# Những thư viện thường **#include**

## Character:

#include "GameFramework/Character.h"

## Character Movement Component:

#include "GameFramework/CharacterMovementComponent.h"

## Kismet:

* Toán học:

#include "Kismet/KismetSystemLibrary.h"

* Trace Hit, Draw Debug:

#include "Kismet/KismetMathLibrary.h"

## HUD, Widget

* #include "Components/WidgetComponent.h"
* #include "Components/ProgressBar.h"

# Những **Kiểu Dữ Liệu** hay dùng

## Object Type

TEnumAsByte<EObjectTypeQuery>

## Mảng Object Type

TArray<TEnumAsByte<EObjectTypeQuery>> TraceObjectTypes;

## Interface

* Interface Referencing:

TScriptInterface<IAttackInterface> AttackInterface;

# Những Function thường xuyên **override**

## Class Character

* Tick:

public:

virtual void Tick(float DeltaSeconds) override;

* Begin Play:

protected:

virtual void BeginPlay() override;

* Post Initialize Components:

virtual void PostInitializeComponents() override;

## Debug

* Print String:

if (GEngine)

GEngine->AddOnScreenDebugMessage(

-1,

1.0f,

FColor::Cyan,

TEXT("Enter Message")

);

* Draw Debug Sphere:

UKismetSystemLibrary::DrawDebugSphere(

this (Pointer),

Position (FVector),

Radius (float)

);

# Code, Function thường dùng

## Component

* Tạo Component mới:

CameraComponent = CreateDefaultSubobject<UCameraComponent>(TEXT("Camera"));

* Gắn Component vào Component khác:

CameraComponent->SetupAttachment(SpringArmComponent);

## Interface

* Constructor (tham số là 1 AActor):

AttackInterface = TScriptInterface<IAttackInterface>(GetOwner());

UPROPERTY(meta = (BindWidget))

UProgressBar\* HealthBar;