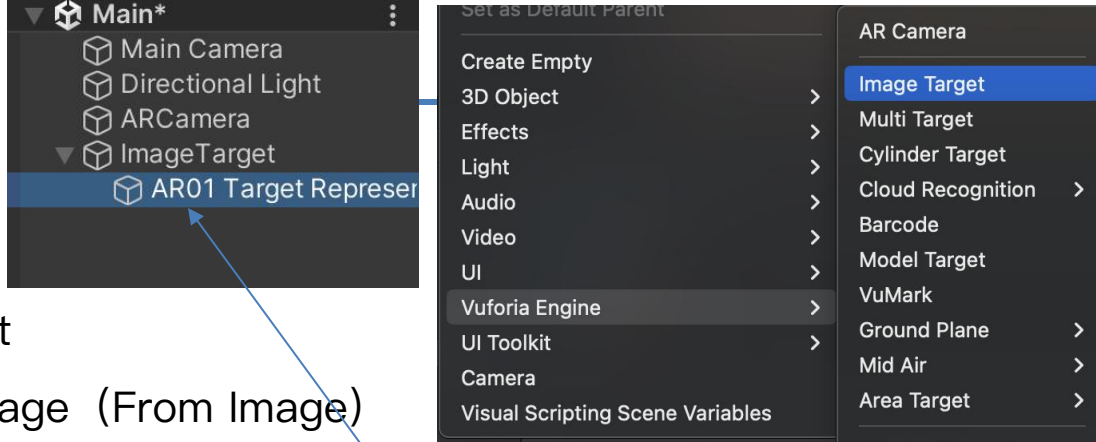
练习2-1

3. 创建Image Target

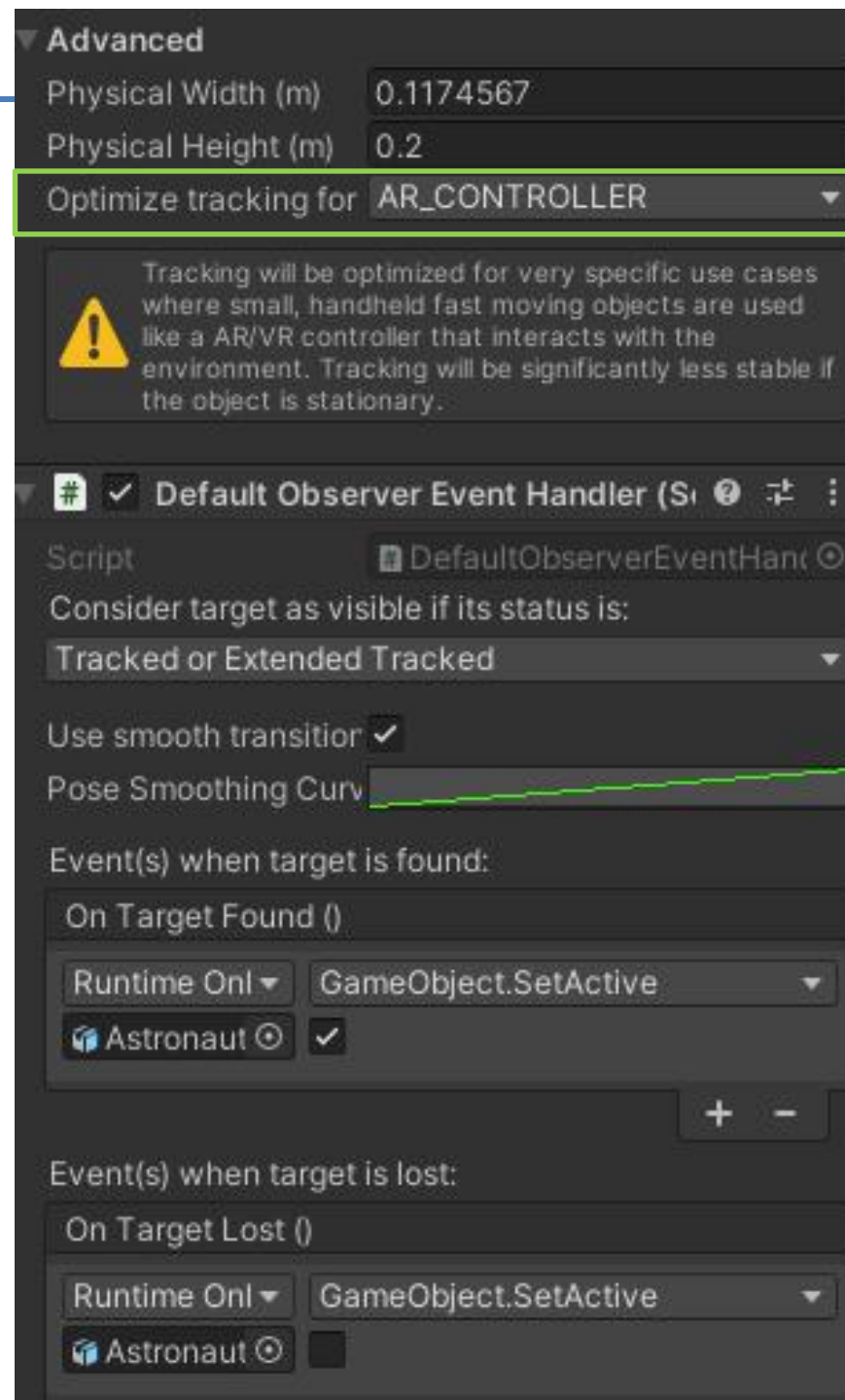
1. 选择一张Image (From Image)
2. Add Target Representation
3. ImageTarget下会多一个Target Representation
4. 为Target Representation选择一个Mesh模型
5. 事件设置 (可选)
 - On Target Found (跟踪到触发)
 - On Target Lost (目标丢失后触发)

4. 设置优化的跟踪模式 (针对跟踪不准确的问题)

- 将Image Target中的Advanced的Optimize tracking for修改为AR_CONTROLLER, 可提高跟踪的精度



创建ImageTarget



练习2-1

测试用KEY

AcUlifX/////AAABmd2epZMMGUE1q8FGNPrkpm8qoLxBzygrw95fO6IHxqwp28HYTXvdmg02d9jGL7OTeXYQ5Md9pPT1WoMx7v1BYsTSWr1b/PLMvDAhVfpfqnr
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3dhsIqplU

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oWb

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使用Vuforia

要求1:

- 当摄像头里出现卡片



的内容，卡片上显示该模型（ AugmentationAssets/Models/Astronaut.FBX)

- 调整模型的材质、大小和位置
- 模型随卡片移动而移动

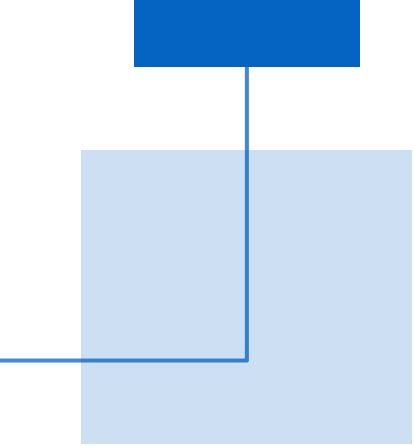
要求2:

- 当摄像头里出现卡片



的内容，卡片上显示该模型的动画效果，调整模型的材质、大小和位置

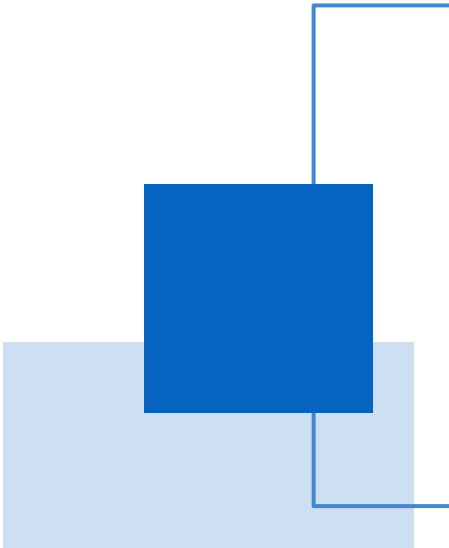
- 模型文件： AugmentationAssets/Models/Drone.FBX
- 动画文件： AugmentationAssets/Animations/Drone.controller
- 模型动画随卡片移动而移动



3

在手机上 进行交互

(课后选做)



练习3-1

导入14-SimpleInput.unitypackage

- 新建场景
- 创建UI，生成Canvas
- 添加Prefabs/Joystick.prefab到Canvas对象里
- 添加一个Button，并选择合适的Sprite
- Joystick用于控制物体的移动
 - 可获得Joystick的偏移数据驱动物体移动
- Button可用于控制物体事件，例如开火

| Q&A