```
D:\CityParkEnvironmentCollec\Source\park\enemy1.h
```

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1
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```
// Fill out your copyright notice in the Description page of Project
     Settings.
 2
 3 #pragma once
 4
 5 #include "CoreMinimal.h"
 6 #include "GameFramework/Character.h"
 7 #include "enemy1.generated.h"
 8 UENUM(BlueprintType)
 9 enum class EEnemyMovementStatus :uint8
10 {
       EMS_Idle UMETA(DeplayName = "Idle"),
11
12
       EMS_MoveToTarget UMETA(DeplayName = "MoveToTarget"),
       EMS_Attacking UMETA(DeplayName = "Attacking"),
13
       EMS_MAX UMETA(DeplayName = "MAX"),
14
       EMS_Dead UMETA(DeplayName = "Dead")
15
16 };
17
18 UCLASS()
19 class PARK_API Aenemy1 : public ACharacter
20 {
21
       GENERATED_BODY()
22
23 public:
       // Sets default values for this character's properties
24
25
       Aenemy1();
       UPROPERTY(VisibleAnywhere, BlueprintReadonly, Category =
26
         "Movement")
            EEnemyMovementStatus EnemyMovementStatus;
27
       FORCEINLINE void SetEnemyMovementStatus(EEnemyMovementStatus
28
         Status) { EnemyMovementStatus=Status; }
29
       FORCEINLINE EEnemyMovementStatus GetEnemyMovementStatus() { return →
         EnemyMovementStatus; }
30
31
       UPROPERTY(VisibleAnywhere,BlueprintReadOnly,category="AI")
32
       class USphereComponent* Agrosphere;
33
34
       UPROPERTY(VisibleAnywhere, BlueprintReadOnly, category = "AI")
35
36
       USphereComponent* Combatsphere;
37
       UPROPERTY(VisibleAnywhere, BlueprintReadOnly, category = "AI")
38
39
       class AAIController* Aicontroller;
40
       UPROPERTY(EditAnywhere, BlueprintReadWrite, Category = "Combat")
41
42
            TSubclassOf<UDamageType>DamageTypeclass;
43
       UPROPERTY(EditAnywhere, BlueprintReadWrite, category = "AI")
44
           float Health;
       UPROPERTY(EditAnywhere, BlueprintReadWrite, category = "AI")
45
46
           float MaxHealth;
47
       UPROPERTY(EditAnywhere, BlueprintReadWrite, category = "AI")
48
           float Damage;
49
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50
        bool bhasvalidtarget;
51
52
       FTimerHandle AttackTimer;
53
54
        UPROPERTY(EditAnywhere, BlueprintReadOnly, Category="Combat")
55
        float AttackMinTime;
56
        UPROPERTY(EditAnywhere, BlueprintReadOnly, Category = "Combat")
57
       float AttackMaxTime;
58
        FTimerHandle DeathTimer;
59
       UPROPERTY(EditAnywhere, BlueprintReadWrite, Category="Combat")
60
       float DeathDelay;
61
62
       void disappear();
63
64
        UPROPERTY(VisibleAnywhere,BlueprintReadWrite,Category="Combat")
            class UBoxComponent* CombatCollision;
65
66
67
       UPROPERTY(EditAnywhere, BlueprintReadWrite, Category = "AI")
            class UParticleSystem* HitParticles;
68
69
        UPROPERTY(EditAnywhere, BlueprintReadWrite, Category = "AI")
            class USoundCue* HitSound;
70
71
72
       UFUNCTION(BlueprintCallable)
       void Deathend();
73
74
       void die(AActor *Causer);
75
76
77
       virtual float TakeDamage(float DamageAmount, struct FDamageEvent
          const& DamageEvent, class AController* EventInstigator, AActor*
          DamageCauser) override;
78
79
       bool alive();
80 protected:
81
        // Called when the game starts or when spawned
82
       virtual void BeginPlay() override;
83
84
   public:
        // Called every frame
85
       virtual void Tick(float DeltaTime) override;
86
87
88
       // Called to bind functionality to input
        virtual void SetupPlayerInputComponent(class UInputComponent*
89
         PlayerInputComponent) override;
90
       UFUNCTION()
91
92
            virtual void AgroSphereOnOverLapbegin(UPrimitiveComponent*
              OverlappedComponent, AActor* OtherActor, UPrimitiveComponent* >
               OtherComp, int32 otherbodyindex, bool bFromSweep, const
              FHitResult& SweepResult);
        UFUNCTION()
93
94
            virtual void AgroSphereOnOverLapend(UPrimitiveComponent*
              OverlappedComponent, AActor* OtherActor, UPrimitiveComponent* >
               OtherComp, int32 otherbodyindex);
```

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3
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```
95
96
        UFUNCTION()
97
             virtual void CombatSphereOnOverLapbegin(UPrimitiveComponent*
               OverlappedComponent, AActor* OtherActor, UPrimitiveComponent* >
               OtherComp, int32 otherbodyindex, bool bFromSweep, const
               FHitResult& SweepResult);
 98
        UFUNCTION()
 99
             virtual void CombatSphereOnOverLapend(UPrimitiveComponent*
               OverlappedComponent, AActor* OtherActor, UPrimitiveComponent* >
               OtherComp, int32 otherbodyindex);
100
        UFUNCTION(BlueprintCallable)
101
102
        void MoveToTarget(class AMaincharacter* Target);
103
        UPROPERTY(VisibleAnywhere, BlueprintReadWrite, Category="AI")
104
        bool bOverlappingCombatSphere;
105
106
107
        UPROPERTY(VisibleAnywhere, BlueprintReadWrite, Category="AI")
108
109
        AMaincharacter* CombatTarget;
110
        UPROPERTY(EditAnyWhere,BlueprintReadWrite,Category="Combat")
111
        class UAnimMontage* CombatMontage;
112
113
        UFUNCTION()
114
115
             void combatOnOverLapbegin(UPrimitiveComponent*
               OverlappedComponent, AActor* OtherActor, UPrimitiveComponent* >
               OtherComp, int32 otherbodyindex, bool bFromSweep, const
               FHitResult& SweepResult);
116
        UFUNCTION()
117
             void combatOnOverLapend(UPrimitiveComponent*
118
               OverlappedComponent, AActor* OtherActor, UPrimitiveComponent* >
               OtherComp, int32 otherbodyindex);
119
120
        UFUNCTION(Blueprintcallable)
            void activatecollision();
121
122
        UFUNCTION(Blueprintcallable)
123
124
            void deactivatecollision();
125
126
127
128
        void attack();
        UFUNCTION(Blueprintcallable)
129
130
        void attackend();
131
132
        UPROPERTY(visibleAnywhere,BlueprintReadOnly,Category="Combat")
133
        bool bAttacking;
134 };
135
```