游戏项目实践 实践课

• 游戏框架及游戏跨平台实践



敌机的出现



练习1-1:

- 1. 导入12-2DFlightShooting.unitypackage
- 2. 完善GameControllerScript.cs的SpawnEnemy函数, 实现敌机的 初始位置设置 (可随机或遵循一定的规律)
- 3. 完善EnemyScript.cs代码的Update函数,实现敌机的位置更新













练习2-1:

- 1. 完善GameControllerScript.cs的AddScore及EnemyScript.cs的 OnTriggerEnter2D函数,实现分数的统计,子弹碰到敌机计1分
- 2. 完善EnemyScript.cs的OnTriggerEnter2D函数,实现我机碰撞敌机时 显示游戏结束的提示
- 3. 完善GameControllerScript.cs的Update,实现按下Space键时重新开

始 游戏



在浏览器上运行 飞行射击游戏

3-1、3-2二选一即可



- 如果提示没有安装Unity的WebGL模块,则要安装
- 直接打开Html通常无法运行游戏,须在文件目录启动 Web服务,方式见后页
- 如果浏览器中遇到报错,可能是项目文件中有中文、
 项目路径中有中文或者发布WebGL的选项需要Gzip要
 设置为Disable

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Data Caching						
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Web服务器

因载入其他文件的需要(图片、csv、json等文件),需针对**存有网站文件的本地文件夹**启动一个Web服务 建立Web服务的方式有多种,练习时建议使用Python3启动Web服务:

1. Windows

- Python3: python -m http.server
- IIS
- Apache
- Mac/Ubuntu
 - Python3: python -m http.server
 - Apache

练习3-1 (使用Python启动Web服务):

- 1. 在控制台里进入网页文件的文件夹
- 2. 输入: python -m http.server (假设安装的是python3)
- 3. 通过http://localhost:8000访问网页
- 4. 如需自定义端口,命令可改为: python -m http.server 8000

注意: 如遇到修改代码后网页内容不更新, 请尝试清浏览器缓存或改变端口

Web服务器

练习3-2 (使用Visual Studio Code的Live Server启用Web服务):

1. 安装Live Server插件



4. 浏览器中查看结果

2. 打开代码文件夹



3. 选中html文件,点击右下角Go Live按钮

				Click	to run live s	erver		
Ln 63, Col 1	Spaces: 2	UTF-8	LF	HTML	Go Live	8	Ŕ	Q

在手机上运行 飞行射击游戏 (课后练习)





Unity移动端支持包的安装

• 如果无法补安装的话,需要卸载Unity重新安装,注意勾选支持Android或iOS以及WebGL

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移动端图片及材质设置

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真机 (Device SDK) 或模拟器 (Simulator SDK) 发布

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			Input Manager	Api Compatibility Level*	.NET Standard 2.0	▼ .
			Physics	C++ Compiler Configuration	Release	
			Physics 2D Playor	Use incremental GC		
			Preset Manager	Camera Usage Description*		
			Quality	Microphone Usage Description*		
			Script Execution Order	Location Usage Description*		
		Add Open Scenes	Tags and Layers	Use on-demand resources*		
Platform			Time	Accelerometer Frequency*	60 Hz	
			VFX	Mute Other Audio Sources*		
PC, Mac & Linux Standalone	ios ios		XR Plugin Management	Audio input from Bluetooth microphones i	is not supported when Mute Other Audio S	iources is off.
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Android	Symlink Unity libraries			Requires Persistent WiFi*		
HTML WebGI	Development Build			Allow downloads over HTTP (nonsecure)*	\checkmark	
	Autoconnect Profiler			Supported URL schemes*		
tvos tvos	Deep Profiling			Target Device	iPhone + iPad	•
	Script Debugging			Target SDK	✓ Device SDK	
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				Enable ProMotion Support		
Xbox One	Compression Method	Default		Requires ARKit support		
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Apk包名的设置,设定为自定义的名字

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Android	ETC2 fallback Export Project Symlink Sources	Don't override 32-bit		Vulkan Settings SRGB Write Mode* Number of swapchain buffers	3	
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PJA PS4	Development Build Autoconnect Profiler			Bundle Version Code Minimum API Level	1 Android 4.4 'KitKat' (API level 19) Automatic (highest installed)	
Xbox One	Deep Profiling Script Debugging Scripts Only Build Compression Method	Patch Patch And Run LZ4 ✓ Learn about Unity Cloud Build		Configuration Scripting Backend Api Compatibility Level* C++ Compiler Configuration	Mono .NET Standard 2.0 Release	
Player Settings	Swit	ch Platform Build And Run		Use incremental GC Mute Other Audio Sources* Target Architectures	-	
 Assets Scenes VictorsAssets ContcontrolsKit-Lite Content FirstPersonExampl FirstPerson Materials 	Scenes VictorsAssets			ARMv7 ARM64 Split APKs by target architecture (Exper Install Location Internet Access	riment: Prefer External Auto	



如果要发布到安卓商店,需要进行签名的设置

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Plugins

- Android
- iOS

Unity中和Android及iOS相关的插件文件, 统一放到Plugins目录下的制定文件中

Import Unity Package GoogleMobileAds-v6.0.0 README.md NEW \checkmark GoogleMobileAds CHANGELOG.md NEW \checkmark Editor # BuildPreProcessor.cs ~ NEW GoogleMobileAds.Editor.asmdef ~ NEW GoogleMobileAdsDependencies.xml ~ NEW # GoogleMobileAdsSettings.cs NEW # GoogleMobileAdsSettingsEditor.cs ~ NEW GoogleMobileAdsSKAdNetworkItems.xINEW 1 # ManifestProcessor.cs NEW # PListProcessor.cs ~ NEW Resources \checkmark GoogleMobileAds.Android.dll NEW \checkmark GoogleMobileAds.Common.dll NEW \checkmark \checkmark GoogleMobileAds.Core.dll NEW GoogleMobileAds.dll NEW \checkmark GoogleMobileAds.iOS.dll NEW \checkmark GoogleMobileAds.Unity.dll NEW GoogleMobileAds_version-6.0.0_manifest. link xml NEW Plugins Android googlemobileads-unity.aar NEW \checkmark GoogleMobileAdsPlugin.androidlib AndroidManifest.xml NEW \checkmark NEW \checkmark project.properties ✓ ■ iOS unity-plugin-library.a \checkmark NEW Cancel Import All None

