

# C++ : Overlap

```
boxComp = CreateDefaultSubobject<UBoxComponent>(TEXT("boxComp"));
this->SetRootComponent(boxComp);
```

```
boxComp->SetGenerateOverlapEvents(true);
boxComp->SetCollisionProfileName(TEXT("ItemBox"));
```

헤더

**UFUNCTION()**

void OnMyComp

```
BeginOverlap(UPrimitiveComponent* OverlappedComponent, AActor*
OtherActor, UPrimitiveComponent* OtherComp, int32 OtherBodyIndex, bool
bFromSweep, const FHitResult& SweepResult); // 오버랩 시작할 때 한번 호출 됨
```

**UFUNCTION()**

virtual void OnMyComp

```
EndOverlap(UPrimitiveComponent* OverlappedComponent, AActor*
OtherActor, UPrimitiveComponent* OtherComp, int32 OtherBodyIndex);
```

//오버랩이 끝나는 시점

**함수 바인딩 해줘야함!!!!!!**

```
// Called when the game starts or when spawned
void AItemBox::BeginPlay()
{
    Super::BeginPlay();

    //boxComponent와 begin overlap함수 바인딩하기
    boxComp->OnComponentBeginOverlap.AddDynamic(this, &AItemBox::OnMyCompBeginOverlap);
}
```

```

void AItemBox::OnMyCompBeginOverlap(UPrimitiveComponent* OverlappedComponent, AActor* OtherActor, UPrimitiveComponent* OtherComp, int32 OtherBodyIndex)
{
    // 만약 OtherActor가 플레이어라면
    if (OtherActor->IsA<AKartPlayer>())
    {
        //auto player = Cast<AKartPlayer>(OtherActor);

        UE_LOG(LogTemp, Warning, TEXT("overlap"));
        //얻은 아이템 ui 사진 띄우기
        //player->randomItem;

        //UGameplayStatics::PlaySound2D(GetWorld(), itemBoxSound);

        //아이템 박스 destroy
        this->Destroy();
    }
}

```

Ex) 마리오 카트 무지개 발판 - 오버랩 되는 시점에 스피드 업하고 오버랩 끝나는 시점에 스피드 다운

```

void AMiniGameSpeedBoard::OnMyCompBeginOverlap(UPrimitiveComponent* OverlappedComponent, AActor* OtherActor, UPrimitiveComponent* OtherComp, int32 OtherBodyIndex)
{
    // 만약 OtherActor가 플레이어라면
    auto player = Cast<AKartPlayer>(OtherActor);
    if (player)
        player->speedUp();
}

void AMiniGameSpeedBoard::OnMyCompEndOverlap(UPrimitiveComponent* OverlappedComponent, AActor* OtherActor, UPrimitiveComponent* OtherComp, int32 OtherBodyIndex)
{
    auto player = Cast<AKartPlayer>(OtherActor);
    if (player)
        player->speedDown();
}

```