# Unreal **笔记**

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# 第一章 Visual studio And Unreal Engine4

- 1.1 Intruduction And installing UE4
- 1.2 Installing Visual Studio with C++
- 1.3 Setting up your first Project

**Jump Function Implements** 

Write Simple Code Update Jump times

## 1.4 Logging

UE\_LOG(xx, xx, TEXT())

# 第二章 Classes in Unreal Engine4

## 2.1 Introduction to Classes and Actors

Actor

Pawn

**Actor Component** 

## 2.2 Creating new Classes

#### Introduction

- Uses macro UCLASS() to expose classes to the Engine
- A UCLASS is a C++ calss but the UCLASS macro will add header files to allow the intergration of your calss into the UE4 editor properly
- $\bullet$  With a class being UCLASS, its construction and desconstruction must be handled and managed by UE4
- Therefore, we may not use the new/delete or malloc/free operations to construct or delete the objects of type UCLASS

#### process ->

- creating Class based on the UE4's Actor class
- investigate what a UCLASS is made of

- Make your class and its properties editable
- 1. To Engine Editor Select -> Add New
- 2. Select -> New C++ Class
- 3. Choose Parent Class Actor Pawn ActorComponent ...

## 2.3 Making Our Actors Present in Game

#### Component

• Actors without components will have no visual representation and no transforms!

#### **Process**

- 1. Add UStaticMeshComponent\* to our Actor(Cpp Object)
- 2. Locate a Suitable Static Mesh(World Object)
- 3. Assign a Static Mesh to the component in C++(Connect Cppobject with Worldobject)

### 2.4 Implementing actor functionalities

#### Intruduction

- 1. Establishing the PillSapwner Functionality
- 2. Setting up what to spawn
- 3. Establishing where to spawn

#### 2.5 Spawning actors

# 第三章 进阶

3.1 Memory Management in Unreal Engine4

## 第四章 其他相关领域

- 4.1 Artificial Intelligence
- 4.2 Visual Computing
- 4.3 Virtual Reality
- 4.4 Robotics
- 4.5 参考文献

http://www.52vr.com/article-569-1.html