

Sticky Base Shooter

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1 Todo List

Member **ABaseShooter::CreateNewActionMapping** (FName DesiredActionName, FKey DesiredActionKey)

Move to a controller class perhaps?

Member **ABaseShooter::CreateNewAxisMapping** (FName DesiredAxisName, FKey DesiredAxisKey)

Move to a controller class perhaps?

Class **ABomberman**

Move some of the functions of **ABaseShooter** into Bomberman, or rather rewrite some as virtual and implement them in child classes such as ABomberMan

Move some of the functions of **ABaseShooter** into Bomberman, or rather rewrite some as virtual and implement them in child classes such as ABomberMan

Currently this class is fairly bloated.

1. Move some of the functions of **ABaseShooter** into Bomberman, or rather rewrite some as virtual and implement them in child classes such as ABomberMan.
2. Move methods such as those regarding to input setup to the player controller class

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1. Move some of the functions of **ABaseShooter** into Bomberman, or rather rewrite some as virtual and implement them in child classes such as ABomberMan.
2. Move methods such as those regarding to input setup to the player controller class

Class **AStickyBaseActor**

Perhaps the class needs to be extended to be able to edit other editor uassets

Member **AStickyGameMode::CheckAnyPlayerAlive** ()

remove, superflous function

Member **AStickyGameMode::PostLogin** (APlayerController *NewPlayer) override

Register user-chosen names?

Member [AStickyGameMode::RestartDeadPlayers \(\)](#)

Reset player capsule orientation and reset stance?

Member [AStickyGameMode::Tick \(float DeltaSeconds\) override](#)

Have a timer based delay before restarting Dead players

Class [AStickyGameState](#)

Add gamestate logic

Class [AStickyPlayerController](#)

Move controller and input related code from the [ABaseShooter](#) class into here.

Move controller and input related code from [ABaseShooter](#) into the player Controller

Class [AStickyPlayerState](#)

Redesign and remove extraneous code

Class [FMaterialGenerator](#)

Extend with many variants of templates, both in regards to expression types but also package types, and opt for selective compilation with 'constexpr if's for efficiency.

Member [FMaterialGenerator::CreateCelShadedExplosionMat \(FString MaterialBaseName=FString\("M_↵ CelExplosionMat"\), FString PackageName=FString\("/Game/GenMaterials/"\)\)](#)

Hook correct nodes together and then generate some banded textures to use. Also remember to set the material defaults to be able to use it as a particle material

Class [FStickyFXManager](#)

Write functions to handle creation and editing of new particle systems through c++

Write functions to handle creation and editing of new particle systems through c++

Class [UAmmoComp](#)

This component could be expanded into something more like an inventory. What would be needed is making a dedicated item_data class, hold the item_data in the inventory. Then spawn the items on server-side when brought out of inventory.

2 Hierarchical Index

2.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

AActor	
AStickyBaseActor	28
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ACharacter	
ABaseShooter	7
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AGameModeBase	
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3 Class Index

3.1 Class List

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AStickyBaseActor A simple shell of a class to be expanded upon	28
AStickyGameMode Naive implementation of Gamemode for networked play	30
AStickyGameSession Dummy gamesession class	35
AStickyGameState A simple shell of a class implementation to be expanded upon	35
AStickyHUD A simple HUD class to handle widgets	36
AStickyPickup A simple pickup actor	40
AStickyPickupContainer A simple actor which holds a static mesh container	43
AStickyPlayerCameraManager A simple shell of a class implementation to be expanded upon	44
AStickyPlayerController A simple shell of a class implementation to be expanded upon	45
AStickyPlayerState Networked Player-state implementation	46
AStickyProjectile A projectile moving actor class	49
FMaterialGenerator A WIP utility class for Material creation/editing	57
FPlayerData Simple utility struct to pass data into widgets	59
FStickyFXManager A particle system primer class	60

InteractionUOI		
A simple shell of a class to be expanded upon		60
SAmmoWidget		
Ammo Widget which derives from SCompoundWidget		61
SInGameOverlay		
A simple shell of a class to be expanded upon. Right now it only functions as a blank overlay		63
SKillContentContainer		
A simple shell of a class to be expanded upon		64
SKillWidget		
A simple shell of a class to be expanded upon to display current kills		66
SSlideInText		
A simple widget that can be used to display a recent player kill		68
UAmmoComp		
Simple ammo component		71
UHealthComp		
Networked health component		71
UInteractionUOI		72
UStickyGunSkeletalComp		
Networked weapon component		72
UStickyLinetraceComp		
Not much more than a linetracer. Almost a functor,		78

4 File Index

4.1 File List

Here is a list of all files with brief descriptions:

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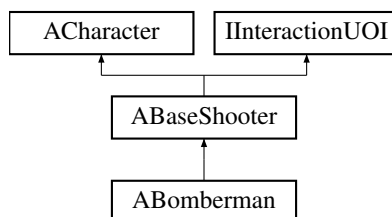
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5 Class Documentation

5.1 ABaseShooter Class Reference

```
#include <BaseShooter.h>
```

Inheritance diagram for ABaseShooter:



Public Member Functions

- [ABaseShooter](#) ()
Construct a new [ABaseShooter](#) object.
- virtual void [TryInteractItem](#) () override
Interact Item, Start.
- virtual void [EndInteractItem](#) () override
Interact Item, End.
- [UStickyGunSkeletalComp](#) * [GetStickyGun](#) ()
Get the Sticky Gun object.
- [USkeletalMeshComponent](#) * [GetCharMesh](#) ()
Get the Char Mesh object.
- [UHealthComp](#) * [GetHealthComp](#) ()
Get the Health Comp object.
- [UAmmoComp](#) * [GetAmmoComp](#) ()
Get the Ammo Comp object.
- [UCameraComponent](#) * [GetFirstPersonCameraComponent](#) ()
Get the First Person Camera Component object.
- void [TryStartFire](#) ()
Try triggering weapon, checks ammo with server in subsequent calls.
- void [ServerTriggerRagdoll](#) ()
Trigger ragdoll, can only be run by Server.
- void [ServerUndoRagdoll](#) ()
Reset player/Undo Ragdoll, Can only be run by server.
- void [TriggerPlayerStateAmmo](#) (int LocalAmmoUpdate)
Triggers an update to the players UAmmoWidget.

Public Attributes

- float [BaseTurnRate](#)
- float [BaseLookUpRate](#)
In deg/sec. Other scaling may affect final turn rate.

Protected Member Functions

- virtual void [BeginPlay](#) ()
Component BeginPlay.
- virtual void [SetupPlayerInputComponent](#) (UInputComponent *InputComponent) override
Override in dervied classes to set up class-specific inputs.
- virtual float [TakeDamage](#) (float DamageAmount, FDamageEvent const &DamageEvent, AController *EventInstigator, AActor *DamageCauser) final
TakeDamage event.
- void [MulticastUndoRagdoll](#) ()
In deg/sec. Other scaling may affect final rate.
- void [MulticastTriggerRagdoll](#) ()
Trigger Ragdoll function, will run multicasted.
- void [ServerTryInteractItem](#) ()
Try Interaction function, will only run on server.
- void [ServerEndInteractItem](#) ()
End Interaction function, will only run on server.

- void [ServerTakeDamage](#) (AActor *ThisActor, float DamageAmount, const UDamageType *DamageType, AController *EventInstigator, AActor *DamageCauser)
TakeDamage function, will only run on server.
- void [InitSkeletalBody](#) ()
Initializes the Skeletal mesh component and it's mesh.
- void [InitCamera](#) ()
Initializes the Camera component.
- void [InitActorComponents](#) ()
Initialize various actor components which aren't initialized in a function of their own.
- void [SetupStickyGun](#) ()
Construct a ASlickyGunSkeletalComp and call some intializing functions on it.
- void [SetupCollision](#) ()
Sets up collision channels and collision settings.
- void [MoveRight](#) (float Val)
- void [MoveForward](#) (float Val)
- void [TurnAtRate](#) (float Rate)
Turn Rate.
- void [LookUpAtRate](#) (float Rate)
LookUp Rate.
- void [CreateNewAxisMapping](#) (FName DesiredAxisName, FKey DesiredAxisKey)
Create and store New Axis Mapping.
- void [CreateNewActionMapping](#) (FName DesiredActionName, FKey DesiredActionKey)
Create and store New Action Mapping.

Protected Attributes

- USkeletalMeshComponent * [MeshPtr](#) = nullptr
- UStickyGunSkeletalComp * [StickyGun](#) = nullptr
SkelMesh: 1st person view arms.
- UCameraComponent * [FirstPersonCameraComponent](#) = nullptr
SkelMesh: Skeletal Gun mesh.
- UHealthComp * [HealthComponent](#) = nullptr
First person camera.
- UAmmoComp * [AmmoComp](#) = nullptr
Networked health component.
- UStickyLinetraceComp * [LinetraceComp](#) = nullptr
Networked ammo component.
- bool [blsRagdoll](#) = false
Interaction detection component, uses linetrace.

5.1.1 Constructor & Destructor Documentation

5.1.1.1 ABaseShooter() `ABaseShooter::ABaseShooter ()`

Construct a new [ABaseShooter](#) object.

5.1.2 Member Function Documentation

5.1.2.1 **BeginPlay()** `void ABaseShooter::BeginPlay () [protected], [virtual]`

Component BeginPlay.

Runs when world at BeginPlay, or when constructed in an already running world.

Inherited Methods: Overrides

Reimplemented in [ABomberman](#).

5.1.2.2 **CreateNewActionMapping()** `void ABaseShooter::CreateNewActionMapping (FName DesiredActionName, FKey DesiredActionKey) [protected]`

Create and store New Action Mapping.

Parameters

<i>DesiredActionName</i>	
<i>DesiredActionKey</i>	

Todo Move to a controller class perhaps?

5.1.2.3 **CreateNewAxisMapping()** `void ABaseShooter::CreateNewAxisMapping (FName DesiredAxisName, FKey DesiredAxisKey) [protected]`

Create and store New Axis Mapping.

Parameters

<i>DesiredAxisName</i>	
<i>DesiredAxisKey</i>	

Todo Move to a controller class perhaps?

5.1.2.4 EndInteractItem() `void ABaseShooter::EndInteractItem () [override], [virtual]`

Interact Item, End.

Implements [IInteractionUOI](#).

5.1.2.5 GetAmmoComp() `UAmmoComp * ABaseShooter::GetAmmoComp ()`

Get the Ammo Comp object.

Returns

UAmmoComp*

5.1.2.6 GetCharMesh() `USkeletalMeshComponent * ABaseShooter::GetCharMesh ()`

Get the Char Mesh object.

Returns

USkeletalMeshComponent*

5.1.2.7 GetFirstPersonCameraComponent() `UCameraComponent * ABaseShooter::GetFirstPersonCameraComponent ()`

Get the First Person Camera Component object.

Returns

UCameraComponent*

5.1.2.8 GetHealthComp() `UHealthComp * ABaseShooter::GetHealthComp ()`

Get the Health Comp object.

Returns

UHealthComp*

5.1.2.9 GetStickyGun() `UStickyGunSkeletalComp * ABaseShooter::GetStickyGun ()`

Get the Sticky Gun object.

Returns

UStickyGunSkeletalComp*

5.1.2.10 InitActorComponents() `void ABaseShooter::InitActorComponents () [protected]`

Initialize various actor components which aren't initialized in a function of their own.

5.1.2.11 InitCamera() `void ABaseShooter::InitCamera () [protected]`

Initializes the Camera component.

5.1.2.12 InitSkeletalBody() `void ABaseShooter::InitSkeletalBody () [protected]`

Initializes the Skeletal mesh component and it's mesh.

5.1.2.13 LookUpAtRate() `void ABaseShooter::LookUpAtRate (float Rate) [protected]`

LookUp Rate.

Called via input to turn look up/down at a given rate.

Parameters

<i>Rate</i>	This is a normalized rate, i.e. 1.0 means 100% of desired turn rate
-------------	---

5.1.2.14 MoveForward() `void ABaseShooter::MoveForward (float Val) [protected]`**5.1.2.15 MoveRight()** `void ABaseShooter::MoveRight (float Val) [protected]`

5.1.2.16 MulticastTriggerRagdoll() `void ABaseShooter::MulticastTriggerRagdoll () [protected]`

Trigger Ragdoll function, will run multicasted.

5.1.2.17 MulticastUndoRagdoll() `void ABaseShooter::MulticastUndoRagdoll () [protected]`

In deg/sec. Other scaling may affect final rate.

Undo Ragdoll function, will run multicasted

5.1.2.18 ServerEndInteractItem() `void ABaseShooter::ServerEndInteractItem () [protected]`

End Interaction function, will only run on server.

5.1.2.19 ServerTakeDamage() `void ABaseShooter::ServerTakeDamage (`
`AActor * ThisActor,`
`float DamageAmount,`
`const UDamageType * DamageType,`
`AController * EventInstigator,`
`AActor * DamageCauser) [protected]`

TakeDamage function, will only run on server.

Parameters

<i>ThisActor</i>	
<i>DamageAmount</i>	
<i>DamageType</i>	
<i>EventInstigator</i>	
<i>DamageCauser</i>	

5.1.2.20 ServerTriggerRagdoll() `void ABaseShooter::ServerTriggerRagdoll ()`

Trigger ragdoll, can only be run by Server.

5.1.2.21 ServerTryInteractItem() `void ABaseShooter::ServerTryInteractItem () [protected]`

Try Interaction function, will only run on server.

5.1.2.22 ServerUndoRagdoll() `void ABaseShooter::ServerUndoRagdoll ()`

Reset player/Undo Ragdoll, Can only be run by server.

5.1.2.23 SetupCollision() `void ABaseShooter::SetupCollision ()` [protected]

Sets up collision channels and collision settings.

5.1.2.24 SetupPlayerInputComponent() `void ABaseShooter::SetupPlayerInputComponent (UInputComponent * InputComponent)` [override], [protected], [virtual]

Override in dervied classes to set up class-specific inputs.

Parameters

<i>InputComponent</i>	
-----------------------	--

Reimplemented in [ABomberman](#).

5.1.2.25 SetupStickyGun() `void ABaseShooter::SetupStickyGun ()` [protected]

Construct a AStickyGunSkeletalComp and call some intializing functions on it.

5.1.2.26 TakeDamage() `float ABaseShooter::TakeDamage (float DamageAmount, FDamageEvent const & DamageEvent, AController * EventInstigator, AActor * DamageCauser)` [final], [protected], [virtual]

TakeDamage event.

Parameters

<i>DamageAmount</i>	
<i>DamageEvent</i>	
<i>EventInstigator</i>	
<i>DamageCauser</i>	

Returns

float

5.1.2.27 TriggerPlayerStateAmmo() `void ABaseShooter::TriggerPlayerStateAmmo (
int LocalAmmoUpdate)`

Triggers an update to the players UAmmoWidget.

Parameters

<i>LocalAmmoUpdate</i>	
------------------------	--

5.1.2.28 TryInteractItem() `void ABaseShooter::TryInteractItem () [override], [virtual]`

Interact Item, Start.

Implements [IInteractionUOI](#).

5.1.2.29 TryStartFire() `void ABaseShooter::TryStartFire ()`

Try triggering weapon, checks ammo with server in subsequent calls.

5.1.2.30 TurnAtRate() `void ABaseShooter::TurnAtRate (
float Rate) [protected]`

Turn Rate.

Called via input to turn at a given rate.

Parameters

<i>Rate</i>	This is a normalized rate, i.e. 1.0 means 100% of desired turn rate
-------------	---

5.1.3 Member Data Documentation

5.1.3.1 AmmoComp `UAmmoComp* ABaseShooter::AmmoComp = nullptr [protected]`

Networked health component.

5.1.3.2 BaseLookUpRate `float ABaseShooter::BaseLookUpRate`

In deg/sec. Other scaling may affect final turn rate.

5.1.3.3 BaseTurnRate `float ABaseShooter::BaseTurnRate`

5.1.3.4 bIsRagdoll `bool ABaseShooter::bIsRagdoll = false [protected]`

Interaction detection component, uses linetrace.

5.1.3.5 FirstPersonCameraComponent `UCameraComponent* ABaseShooter::FirstPersonCameraComponent = nullptr [protected]`

SkelMesh: Skeletal Gun mesh.

5.1.3.6 HealthComponent `UHealthComp* ABaseShooter::HealthComponent = nullptr [protected]`

First person camera.

5.1.3.7 LinetraceComp `UStickyLinetraceComp* ABaseShooter::LinetraceComp = nullptr [protected]`

Networked ammo component.

5.1.3.8 MeshPtr `USkeletalMeshComponent* ABaseShooter::MeshPtr = nullptr [protected]`

5.1.3.9 StickyGun `UStickyGunSkeletalComp* ABaseShooter::StickyGun = nullptr [protected]`

SkelMesh: 1st person view arms.

The documentation for this class was generated from the following files:

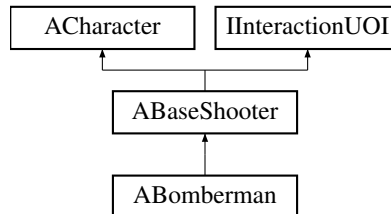
- Source/ario_stickyBomb_UE4/Public/Characters/[BaseShooter.h](#)
- Source/ario_stickyBomb_UE4/Private/Characters/[BaseShooter.cpp](#)

5.2 ABomberman Class Reference

Inherits from ACharacter & [IInteractionUOI](#).

```
#include <Bomberman.h>
```

Inheritance diagram for ABomberman:



Public Member Functions

- [ABomberman](#) ()
Construct a new [ABomberman](#) object.
- virtual void [TryInteractItem](#) () override
Interact Item, Start.
- virtual void [EndInteractItem](#) () override
Interact Item, End.
- [UStickyGunSkeletalComp](#) * [GetStickyGun](#) ()
Get the Sticky Gun object.
- [USkeletalMeshComponent](#) * [GetCharMesh](#) ()
Get the Char Mesh object.
- [UHealthComp](#) * [GetHealthComp](#) ()
Get the Health Comp object.
- [UAmmoComp](#) * [GetAmmoComp](#) ()
Get the Ammo Comp object.
- [UCameraComponent](#) * [GetFirstPersonCameraComponent](#) ()
Get the First Person Camera Component object.
- void [TryStartFire](#) ()
Try triggering weapon, checks ammo with server in subsequent calls.
- void [ServerTriggerRagdoll](#) ()
Trigger ragdoll, can only be run by Server.
- void [ServerUndoRagdoll](#) ()
Reset player/Undo Ragdoll, Can only be run by server.
- void [TriggerPlayerStateAmmo](#) (int LocalAmmoUpdate)
Triggers an update to the players UAmmoWidget.

Public Attributes

- float [BaseTurnRate](#)
- float [BaseLookUpRate](#)
In deg/sec. Other scaling may affect final turn rate.

Protected Member Functions

- virtual void [BeginPlay](#) ()
Actor BeginPlay.
- virtual void [SetupPlayerInputComponent](#) (UInputComponent *InputComponent) override
Override in dervied classes to set up class-specific inputs.
- virtual float [TakeDamage](#) (float DamageAmount, FDamageEvent const &DamageEvent, AController *EventInstigator, AActor *DamageCauser) final
TakeDamage event.
- void [MulticastUndoRagdoll](#) ()
In deg/sec. Other scaling may affect final rate.
- void [MulticastTriggerRagdoll](#) ()
Trigger Ragdoll function, will run multicasted.
- void [ServerTryInteractItem](#) ()
Try Interaction function, will only run on server.
- void [ServerEndInteractItem](#) ()
End Interaction function, will only run on server.
- void [ServerTakeDamage](#) (AActor *ThisActor, float DamageAmount, const UDamageType *DamageType, AController *EventInstigator, AActor *DamageCauser)
TakeDamage function, will only run on server.
- void [InitSkeletalBody](#) ()
Initializes the Skeletal mesh component and it's mesh.
- void [InitCamera](#) ()
Initializes the Camera component.
- void [InitActorComponents](#) ()
Initialize various actor components which aren't initialized in a function of their own.
- void [SetupStickyGun](#) ()
Construct a ASlickyGunSkeletalComp and call some intializing functions on it.
- void [SetupCollision](#) ()
Sets up collision channels and collision settings.
- void [MoveRight](#) (float Val)
- void [MoveForward](#) (float Val)
- void [TurnAtRate](#) (float Rate)
Turn Rate.
- void [LookUpAtRate](#) (float Rate)
LookUp Rate.
- void [CreateNewAxisMapping](#) (FName DesiredAxisName, FKey DesiredAxisKey)
Create and store New Axis Mapping.
- void [CreateNewActionMapping](#) (FName DesiredActionName, FKey DesiredActionKey)
Create and store New Action Mapping.

Protected Attributes

- USkeletalMeshComponent * [MeshPtr](#) = nullptr
- UStickyGunSkeletalComp * [StickyGun](#) = nullptr
SkelMesh: 1st person view arms.
- UCameraComponent * [FirstPersonCameraComponent](#) = nullptr
SkelMesh: Skeletal Gun mesh.
- UHealthComp * [HealthComponent](#) = nullptr
First person camera.
- UAmmoComp * [AmmoComp](#) = nullptr

Networked health component.

- `UStickyLinetraceComp * LinetraceComp = nullptr`

Networked ammo component.

- `bool blsRagdoll = false`

Interaction detection component, uses linetrace.

5.2.1 Detailed Description

Inherits from ACharacter & [InteractionUOI](#).

Inherits from [ABaseShooter](#).

Derived from ACharacter and implements a StickyGunSkeletalComponent, HealthComponent and a Ammo↔Component

Todo Currently this class is fairly bloated.

1. Move some of the functions of [ABaseShooter](#) into Bomberman, or rather rewrite some as virtual and implement them in child classes such as ABomberMan.
2. Move methods such as those regarding to input setup to the player controller class

Currently it only sets up the key_bindings

Todo Move some of the functions of [ABaseShooter](#) into Bomberman, or rather rewrite some as virtual and implement them in child classes such as ABomberMan

Derived from ACharacter and implements a StickyGunSkeletalComponent, HealthComponent and a Ammo↔Component

Todo Currently this class is fairly bloated.

1. Move some of the functions of [ABaseShooter](#) into Bomberman, or rather rewrite some as virtual and implement them in child classes such as ABomberMan.
2. Move methods such as those regarding to input setup to the player controller class

Todo Move some of the functions of [ABaseShooter](#) into Bomberman, or rather rewrite some as virtual and implement them in child classes such as ABomberMan

5.2.2 Constructor & Destructor Documentation

5.2.2.1 ABomberman() `ABomberman::ABomberman ()`

Construct a new [ABomberman](#) object.

5.2.3 Member Function Documentation

5.2.3.1 BeginPlay() `void ABomberman::BeginPlay () [protected], [virtual]`

Actor BeginPlay.

Runs when world at BeginPlay, or when constructed in an already running world.

Reimplemented from [ABaseShooter](#).

5.2.3.2 CreateNewActionMapping() `void ABaseShooter::CreateNewActionMapping (`
 `FName DesiredActionName,`
 `FKey DesiredActionKey) [protected], [inherited]`

Create and store New Action Mapping.

Parameters

<i>DesiredActionName</i>	
<i>DesiredActionKey</i>	

Todo Move to a controller class perhaps?

5.2.3.3 CreateNewAxisMapping() `void ABaseShooter::CreateNewAxisMapping (`
 `FName DesiredAxisName,`
 `FKey DesiredAxisKey) [protected], [inherited]`

Create and store New Axis Mapping.

Parameters

<i>DesiredAxisName</i>	
<i>DesiredAxisKey</i>	

Todo Move to a controller class perhaps?

5.2.3.4 EndInteractItem() `void ABaseShooter::EndInteractItem () [override], [virtual], [inherited]`

Interact Item, End.

Implements [IInteractionUOI](#).

5.2.3.5 GetAmmoComp() `UAmmoComp * ABaseShooter::GetAmmoComp () [inherited]`

Get the Ammo Comp object.

Returns

UAmmoComp*

5.2.3.6 GetCharMesh() `USkeletalMeshComponent * ABaseShooter::GetCharMesh () [inherited]`

Get the Char Mesh object.

Returns

USkeletalMeshComponent*

5.2.3.7 GetFirstPersonCameraComponent() `UCameraComponent * ABaseShooter::GetFirstPersonCameraComponent () [inherited]`

Get the First Person Camera Component object.

Returns

UCameraComponent*

5.2.3.8 GetHealthComp() `UHealthComp * ABaseShooter::GetHealthComp () [inherited]`

Get the Health Comp object.

Returns

UHealthComp*

5.2.3.9 GetStickyGun() `UStickyGunSkeletalComp * ABaseShooter::GetStickyGun () [inherited]`

Get the Sticky Gun object.

Returns

UStickyGunSkeletalComp*

5.2.3.10 InitActorComponents() `void ABaseShooter::InitActorComponents () [protected], [inherited]`

Initialize various actor components which aren't initialized in a function of their own.

5.2.3.11 InitCamera() `void ABaseShooter::InitCamera () [protected], [inherited]`

Initializes the Camera component.

5.2.3.12 InitSkeletalBody() `void ABaseShooter::InitSkeletalBody () [protected], [inherited]`

Initializes the Skeletal mesh component and it's mesh.

5.2.3.13 LookUpAtRate() `void ABaseShooter::LookUpAtRate (float Rate) [protected], [inherited]`

LookUp Rate.

Called via input to turn look up/down at a given rate.

Parameters

<i>Rate</i>	This is a normalized rate, i.e. 1.0 means 100% of desired turn rate
-------------	---

5.2.3.14 MoveForward() `void ABaseShooter::MoveForward (float Val) [protected], [inherited]`**5.2.3.15 MoveRight()** `void ABaseShooter::MoveRight (float Val) [protected], [inherited]`**5.2.3.16 MulticastTriggerRagdoll()** `void ABaseShooter::MulticastTriggerRagdoll () [protected], [inherited]`

Trigger Ragdoll function, will run multicasted.

5.2.3.17 MulticastUndoRagdoll() `void ABaseShooter::MulticastUndoRagdoll () [protected], [inherited]`

In deg/sec. Other scaling may affect final rate.

Undo Ragdoll function, will run multicasted

5.2.3.18 ServerEndInteractItem() `void ABaseShooter::ServerEndInteractItem () [protected], [inherited]`

End Interaction function, will only run on server.

5.2.3.19 ServerTakeDamage() `void ABaseShooter::ServerTakeDamage (`
`AActor * ThisActor,`
`float DamageAmount,`
`const UDamageType * DamageType,`
`AController * EventInstigator,`
`AActor * DamageCauser) [protected], [inherited]`

TakeDamage function, will only run on server.

Parameters

<i>ThisActor</i>	
<i>DamageAmount</i>	
<i>DamageType</i>	
<i>EventInstigator</i>	
<i>DamageCauser</i>	

5.2.3.20 ServerTriggerRagdoll() `void ABaseShooter::ServerTriggerRagdoll () [inherited]`

Trigger ragdoll, can only be run by Server.

5.2.3.21 ServerTryInteractItem() `void ABaseShooter::ServerTryInteractItem () [protected], [inherited]`

Try Interaction function, will only run on server.

5.2.3.22 ServerUndoRagdoll() `void ABaseShooter::ServerUndoRagdoll () [inherited]`

Reset player/Undo Ragdoll, Can only be run by server.

5.2.3.23 SetupCollision() `void ABaseShooter::SetupCollision () [protected], [inherited]`

Sets up collision channels and collision settings.

5.2.3.24 SetupPlayerInputComponent() `void ABomberman::SetupPlayerInputComponent (UInputComponent * InputComponent) [override], [protected], [virtual]`

Override in dervied classes to set up class-specific inputs.

Parameters

<i>InputComponent</i>	
-----------------------	--

Reimplemented from [ABaseShooter](#).

5.2.3.25 SetupStickyGun() `void ABaseShooter::SetupStickyGun () [protected], [inherited]`

Construct a AStickyGunSkeletalComp and call some intializing functions on it.

5.2.3.26 TakeDamage() `float ABaseShooter::TakeDamage (float DamageAmount, FDamageEvent const & DamageEvent, AController * EventInstigator, AActor * DamageCauser) [final], [protected], [virtual], [inherited]`

TakeDamage event.

Parameters

<i>DamageAmount</i>	
<i>DamageEvent</i>	
<i>EventInstigator</i>	
<i>DamageCauser</i>	

Returns

float

5.2.3.27 TriggerPlayerStateAmmo() `void ABaseShooter::TriggerPlayerStateAmmo (int LocalAmmoUpdate) [inherited]`

Triggers an update to the players UAmmoWidget.

Parameters

<i>LocalAmmoUpdate</i>	
------------------------	--

5.2.3.28 TryInteractItem() `void ABaseShooter::TryInteractItem () [override], [virtual], [inherited]`

Interact Item, Start.

Implements [IInteractionUOI](#).

5.2.3.29 TryStartFire() `void ABaseShooter::TryStartFire () [inherited]`

Try triggering weapon, checks ammo with server in subsequent calls.

5.2.3.30 TurnAtRate() `void ABaseShooter::TurnAtRate (float Rate) [protected], [inherited]`

Turn Rate.

Called via input to turn at a given rate.

Parameters

<i>Rate</i>	This is a normalized rate, i.e. 1.0 means 100% of desired turn rate
-------------	---

5.2.4 Member Data Documentation

5.2.4.1 AmmoComp `UAmmoComp* ABaseShooter::AmmoComp = nullptr [protected], [inherited]`

Networked health component.

5.2.4.2 BaseLookUpRate `float ABaseShooter::BaseLookUpRate [inherited]`

In deg/sec. Other scaling may affect final turn rate.

5.2.4.3 BaseTurnRate float ABaseShooter::BaseTurnRate [inherited]

5.2.4.4 blsRagdoll bool ABaseShooter::bIsRagdoll = false [protected], [inherited]

Interaction detection component, uses linetrace.

5.2.4.5 FirstPersonCameraComponent UCameraComponent* ABaseShooter::FirstPersonCameraComponent = nullptr [protected], [inherited]

SkelMesh: Skeletal Gun mesh.

5.2.4.6 HealthComponent UHealthComp* ABaseShooter::HealthComponent = nullptr [protected], [inherited]

First person camera.

5.2.4.7 LinetraceComp UStickyLinetraceComp* ABaseShooter::LinetraceComp = nullptr [protected], [inherited]

Networked ammo component.

5.2.4.8 MeshPtr USkeletalMeshComponent* ABaseShooter::MeshPtr = nullptr [protected], [inherited]

5.2.4.9 StickyGun UStickyGunSkeletalComp* ABaseShooter::StickyGun = nullptr [protected], [inherited]

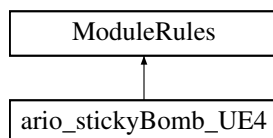
SkelMesh: 1st person view arms.

The documentation for this class was generated from the following files:

- Source/ario_stickyBomb_UE4/Public/Characters/[Bomberman.h](#)
- Source/ario_stickyBomb_UE4/Private/Characters/[Bomberman.cpp](#)

5.3 ario_stickyBomb_UE4 Class Reference

Inheritance diagram for ario_stickyBomb_UE4:



Public Member Functions

- [ario_stickyBomb_UE4](#) (ReadOnlyTargetRules Target)

5.3.1 Constructor & Destructor Documentation

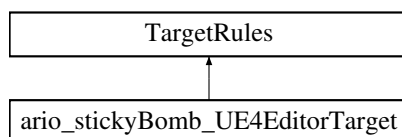
5.3.1.1 ario_stickyBomb_UE4() `ario_stickyBomb_UE4.ario_stickyBomb_UE4 (ReadOnlyTargetRules Target) [inline]`

The documentation for this class was generated from the following file:

- Source/ario_stickyBomb_UE4/[ario_stickyBomb_UE4.Build.cs](#)

5.4 ario_stickyBomb_UE4EditorTarget Class Reference

Inheritance diagram for ario_stickyBomb_UE4EditorTarget:



Public Member Functions

- [ario_stickyBomb_UE4EditorTarget](#) (TargetInfo Target)

5.4.1 Constructor & Destructor Documentation

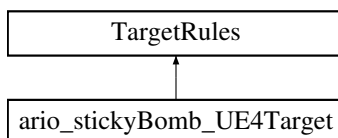
5.4.1.1 ario_stickyBomb_UE4EditorTarget() `ario_stickyBomb_UE4EditorTarget.ario_stickyBomb_UE4EditorTarget (TargetInfo Target) [inline]`

The documentation for this class was generated from the following file:

- Source/[ario_stickyBomb_UE4Editor.Target.cs](#)

5.5 ario_stickyBomb_UE4Target Class Reference

Inheritance diagram for ario_stickyBomb_UE4Target:



Public Member Functions

- [ario_stickyBomb_UE4Target](#) (TargetInfo Target)

5.5.1 Constructor & Destructor Documentation

5.5.1.1 ario_stickyBomb_UE4Target() `ario_stickyBomb_UE4Target.ario_stickyBomb_UE4Target (TargetInfo Target) [inline]`

The documentation for this class was generated from the following file:

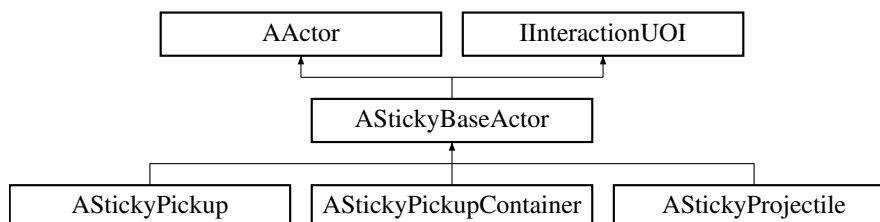
- Source/[ario_stickyBomb_UE4.Target.cs](#)

5.6 AStickyBaseActor Class Reference

A simple shell of a class to be expanded upon.

```
#include <StickyBaseActor.h>
```

Inheritance diagram for AStickyBaseActor:



Public Member Functions

- [AStickyBaseActor](#) ()
Construct a new [AStickyBaseActor](#) object.
- virtual void [TryInteractItem](#) () override
Interact Item, End.
- virtual void [EndInteractItem](#) () override
Interact Item, Start.

5.6.1 Detailed Description

A simple shell of a class to be expanded upon.

A simple shell of a class implementation to be expanded upon.

A simple utility class for generating and editing materialgraphs in code.

Todo Perhaps the class needs to be extended to be able to edit other editor uassets

5.6.2 Constructor & Destructor Documentation

5.6.2.1 AStickyBaseActor() `AStickyBaseActor::AStickyBaseActor ()`

Construct a new [AStickyBaseActor](#) object.

5.6.3 Member Function Documentation

5.6.3.1 EndInteractItem() `void AStickyBaseActor::EndInteractItem () [override], [virtual]`

Interact Item, Start.

Implements [InteractionUOI](#).

Reimplemented in [AStickyPickupContainer](#), [AStickyPickup](#), and [AStickyProjectile](#).

5.6.3.2 TryInteractItem() `void AStickyBaseActor::TryInteractItem () [override], [virtual]`

Interact Item, End.

Implements [InteractionUOI](#).

Reimplemented in [AStickyPickupContainer](#), [AStickyPickup](#), and [AStickyProjectile](#).

The documentation for this class was generated from the following files:

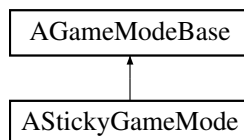
- Source/ario_stickyBomb_UE4/Public/Actors/[StickyBaseActor.h](#)
- Source/ario_stickyBomb_UE4/Private/Actors/[StickyBaseActor.cpp](#)

5.7 AStickyGameMode Class Reference

Naive implementation of Gamemode for networked play.

```
#include <StickyGameMode.h>
```

Inheritance diagram for AStickyGameMode:



Public Member Functions

- [AStickyGameMode](#) ()
Construct a new [AStickyGameMode](#) object.
- virtual void [StartPlay](#) () override
Plays when gamemode starts.
- virtual void [BeginPlay](#) () override
Unchanged, only calls Super::BeginPlay.
- virtual void [Tick](#) (float DeltaSeconds) override
This gamemodes tick. uses it to keep track of the players and the game.
- virtual void [PostLogin](#) (APlayerController *NewPlayer) override
Called when user logs-in.
- virtual void [Logout](#) (AController *ExitingPlayer) override
Called when user is exiting the game.
- [ABaseShooter](#) * [FindPlayer](#) (int32 LocalPlayerId)
Find player on server given player ID sent by client.

Public Attributes

- FOnActorKilled [OnActorKilled](#)
OnActorKilled delegate, multicasts when a player has been killed.
- FOnTargetHitEvent [OnHitEvent](#)
OnHitEvent Delegate, multicasts when a hit has occurred.

Protected Member Functions

- void [RegisterNewPlayer](#) (ABaseShooter *NewPlayer)
Register newly logged ing player.
- void [DeregisterExitingPlayer](#) (ABaseShooter *ExitingPlayer)
Unregister player who is logging out.
- void [CheckAnyPlayerAlive](#) ()
Is any player alive?
- bool [HasPlayerWon](#) () const
Checks whether match is still going of if has been won.
- void [RestartDeadPlayers](#) ()
Restart any dead players who are still connected to the server.
- void [PlayerKilled](#) (AActor *DamageCauser, AActor *DamagedActor, AController *InstigatorController)
Registers a killed player.
- void [GameOver](#) ()
Ends the current game.

Protected Attributes

- bool [bIsGameOver](#)
- bool [bHasGameStarted](#)
- bool [bTriggerOnce](#) = false
- [FMaterialGenerator](#) * [MatGen](#)

5.7.1 Detailed Description

Naive implementation of Gamemode for networked play.

Simple GameMode which has been designed to work with [ABaseShooter](#) derived classes.

Implements barebone player checks which could be expanded on.

5.7.2 Constructor & Destructor Documentation

5.7.2.1 AStickyGameMode() `AStickyGameMode::AStickyGameMode ()`

Construct a new [AStickyGameMode](#) object.

5.7.3 Member Function Documentation

5.7.3.1 BeginPlay() `void AStickyGameMode::BeginPlay () [override], [virtual]`

Unchanged, only calls Super::BeginPlay.

5.7.3.2 CheckAnyPlayerAlive() `void AStickyGameMode::CheckAnyPlayerAlive () [protected]`

Is any player alive?

Todo remove, superfluous function

5.7.3.3 DeregisterExitingPlayer() `void AStickyGameMode::DeregisterExitingPlayer (ABaseShooter * ExitingPlayer) [protected]`

Unregister player who is logging out.

Parameters

<i>ExitingPlayer</i>	
----------------------	--

5.7.3.4 FindPlayer() `ABaseShooter * AStickyGameMode::FindPlayer (
int32 LocalPlayerId)`

Find player on server given player ID sent by client.

Parameters

<i>Local↔ PlayerId</i>	
----------------------------	--

Returns

ABaseShooter*

5.7.3.5 GameOver() `void AStickyGameMode::GameOver () [protected]`

Ends the current game.

5.7.3.6 HasPlayerWon() `bool AStickyGameMode::HasPlayerWon () const [protected]`

Checks whether match is still going of if has been won.

Returns

true | false

5.7.3.7 Logout() `void AStickyGameMode::Logout (
AController * ExitingPlayer) [override], [virtual]`

Called when user is exiting the game.

Parameters

<i>ExitingPlayer</i>	
----------------------	--

5.7.3.8 PlayerKilled() `void AStickyGameMode::PlayerKilled (`
 `AActor * DamageCauser,`
 `AActor * DamagedActor,`
 `AController * InstigatorController) [protected]`

Registers a killed player.

Does not do much right now, but could be expanded upon to trigger OnKill audio cues or something similar

Parameters

<i>DamageCauser</i>	
<i>DamagedActor</i>	
<i>InstigatorController</i>	

5.7.3.9 PostLogin() `void AStickyGameMode::PostLogin (`
 `APlayerController * NewPlayer) [override], [virtual]`

Called when user logs-in.

Todo Register user-chosen names?

Parameters

<i>NewPlayer</i>	
------------------	--

5.7.3.10 RegisterNewPlayer() `void AStickyGameMode::RegisterNewPlayer (`
 `ABaseShooter * NewPlayer) [protected]`

Register newly logged ing player.

Parameters

<i>NewPlayer</i>	
------------------	--

5.7.3.11 RestartDeadPlayers() `void AStickyGameMode::RestartDeadPlayers () [protected]`

Restart any dead players who are still connected to the server.

Todo Reset player capsule orientation and reset stance?

5.7.3.12 StartPlay() `void AStickyGameMode::StartPlay () [override], [virtual]`

Plays when gamemode starts.

Inherited Methods: Overrides

Generates a material using [FMaterialGenerator](#) and turns off timeline logs

Inherited Methods: Overrides

5.7.3.13 Tick() `void AStickyGameMode::Tick (
float DeltaSeconds) [override], [virtual]`

This gamemodes tick. uses it to keep track of the players and the game.

Parameters

<i>DeltaSeconds</i>	
---------------------	--

Todo Have a timer based delay before restarting Dead players

5.7.4 Member Data Documentation

5.7.4.1 bHasGameStarted `bool AStickyGameMode::bHasGameStarted [protected]`

5.7.4.2 bIsGameOver `bool AStickyGameMode::bIsGameOver [protected]`

5.7.4.3 bTriggerOnce `bool AStickyGameMode::bTriggerOnce = false [protected]`

5.7.4.4 MatGen `FMaterialGenerator* AStickyGameMode::MatGen [protected]`

5.7.4.5 OnActorKilled `FOnActorKilled AStickyGameMode::OnActorKilled`

OnActorKilled delegate, multicasts when a player has been killed.

5.7.4.6 OnHitEvent `FOnTargetHitEvent AStickyGameMode::OnHitEvent`

OnHitEvent Delegate, multicasts when a hit has occurred.

The documentation for this class was generated from the following files:

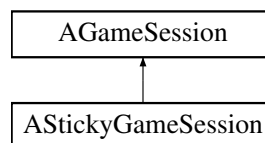
- Source/ario_stickyBomb_UE4/Public/[StickyGameMode.h](#)
- Source/ario_stickyBomb_UE4/Private/[StickyGameMode.cpp](#)

5.8 AStickyGameSession Class Reference

Dummy gamesession class.

```
#include <StickyGameSession.h>
```

Inheritance diagram for AStickyGameSession:



5.8.1 Detailed Description

Dummy gamesession class.

The documentation for this class was generated from the following file:

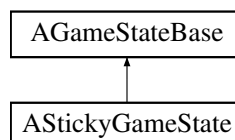
- Source/ario_stickyBomb_UE4/Public/[StickyGameSession.h](#)

5.9 AStickyGameState Class Reference

A simple shell of a class implementation to be expanded upon.

```
#include <StickyGameState.h>
```

Inheritance diagram for AStickyGameState:



5.9.1 Detailed Description

A simple shell of a class implementation to be expanded upon.

Dummy Gamestate, derives from AGameStateBase.

Todo Add gamestate logic

The documentation for this class was generated from the following file:

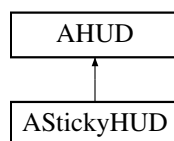
- Source/ario_stickyBomb_UE4/Public/[StickyGameState.h](#)

5.10 AStickyHUD Class Reference

A simple HUD class to handle widgets.

```
#include <StickyHUD.h>
```

Inheritance diagram for AStickyHUD:



Public Member Functions

- [AStickyHUD](#) ()
Construct a new [AStickyHUD](#) object.
- virtual void [Tick](#) (float DeltaTime) final
Inherited and mostly unused - Super::Tick.
- virtual void [DrawHUD](#) () final
Inherited and mostly unused - Super::DrawHUD.
- void [UpdateTotalKills](#) ()
Update Killbox/container with total kills.
- void [UpdateAmmo](#) ()
Reflect value to textbox.
- void [ToggleGameMenu](#) ()
Toggle (unimplemented) game menu.
- void [AddKillToWidget](#) (FString Kill)
Update widget with Kill (unfinished/untested)

Protected Member Functions

- virtual void [PostInitializeComponents](#) () override
Inherited and unused PostInit.
- virtual void [BeginPlay](#) () final
Initialize some components on BeginPlay.
- void [InitializeKillOverlayWidget](#) ()
Init Kill Overlay widget.
- void [InitializeTotalKillsWidget](#) ()
Init Killbox/container widget.
- void [InitializeAmmoWidget](#) ()
Init AmmoWidget.

Protected Attributes

- TSharedPtr< [SKillWidget](#) > [TotalKillsWidget](#)
- TSharedPtr< [SAmmoWidget](#) > [AmmoWidget](#)
- TSharedPtr< [SSlideInText](#) > [OverlayMenu](#)
- TSharedPtr< [SKillContentContainer](#) > [KillList](#)
- TSharedPtr< [AStickyHUD](#) > [StickyHUD](#)
- bool [bIsTitleVisible](#)
- bool [bIsSkillWidgetInitialized](#)
- bool [bIsAmmoWidgetInitialized](#)
- bool [bIsOverlayMenuVisible](#)

5.10.1 Detailed Description

A simple HUD class to handle widgets.

Main HUD class for [ABaseShooter](#), derives from AHUD.

Simple HUD class to load the widgets in UI/Widgets/ and set up display

5.10.2 Constructor & Destructor Documentation

5.10.2.1 AStickyHUD() `AStickyHUD::AStickyHUD ()`

Construct a new [AStickyHUD](#) object.

5.10.3 Member Function Documentation

5.10.3.1 AddKillToWidget() `void AStickyHUD::AddKillToWidget (FString Kill)`

Update widget with Kill (unfinished/untested)

Parameters

<i>Kill</i>	
-------------	--

5.10.3.2 BeginPlay() `void AStickyHUD::BeginPlay () [final], [protected], [virtual]`

Initialize some components on BeginPlay.

5.10.3.3 DrawHUD() `void AStickyHUD::DrawHUD () [final], [virtual]`

Inherited and mostly unused - Super::DrawHUD.

5.10.3.4 InitializeAmmoWidget() `void AStickyHUD::InitializeAmmoWidget () [protected]`

Init AmmoWidget.

5.10.3.5 InitializeKillOverlayWidget() `void AStickyHUD::InitializeKillOverlayWidget () [protected]`

Init Kill Overlay widget.

5.10.3.6 InitializeTotalKillsWidget() `void AStickyHUD::InitializeTotalKillsWidget () [protected]`

Init Killbox/container widget.

5.10.3.7 PostInitializeComponents() `void AStickyHUD::PostInitializeComponents () [override], [protected], [virtual]`

Inherited and unused PostInit.

Inherited Methods: Overrides

5.10.3.8 Tick() `void AStickyHUD::Tick (float DeltaTime) [final], [virtual]`

Inherited and mostly unused - Super::Tick.

Parameters

<i>DeltaTime</i>	
------------------	--

5.10.3.9 ToggleGameMenu() void AStickyHUD::ToggleGameMenu ()

Toggle (unimplemented) game menu.

5.10.3.10 UpdateAmmo() void AStickyHUD::UpdateAmmo ()

Reflect value to textbox.

Reflects value from ABaseShooter->StickyGun->AmmoComp->GetAmmoCount(),e

5.10.3.11 UpdateTotalKills() void AStickyHUD::UpdateTotalKills ()

Update Killbox/container with total kills.

5.10.4 Member Data Documentation**5.10.4.1 AmmoWidget** TSharedPtr<SAmmoWidget> AStickyHUD::AmmoWidget [protected]**5.10.4.2 blsAmmoWidgetInitialized** bool AStickyHUD::blsAmmoWidgetInitialized [protected]**5.10.4.3 blsKillWidgetInitialized** bool AStickyHUD::blsKillWidgetInitialized [protected]**5.10.4.4 blsOverlayMenuVisible** bool AStickyHUD::blsOverlayMenuVisible [protected]**5.10.4.5 blsTitleVisible** bool AStickyHUD::blsTitleVisible [protected]

5.10.4.6 KillList TSharedPtr<[SKillContentContainer](#)> AStickyHUD::KillList [protected]

5.10.4.7 OverlayMenu TSharedPtr<[SSlideInText](#)> AStickyHUD::OverlayMenu [protected]

5.10.4.8 StickyHUD TSharedPtr<[AStickyHUD](#)> AStickyHUD::StickyHUD [protected]

5.10.4.9 TotalKillsWidget TSharedPtr<[SKillWidget](#)> AStickyHUD::TotalKillsWidget [protected]

The documentation for this class was generated from the following files:

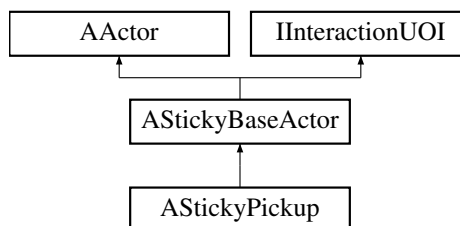
- Source/ario_stickyBomb_UE4/Public/UI/[StickyHUD.h](#)
- Source/ario_stickyBomb_UE4/Private/UI/[StickyHUD.cpp](#)

5.11 AStickyPickup Class Reference

A simple pickup actor.

```
#include <StickyPickup.h>
```

Inheritance diagram for AStickyPickup:



Public Member Functions

- [AStickyPickup](#) ()
Construct a new [AStickyPickup](#) object.
- virtual void [EndInteractItem](#) () override
Interact Item, End.
- virtual void [TryInteractItem](#) () override
Interact Item, Start.
- bool [DidPickup](#) (AActor *OtherActor)
Tries picking up actor, returns to reflect if it was successful.
- USphereComponent * [GetCollisionComp](#) () const
Get the Collision Comp object.

Protected Member Functions

- virtual void [Tick](#) (float DeltaTime) final
- virtual void [BeginPlay](#) () final

Protected Attributes

- USphereComponent * [CollisionComp](#) = nullptr
- UStaticMeshComponent * [MeshComponentPtr](#) = nullptr

5.11.1 Detailed Description

A simple pickup actor.

Has rudimentary pickup logic which sends it to the players ammo component

5.11.2 Constructor & Destructor Documentation

5.11.2.1 AStickyPickup() `AStickyPickup::AStickyPickup ()`

Construct a new [AStickyPickup](#) object.

5.11.3 Member Function Documentation

5.11.3.1 BeginPlay() `void AStickyPickup::BeginPlay () [final], [protected], [virtual]`

5.11.3.2 DidPickup() `bool AStickyPickup::DidPickup (AActor * OtherActor)`

Tries picking up actor, returns to reflect if it was successful.

Parameters

<i>OtherActor</i>	
-------------------	--

Returns

true | false

5.11.3.3 EndInteractItem() `void AStickyPickup::EndInteractItem () [override], [virtual]`

Interact Item, End.

Reimplemented from [AStickyBaseActor](#).

5.11.3.4 GetCollisionComp() `USphereComponent * AStickyPickup::GetCollisionComp () const`

Get the Collision Comp object.

Returns

`USphereComponent*`

5.11.3.5 Tick() `void AStickyPickup::Tick (float DeltaTime) [final], [protected], [virtual]`

Inherited Methods: Overrides

5.11.3.6 TryInteractItem() `void AStickyPickup::TryInteractItem () [override], [virtual]`

Interact Item, Start.

Reimplemented from [AStickyBaseActor](#).

5.11.4 Member Data Documentation

5.11.4.1 CollisionComp `USphereComponent* AStickyPickup::CollisionComp = nullptr [protected]`

5.11.4.2 MeshComponentPtr `UStaticMeshComponent* AStickyPickup::MeshComponentPtr = nullptr [protected]`

The documentation for this class was generated from the following files:

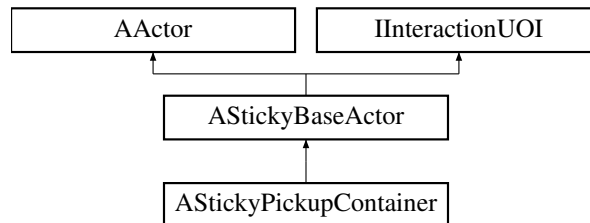
- Source/ario_stickyBomb_UE4/Public/Actors/[StickyPickup.h](#)
- Source/ario_stickyBomb_UE4/Private/Actors/[StickyPickup.cpp](#)

5.12 AStickyPickupContainer Class Reference

A simple actor which holds a static mesh container.

```
#include <StickyPickupContainer.h>
```

Inheritance diagram for AStickyPickupContainer:



Public Member Functions

- [AStickyPickupContainer](#) ()
Construct a new [AStickyPickupContainer](#) object.
- virtual void [EndInteractItem](#) () override
Interact Item, End.
- virtual void [TryInteractItem](#) () override
Interact Item, Start.

Protected Member Functions

- virtual void [Tick](#) (float DeltaTime) final
- virtual void [BeginPlay](#) () final

Protected Attributes

- TArray< UStaticMeshComponent * > [MeshComponentArray](#)

5.12.1 Detailed Description

A simple actor which holds a static mesh container.

5.12.2 Constructor & Destructor Documentation

5.12.2.1 AStickyPickupContainer() `AStickyPickupContainer::AStickyPickupContainer ()`

Construct a new [AStickyPickupContainer](#) object.

5.12.3 Member Function Documentation

5.12.3.1 BeginPlay() `void AStickyPickupContainer::BeginPlay () [final], [protected], [virtual]`

5.12.3.2 EndInteractItem() `void AStickyPickupContainer::EndInteractItem () [override], [virtual]`

Interact Item, End.

Reimplemented from [AStickyBaseActor](#).

5.12.3.3 Tick() `void AStickyPickupContainer::Tick (float DeltaTime) [final], [protected], [virtual]`

Inherited Methods: Overrides

5.12.3.4 TryInteractItem() `void AStickyPickupContainer::TryInteractItem () [override], [virtual]`

Interact Item, Start.

Reimplemented from [AStickyBaseActor](#).

5.12.4 Member Data Documentation

5.12.4.1 MeshComponentArray `TArray<UStaticMeshComponent*> AStickyPickupContainer::MeshComponentArray [protected]`

The documentation for this class was generated from the following files:

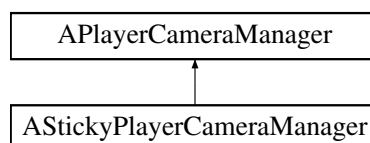
- Source/ario_stickyBomb_UE4/Public/Actors/[StickyPickupContainer.h](#)
- Source/ario_stickyBomb_UE4/Private/Actors/[StickyPickupContainer.cpp](#)

5.13 AStickyPlayerCameraManager Class Reference

A simple shell of a class implementation to be expanded upon.

```
#include <StickyPlayerCameraManager.h>
```

Inheritance diagram for AStickyPlayerCameraManager:



Public Member Functions

- [AStickyPlayerCameraManager](#) ()

Construct a new [AStickyPlayerCameraManager](#) object.

5.13.1 Detailed Description

A simple shell of a class implementation to be expanded upon.

Dummy Camera Manager, derives from APlayerCameraManager.

Only used to force 'bShouldSendClientSideCameraUpdate' to be true, as the default camera in the FPS example is not controlled by a Camera Manager, and thus doesn't have builtin support for replicating camera pitch.

Only used to set pitch to replicate thought the camera manager, instead of forcing replication of pitch on the tick of the player

5.13.2 Constructor & Destructor Documentation

5.13.2.1 AStickyPlayerCameraManager() `AStickyPlayerCameraManager::AStickyPlayerCameraManager ()`

Construct a new [AStickyPlayerCameraManager](#) object.

The documentation for this class was generated from the following files:

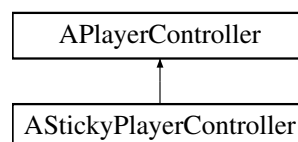
- Source/ario_stickyBomb_UE4/Public/[StickyPlayerCameraManager.h](#)
- Source/ario_stickyBomb_UE4/Private/[StickyPlayerCameraManager.cpp](#)

5.14 AStickyPlayerController Class Reference

A simple shell of a class implementation to be expanded upon.

```
#include <StickyPlayerController.h>
```

Inheritance diagram for AStickyPlayerController:



Public Member Functions

- [AStickyPlayerController](#) ()

Construct a new [AStickyPlayerController](#) object.

5.14.1 Detailed Description

A simple shell of a class implementation to be expanded upon.

Dummy Player Controller, derives from APlayerController.

Todo Move controller and input related code from the [ABaseShooter](#) class into here.

This class is currently only used to explicitly set some default values

Todo Move controller and input related code from [ABaseShooter](#) into the player Controller

5.14.2 Constructor & Destructor Documentation

5.14.2.1 AStickyPlayerController() `AStickyPlayerController::AStickyPlayerController ()`

Construct a new [AStickyPlayerController](#) object.

The documentation for this class was generated from the following files:

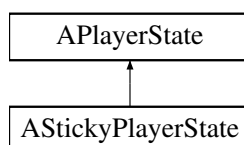
- Source/ario_stickyBomb_UE4/Public/[StickyPlayerController.h](#)
- Source/ario_stickyBomb_UE4/Private/[StickyPlayerController.cpp](#)

5.15 AStickyPlayerState Class Reference

Networked Player-state implementation.

```
#include <StickyPlayerState.h>
```

Inheritance diagram for AStickyPlayerState:



Public Member Functions

- void [AddUserScore](#) (float DeltaScore)
Add new Score Delta.
- float [GetUserScore](#) () const
Get the User Score value.
- void [AddKill](#) (int32 KillCount)
Add new kill count Delta.
- int32 [GetKills](#) () const
Get the Kills value.
- void [SetAmmo](#) (int32 AmmoCount)
Set the Ammo count.
- int32 [GetAmmo](#) () const
Get the Ammo count.

Protected Member Functions

- void [OnRep_Kills](#) ()
On replication, Kills.
- void [OnRep_Ammo](#) ()
OnReplication, Ammo.

Protected Attributes

- int32 [Kills](#)
- int32 [Ammo](#)

5.15.1 Detailed Description

Networked Player-state implementation.

Networked Player-state definition, derives from [AStickyPlayerState](#).

Keeps track of the state of the player, in regards to kills and ammo.

Todo Redesign and remove extraneous code

Keeps track of the state of the player, in regards to kills and ammo. Shares data to the server through the gamemode->gamestate

5.15.2 Member Function Documentation

5.15.2.1 AddKill() void AStickyPlayerState::AddKill (
int32 *KillCount*)

Add new kill count Delta.

Parameters

<i>KillCount</i>	
------------------	--

5.15.2.2 AddUserScore() void AStickyPlayerState::AddUserScore (
float *DeltaScore*)

Add new Score Delta.

Parameters

<i>DeltaScore</i>	
-------------------	--

5.15.2.3 GetAmmo() `int32 AStickyPlayerState::GetAmmo () const`

Get the Ammo count.

Returns

int32

5.15.2.4 GetKills() `int32 AStickyPlayerState::GetKills () const`

Get the Kills value.

Returns

int32

5.15.2.5 GetUserScore() `float AStickyPlayerState::GetUserScore () const`

Get the User Score value.

Returns

float

5.15.2.6 OnRep_Ammo() `void AStickyPlayerState::OnRep_Ammo () [protected]`

OnReplication, Ammo.

5.15.2.7 OnRep_Kills() `void AStickyPlayerState::OnRep_Kills () [protected]`

On replication, Kills.

5.15.2.8 SetAmmo() `void AStickyPlayerState::SetAmmo (
int32 AmmoCount)`

Set the Ammo count.

Parameters

<i>AmmoCount</i>	
------------------	--

5.15.3 Member Data Documentation

5.15.3.1 Ammo `int32 AStickyPlayerState::Ammo` [protected]

5.15.3.2 Kills `int32 AStickyPlayerState::Kills` [protected]

The documentation for this class was generated from the following files:

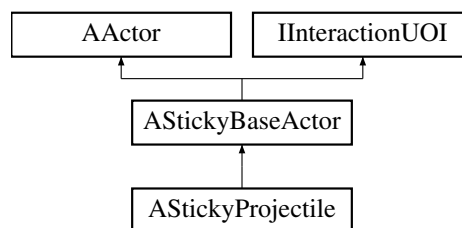
- Source/ario_stickyBomb_UE4/Public/[StickyPlayerState.h](#)
- Source/ario_stickyBomb_UE4/Private/[StickyPlayerState.cpp](#)

5.16 AStickyProjectile Class Reference

A projectile moving actor class.

```
#include <StickyProjectile.h>
```

Inheritance diagram for AStickyProjectile:



Public Member Functions

- [AStickyProjectile](#) ()
Construct a new [AStickyProjectile](#) object.
- virtual void [TryInteractItem](#) () final
Interact Item, End.
- virtual void [EndInteractItem](#) () final
Interact Item, Start.
- float [GetMaxLifetime](#) () const
Get the Max Lifetime.
- USphereComponent * [GetCollisionComp](#) () const
Get the Collision Comp object.

- UProjectileMovementComponent * [GetProjectileMovement](#) () const
Get the Projectile Movement object.
- UTimelineComponent * [GetTimelineComp](#) () const
Get the Timeline Comp object.
- TArray< UActorComponent * > & [GetReplicatedComponents](#) ()
Get the Replicated Components object.
- float [GetDamageRadius](#) () const
Get the Damage Radius.
- float [GetDamageAmount](#) () const
Get the Damage Amount.
- void [SetDamageRadius](#) (float InRadius)
Set the Damage Radius.
- void [SetDamageAmount](#) (float InDamage)
Set the Damage Amount.
- void [SetMaxPossibleLifetime](#) (float MaxLifetime)
Set the Max Possible Lifetime length.
- void [SetCurve](#) (UCurveFloat *InCurve)
Set the Curve object.
- UCurveFloat * [GetCurve](#) ()
Get the Curve object.
- bool [DidPickup](#) (AActor *OtherActor)
Tries picking up actor, returns to reflect if it was successful.

Protected Member Functions

- virtual void [Tick](#) (float DeltaTime) final
- virtual void [BeginPlay](#) () final
- virtual void [LifeSpanExpired](#) () final
- void [OnHit](#) (UPrimitiveComponent *HitComp, AActor *OtherActor, UPrimitiveComponent *OtherComp, FVector NormalImpulse, const FHitResult &Hit)
Called when a hit triggers the collision of the actor.
- void [OnExplode](#) ()
Decides what happens when the projectile explodes.
- void [ModulateColor](#) (const float InterpValue)
Multicasted timeline callback.
- void [TriggerExplosionFX](#) ()
Triggers explosion effects from the ue4 starter content.
- void [ServerTriggerExplosionFX](#) ()
Server check.
- void [MultiCastTriggerExplosionFX](#) ()
Multicast TriggerExplosionFX call to all clients.

Protected Attributes

- USphereComponent * [CollisionComp](#) = nullptr
Used as a primitive collision component.
- UProjectileMovementComponent * [ProjectileMovement](#) = nullptr
Handles projectile movement with an easy to use interface.
- UStaticMeshComponent * [MeshComponentPtr](#) = nullptr
Mesh component of the projectile.

- UTimelineComponent * [StickyTimelineComp](#) = nullptr
Timeline component to be used to modulate material color.
- UParticleSystemComponent * [ParticleSystemComp](#) = nullptr
Particle Systems Component to spawn particle effects.
- UParticleSystem * [ParticleFX](#) = nullptr
Particle System Type to actually hold the particle effect.
- UCurveFloat * [StickyTimelineCurve](#) = nullptr
UCurve object to store the UCurve that is generated by StickyGunSkeletalComp.
- FOnTimelineEvent [TimelineFinishedEvent](#)
Delegate signature for the function which will handle our Finished event.
- FOnTimelineFloat [InterpTimelineEvent](#)
Delegate signature for the function which will handle our timeline loop.
- TEnumAsByte< ETimelineDirection::Type > [TimelineDirection](#) = ETimelineDirection::Type::Forward

5.16.1 Detailed Description

A projectile moving actor class.

A projectile actor which acts as a sticky bomb. Networked, but only naively implemented.

5.16.2 Constructor & Destructor Documentation

5.16.2.1 AStickyProjectile() `AStickyProjectile::AStickyProjectile ()`

Construct a new [AStickyProjectile](#) object.

5.16.3 Member Function Documentation

5.16.3.1 BeginPlay() `void AStickyProjectile::BeginPlay () [final], [protected], [virtual]`

5.16.3.2 DidPickup() `bool AStickyProjectile::DidPickup (AActor * OtherActor)`

Tries picking up actor, returns to reflect if it was successful.

Parameters

<i>OtherActor</i>	
-------------------	--

Returns

true | false

5.16.3.3 EndInteractItem() void AStickyProjectile::EndInteractItem () [final], [virtual]

Interact Item, Start.

Reimplemented from [AStickyBaseActor](#).

5.16.3.4 GetCollisionComp() USphereComponent * AStickyProjectile::GetCollisionComp () const

Get the Collision Comp object.

Returns

USphereComponent*

5.16.3.5 GetCurve() UCurveFloat * AStickyProjectile::GetCurve ()

Get the Curve object.

Returns

UCurveFloat*

5.16.3.6 GetDamageAmount() float AStickyProjectile::GetDamageAmount () const

Get the Damage Amount.

Returns

float

5.16.3.7 GetDamageRadius() float AStickyProjectile::GetDamageRadius () const

Get the Damage Radius.

Returns

float

5.16.3.8 GetMaxLifetime() `float AStickyProjectile::GetMaxLifetime () const`

Get the Max Lifetime.

Returns

`float`

5.16.3.9 GetProjectileMovement() `UProjectileMovementComponent * AStickyProjectile::GetProjectileMovement () const`

Get the Projectile Movement object.

Returns

`UProjectileMovementComponent*`

5.16.3.10 GetReplicatedComponents() `TArray< UActorComponent * > & AStickyProjectile::GetReplicatedComponents ()`

Get the Replicated Components object.

Returns

`TArray<UActorComponent*>&`

5.16.3.11 GetTimelineComp() `UTimelineComponent * AStickyProjectile::GetTimelineComp () const`

Get the Timeline Comp object.

Returns

`UTimelineComponent*`

5.16.3.12 LifeSpanExpired() `void AStickyProjectile::LifeSpanExpired () [final], [protected], [virtual]`

5.16.3.13 ModulateColor() `void AStickyProjectile::ModulateColor (const float InterpValue) [protected]`

Multicasted timeline callback.

Parameters

<i>InterpValue</i>	
--------------------	--

5.16.3.14 MultiCastTriggerExplosionFX() `void AStickyProjectile::MultiCastTriggerExplosionFX ()`
[protected]

Multicast TriggerExplosionFX call to all clients.

5.16.3.15 OnExplode() `void AStickyProjectile::OnExplode ()` [protected]

Decides what happens when the projectile explodes.

If server accepts, send radial damage and replicate it and then multicast VFX/SFX to clients

5.16.3.16 OnHit() `void AStickyProjectile::OnHit (`
 `UPrimitiveComponent * HitComp,`
 `AActor * OtherActor,`
 `UPrimitiveComponent * OtherComp,`
 `FVector NormalImpulse,`
 `const FHitResult & Hit)` [protected]

Called when a hit triggers the collision of the actor.

Parameters

<i>HitComp</i>	
<i>OtherActor</i>	
<i>OtherComp</i>	
<i>NormalImpulse</i>	
<i>Hit</i>	

5.16.3.17 ServerTriggerExplosionFX() `void AStickyProjectile::ServerTriggerExplosionFX ()` [protected]

Server check.

5.16.3.18 SetCurve() `void AStickyProjectile::SetCurve (`
 `UCurveFloat * InCurve)`

Set the Curve object.

Parameters

<i>InCurve</i>	
----------------	--

5.16.3.19 SetDamageAmount() void AStickyProjectile::SetDamageAmount (
float *InDamage*)

Set the Damage Amount.

Parameters

<i>InDamage</i>	
-----------------	--

5.16.3.20 SetDamageRadius() void AStickyProjectile::SetDamageRadius (
float *InRadius*)

Set the Damage Radius.

Parameters

<i>InRadius</i>	
-----------------	--

5.16.3.21 SetMaxPossibleLifetime() void AStickyProjectile::SetMaxPossibleLifetime (
float *MaxLifetime*)

Set the Max Possible Lifetime length.

Parameters

<i>MaxLifetime</i>	
--------------------	--

5.16.3.22 Tick() void AStickyProjectile::Tick (
float *DeltaTime*) [final], [protected], [virtual]

Inherited Methods: Overrides

5.16.3.23 TriggerExplosionFX() void AStickyProjectile::TriggerExplosionFX () [protected]

Triggers explosion effects from the ue4 starter content.

5.16.3.24 TryInteractItem() `void AStickyProjectile::TryInteractItem () [final], [virtual]`

Interact Item, End.

Reimplemented from [AStickyBaseActor](#).

5.16.4 Member Data Documentation

5.16.4.1 CollisionComp `USphereComponent* AStickyProjectile::CollisionComp = nullptr [protected]`

Used as a primitive collision component.

5.16.4.2 InterpTimelineEvent `FOnTimelineFloat AStickyProjectile::InterpTimelineEvent [protected]`

Delegate signature for the function which will handle our timeline loop.

5.16.4.3 MeshComponentPtr `UStaticMeshComponent* AStickyProjectile::MeshComponentPtr = nullptr [protected]`

Mesh component of the projectile.

5.16.4.4 ParticleFX `UParticleSystem* AStickyProjectile::ParticleFX = nullptr [protected]`

Particle System Type to actually hold the particle effect.

5.16.4.5 ParticleSystemComp `UParticleSystemComponent* AStickyProjectile::ParticleSystemComp = nullptr [protected]`

Particle Systems Component to spawn particle effects.

5.16.4.6 ProjectileMovement `UProjectileMovementComponent* AStickyProjectile::ProjectileMovement = nullptr [protected]`

Handles projectile movement with an easy to use interface.

5.16.4.7 StickyTimelineComp UTimelineComponent* AStickyProjectile::StickyTimelineComp = nullptr
[protected]

Timeline component to be used to modulate material color.

5.16.4.8 StickyTimelineCurve UCurveFloat* AStickyProjectile::StickyTimelineCurve = nullptr
[protected]

UCurve object to store the UCurve that is generated by StickyGunSkeletalComp.

5.16.4.9 TimelineDirection TEnumAsByte<ETimelineDirection::Type> AStickyProjectile::TimelineDirection = ETimelineDirection::Type::Forward [protected]

5.16.4.10 TimelineFinishedEvent FOnTimelineEvent AStickyProjectile::TimelineFinishedEvent
[protected]

Delegate signature for the function which will handle our Finished event.

The documentation for this class was generated from the following files:

- Source/ario_stickyBomb_UE4/Public/Actors/[StickyProjectile.h](#)
- Source/ario_stickyBomb_UE4/Private/Actors/[StickyProjectile.cpp](#)

5.17 FMaterialGenerator Class Reference

A WIP utility class for Material creation/editing.

```
#include <MaterialGenerator.h>
```

Public Member Functions

- void [CreateBasicMaterial](#) (FString MaterialBaseName="M_Material", FString PackageName="/Game/GenMaterials")
Create a Basic Material object.
- void [CreateCelShadedExplosionMat](#) (FString MaterialBaseName=FString("M_CelExplosionMat"), FString PackageName=FString("/Game/GenMaterials"))
Create a Cel Shaded Explosion Mat object.

Static Public Member Functions

- static [FMaterialGenerator](#) * [CreateObject](#) ()
Create a [FMaterialGenerator](#) object.

5.17.1 Detailed Description

A WIP utility class for Material creation/editing.

This class lets you create new packages, design them through code and save them to your content_browser (Currently only Materials). End result is a uasset primed for used in the editor, it can therefor be used to create templates.

The Actual idea with this class was to be able to create an explosion material during BeginPlay which would have been used in the actual explosion effects of the StickyProjectile.

Todo Extend with many variants of templates, both in regards to expression types but also package types, and opt for selective compilation with 'constexpr if's for efficiency.

5.17.2 Member Function Documentation

5.17.2.1 CreateBasicMaterial() `void FMaterialGenerator::CreateBasicMaterial (`
 `FString MaterialBaseName = "M_Material",`
 `FString PackageName = "/Game/GenMaterials/")`

Create a Basic Material object.

Parameters

<i>MaterialBaseName</i>	
<i>PackageName</i>	

5.17.2.2 CreateCelShadedExplosionMat() `void FMaterialGenerator::CreateCelShadedExplosionMat (`
 `FString MaterialBaseName = FString("M_CelExplosionMat"),`
 `FString PackageName = FString("/Game/GenMaterials/"))`

Create a Cel Shaded Explosion Mat object.

Parameters

<i>MaterialBaseName</i>	
<i>PackageName</i>	

Todo Hook correct nodes together and then generate some banded textures to use. Also remember to set the material defaults to be able to use it as a particle material

5.17.2.3 CreateObject() `FMaterialGenerator * FMaterialGenerator::CreateObject () [static]`

Create a `FMaterialGenerator` object.

Returns

`FMaterialGenerator*`

The documentation for this class was generated from the following files:

- Source/ario_stickyBomb_UE4/Public/Effects/[MaterialGenerator.h](#)
- Source/ario_stickyBomb_UE4/Private/Effects/[MaterialGenerator.cpp](#)

5.18 FPlayerData Struct Reference

Simple utility struct to pass data into widgets.

```
#include <FPlayerData.h>
```

Public Member Functions

- [FPlayerData](#) (float score=0.0f, FString name=FString("No Player [Name](#)"))
Construct a new [FPlayerData](#) object.

Public Attributes

- float [Score](#)
- FString [Name](#)

5.18.1 Detailed Description

Simple utility struct to pass data into widgets.

5.18.2 Constructor & Destructor Documentation

5.18.2.1 FPlayerData() `FPlayerData::FPlayerData (float score = 0.0f, FString name = FString("No Player Name")) [inline]`

Construct a new [FPlayerData](#) object.

Parameters

<i>score</i>	
<i>name</i>	

5.18.3 Member Data Documentation

5.18.3.1 Name `FString FPlayerData::Name`

5.18.3.2 Score `float FPlayerData::Score`

The documentation for this struct was generated from the following file:

- Source/ario_stickyBomb_UE4/Public/UI/[FPlayerData.h](#)

5.19 FStickyFXManager Class Reference

A particle system primer class.

```
#include <StickyFXManager.h>
```

5.19.1 Detailed Description

A particle system primer class.

Todo Write functions to handle creation and editing of new particle systems through c++

Todo Write functions to handle creation and editing of new particle systems through c++

The documentation for this class was generated from the following file:

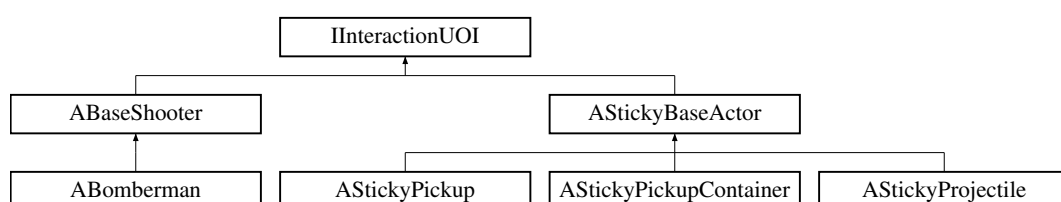
- Source/ario_stickyBomb_UE4/Private/Effects/[StickyFXManager.cpp](#)

5.20 IInteractionUOI Class Reference

A simple shell of a class to be expanded upon.

```
#include <InteractionUOI.h>
```

Inheritance diagram for IInteractionUOI:



Public Member Functions

- virtual void [TryInteractItem](#) ()=0
Pure virtual, implement in child-classes.
- virtual void [EndInteractItem](#) ()=0
Pure virtual, implement in child-classes.

5.20.1 Detailed Description

A simple shell of a class to be expanded upon.

Interaction Interface.

Simple Interaction Interface for managing pickups, could be more fleshed out if needed.

5.20.2 Member Function Documentation

5.20.2.1 EndInteractItem() `virtual void IInteractionUOI::EndInteractItem () [pure virtual]`

Pure virtual, implement in child-classes.

Implemented in [ABaseShooter](#), [ASlickyPickupContainer](#), [ASlickyPickup](#), [ASlickyBaseActor](#), and [ASlickyProjectile](#).

5.20.2.2 TryInteractItem() `virtual void IInteractionUOI::TryInteractItem () [pure virtual]`

Pure virtual, implement in child-classes.

Implemented in [ABaseShooter](#), [ASlickyPickupContainer](#), [ASlickyPickup](#), [ASlickyBaseActor](#), and [ASlickyProjectile](#).

The documentation for this class was generated from the following file:

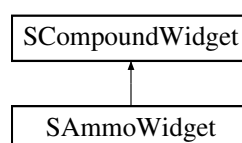
- Source/ario_stickyBomb_UE4/Public/Interfaces/[InteractionUOI.h](#)

5.21 SAmmoWidget Class Reference

Ammo Widget which derives from SCompoundWidget.

```
#include <SAmmoWidget.h>
```

Inheritance diagram for SAmmoWidget:



Public Member Functions

- [SLATE_BEGIN_ARGS](#) ([SAmmoWidget](#))
- [SLATE_ARGUMENT](#) (TWeakObjectPtr< [AStickyHUD](#) >, OwnerHud)
- void [Construct](#) (const FArguments & InArgs)
Construct widget.
- void [SetAmmoText](#) (FText Ammo)
Set the Ammo Text object.
- FText [GetAmmoText](#) () const
Get the Ammo Text object.

5.21.1 Detailed Description

Ammo Widget which derives from SCompoundWidget.

Simple widget to display the ammo count of the ammo component

5.21.2 Member Function Documentation

5.21.2.1 Construct() `void SAmmoWidget::Construct (const FArguments & InArgs)`

Construct widget.

Parameters

<i>InArgs</i>	
---------------	--

5.21.2.2 GetAmmoText() `FText SAmmoWidget::GetAmmoText () const`

Get the Ammo Text object.

Returns

FText

5.21.2.3 SetAmmoText() `void SAmmoWidget::SetAmmoText (FText Ammo)`

Set the Ammo Text object.

Parameters

<i>Ammo</i>	
-------------	--

5.21.2.4 SLATE_ARGUMENT() `SAmmoWidget::SLATE_ARGUMENT (TWeakObjectPtr< AStickyHUD > , OwnerHud)`

5.21.2.5 SLATE_BEGIN_ARGS() `SAmmoWidget::SLATE_BEGIN_ARGS (SAmmoWidget) [inline]`

The documentation for this class was generated from the following files:

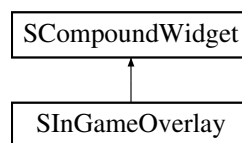
- Source/ario_stickyBomb_UE4/Public/UI/Widgets/[SAmmoWidget.h](#)
- Source/ario_stickyBomb_UE4/Private/UI/Widgets/[SAmmoWidget.cpp](#)

5.22 SInGameOverlay Class Reference

A simple shell of a class to be expanded upon. Right now it only functions as a blank overlay.

```
#include <SInGameOverlay.h>
```

Inheritance diagram for SInGameOverlay:



Public Member Functions

- [SLATE_BEGIN_ARGS](#) ([SInGameOverlay](#))
- void [Construct](#) (const FArguments & InArgs)
Construct widget.

5.22.1 Detailed Description

A simple shell of a class to be expanded upon. Right now it only functions as a blank overlay.

Game Overlay widget, derives from SCompoundWidget.

Simple widget to use in a game overlay.

5.22.2 Member Function Documentation

5.22.2.1 Construct() `BEGIN_SLATE_FUNCTION_BUILD_OPTIMIZATION void SInGameOverlay::Construct (const FArguments & InArgs)`

Construct widget.

Parameters

<i>InArgs</i>	
---------------	--

5.22.2.2 SLATE_BEGIN_ARGS() `SInGameOverlay::SLATE_BEGIN_ARGS (`
`SInGameOverlay) [inline]`

The documentation for this class was generated from the following files:

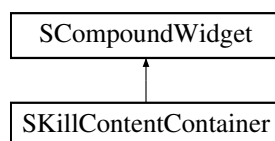
- Source/ario_stickyBomb_UE4/Public/UI/[SInGameOverlay.h](#)
- Source/ario_stickyBomb_UE4/Private/UI/[SInGameOverlay.cpp](#)

5.23 SKillContentContainer Class Reference

A simple shell of a class to be expanded upon.

```
#include <SKillContentContainer.h>
```

Inheritance diagram for SKillContentContainer:



Public Member Functions

- [SLATE_BEGIN_ARGS](#) ([SKillContentContainer](#))
- void [Construct](#) (const FArguments &InArgs)
Construct widget.
- void [AddSlot](#) (FString Value)
Add Slot to widget.

Protected Member Functions

- TSharedRef< ITableRow > [OnGenerateRowForList](#) (TSharedPtr< FString > NewItem, const TSharedRef< STableViewBase > &OwnerTable)
Generate row from table.

Protected Attributes

- [AStickyHUD](#) * [OwnerHud](#)
- TArray< TSharedPtr< FString > > [Items](#)
- TSharedPtr< SListView< TSharedPtr< FString > > > [ListViewWidget](#)
- FSlateFontInfo [FontForKills](#)

5.23.1 Detailed Description

A simple shell of a class to be expanded upon.

Kill Container widget, derives from SCompoundWidget.

Simple widget to display the kills in a cornered box.

5.23.2 Member Function Documentation

5.23.2.1 AddSlot() `void SkillContentContainer::AddSlot (FString Value)`

Add Slot to widget.

Parameters

<i>Value</i>	
--------------	--

5.23.2.2 Construct() `BEGIN_SLATE_FUNCTION_BUILD_OPTIMIZATION void SkillContentContainer::Construct (const FArguments & InArgs)`

Construct widget.

Parameters

<i>InArgs</i>	
---------------	--

5.23.2.3 OnGenerateRowForList() `TSharedRef< ITableRow > SkillContentContainer::OnGenerateRowForList (TSharedPtr< FString > NewItem, const TSharedRef< STableViewBase > & OwnerTable) [protected]`

Generate row from table.

Parameters

<i>NewItem</i>	
<i>OwnerTable</i>	

Returns

TSharedRef<ITableRow>

5.23.2.4 SLATE_BEGIN_ARGS() SkillContentContainer::SLATE_BEGIN_ARGS (
 SkillContentContainer) [inline]

5.23.3 Member Data Documentation

5.23.3.1 FontForKills FSlateFontInfo SkillContentContainer::FontForKills [protected]

5.23.3.2 Items TArray<TSharedPtr<FString> > SkillContentContainer::Items [protected]

5.23.3.3 ListViewWidget TSharedPtr<SListView<TSharedPtr<FString> > > SkillContentContainer↔
::ListViewWidget [protected]

5.23.3.4 OwnerHud AStickyHUD* SkillContentContainer::OwnerHud [protected]

The documentation for this class was generated from the following files:

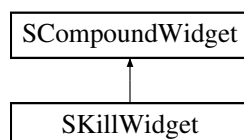
- Source/ario_stickyBomb_UE4/Public/UI/Widgets/SkillContentContainer.h
- Source/ario_stickyBomb_UE4/Private/UI/Widgets/SkillContentContainer.cpp

5.24 SKillWidget Class Reference

A simple shell of a class to be expanded upon to display current kills.

```
#include <SKillWidget.h>
```

Inheritance diagram for SKillWidget:



Public Member Functions

- [SLATE_BEGIN_ARGS](#) ([SKillWidget](#))
- [SLATE_ARGUMENT](#) (TWeakObjectPtr< class [ASlickyHUD](#) >, OwnerHud)
- void [Construct](#) (const FArguments &InArgs)
Construct Widget.
- void [SetScoreText](#) (FText Score)
Set the Score Text.
- FText [GetScoreText](#) () const
Get the Score Text.

5.24.1 Detailed Description

A simple shell of a class to be expanded upon to display current kills.

Kill Count widget, derives from SCompoundWidget.

Simple widget to display the kill count.

5.24.2 Member Function Documentation**5.24.2.1 Construct()** `void SKillWidget::Construct (const FArguments & InArgs)`

Construct Widget.

Parameters

<i>InArgs</i>	
---------------	--

5.24.2.2 GetScoreText() `FText SKillWidget::GetScoreText () const`

Get the Score Text.

Returns

FText

5.24.2.3 SetScoreText() `void SKillWidget::SetScoreText (FText Score)`

Set the Score Text.

Parameters

Score	
-------	--

5.24.2.4 SLATE_ARGUMENT() SkillWidget::SLATE_ARGUMENT (

```
TWeakObjectPtr< class AStickyHUD > ,
OwnerHud )
```

5.24.2.5 SLATE_BEGIN_ARGS() SkillWidget::SLATE_BEGIN_ARGS (

```
SkillWidget ) [inline]
```

The documentation for this class was generated from the following files:

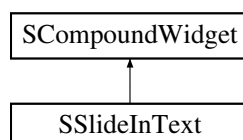
- Source/ario_stickyBomb_UE4/Public/UI/Widgets/SkillWidget.h
- Source/ario_stickyBomb_UE4/Private/UI/Widgets/SkillWidget.cpp

5.25 SSlideInText Class Reference

A simple widget that can be used to display a recent player kill.

```
#include <SSlideInText.h>
```

Inheritance diagram for SSlideInText:



Public Member Functions

- [SLATE_BEGIN_ARGS](#) (SSlideInText)
- void [Construct](#) (const FArguments &InArgs)
Construct widget.
- void [TransitionIn](#) ()
Transitioning widget | in.
- void [TransitionOut](#) ()
Transitioning widget | out.

Public Attributes

- FText [TextToShow](#)

Protected Member Functions

- FLinearColor [GetColor](#) () const
Get the Color object.
- FVector2D [GetItemScale](#) () const
Get the Item Scale object.

Protected Attributes

- [EVisibleState](#) [CurrentState](#)
- FCurveSequence [VisibleAnimation](#)
- FCurveHandle [ScaleCurveX](#)
- FCurveHandle [ScaleCurveY](#)
- FCurveSequence [FadeAnimation](#)
- FCurveHandle [FadeValue](#)

5.25.1 Detailed Description

A simple widget that can be used to display a recent player kill.

Slide In Text widget, derives from SCompoundWidget.

Simple widget to slide in text upon a player kill.

5.25.2 Member Function Documentation

5.25.2.1 Construct() `BEGIN_SLATE_FUNCTION_BUILD_OPTIMIZATION void SSlideInText::Construct (const FArguments & InArgs)`

Construct widget.

Parameters

InArgs	
------------------------	--

5.25.2.2 GetColor() `FLinearColor SSlideInText::GetColor () const [protected]`

Get the Color object.

Returns

FLinearColor

5.25.2.3 GetItemScale() `FVector2D SSlideInText::GetItemScale () const [protected]`

Get the Item Scale object.

Returns

`FVector2D`

5.25.2.4 SLATE_BEGIN_ARGS() `SSlideInText::SLATE_BEGIN_ARGS (
SSlideInText) [inline]`

5.25.2.5 TransitionIn() `END_SLATE_FUNCTION_BUILD_OPTIMIZATION void SSlideInText::TransitionIn (
)`

Transitioning widget | in.

5.25.2.6 TransitionOut() `void SSlideInText::TransitionOut ()`

Transitioning widget | out.

5.25.3 Member Data Documentation

5.25.3.1 CurrentState `EVisibleState SSlideInText::CurrentState [protected]`

5.25.3.2 FadeAnimation `FCurveSequence SSlideInText::FadeAnimation [protected]`

5.25.3.3 FadeValue `FCurveHandle SSlideInText::FadeValue [protected]`

5.25.3.4 ScaleCurveX `FCurveHandle SSlideInText::ScaleCurveX [protected]`

5.25.3.5 ScaleCurveY `FCurveHandle SSlideInText::ScaleCurveY` [protected]

5.25.3.6 TextToShow `FText SSlideInText::TextToShow`

5.25.3.7 VisibleAnimation `FCurveSequence SSlideInText::VisibleAnimation` [protected]

The documentation for this class was generated from the following files:

- Source/ario_stickyBomb_UE4/Public/UI/Widgets/SSlideInText.h
- Source/ario_stickyBomb_UE4/Private/UI/Widgets/SSlideInText.cpp

5.26 UAmmoComp Class Reference

Simple ammo component.

```
#include <AmmoComp.h>
```

5.26.1 Detailed Description

Simple ammo component.

Networked ammo component.

A simple but networked ammo component.

Todo This component could be expanded into something more like an inventory. What would be needed is making a dedicated item_data class, hold the item_data in the inventory. Then spawn the items on server-side when brought out of inventory.

Simple networked Ammo Component to be used for [ABaseShooter](#) derived actors

The documentation for this class was generated from the following file:

- Source/ario_stickyBomb_UE4/Private/Components/AmmoComp.cpp

5.27 UHealthComp Class Reference

Networked health component.

```
#include <HealthComp.h>
```

5.27.1 Detailed Description

Networked health component.

Simple networked health component implementation, to be used with [ABaseShooter](#) derived characters, but could be retrofitted for other character types if it is rewritten as a templated class

Simple networked health component, to be used with [ABaseShooter](#) derived characters, but could be retrofitted for other character types if it is rewritten as a templated class

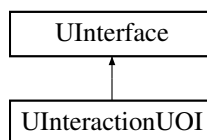
The documentation for this class was generated from the following file:

- [Source/ario_stickyBomb_UE4/Private/Components/HealthComp.cpp](#)

5.28 UInteractionUOI Class Reference

```
#include <InteractionUOI.h>
```

Inheritance diagram for UInteractionUOI:



The documentation for this class was generated from the following file:

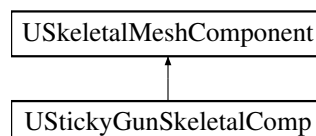
- [Source/ario_stickyBomb_UE4/Public/Interfaces/InteractionUOI.h](#)

5.29 UStickyGunSkeletalComp Class Reference

Networked weapon component.

```
#include <StickyGunSkeletalComp.h>
```

Inheritance diagram for UStickyGunSkeletalComp:



Public Member Functions

- [UStickyGunSkeletalComp](#) ()
Construct a new [UStickyGunSkeletalComp](#) object.
- void [InitStickyGun](#) ([ABaseShooter](#) *Caller, [FVector](#) [GunOffset](#), [USceneComponent](#) *MuzzlePlacementComp)
Called after constructing [StickyGunSkeletalComp](#) as a subobject.
- void [TryStartFire](#) ()
Request to fire weapon, does not guarantee a spawned projectile.
- [UAmmoComp](#) * [GetAmmoComp](#) ()
Get the Ammo Comp object.
- [ABaseShooter](#) * [GetOwningCharacter](#) ()
Get the Owning Character object.
- [USoundBase](#) * [GetFireSound](#) ()
Get the Fire Sound object.
- [UAnimMontage](#) * [GetFireAnimMontage](#) ()
Get the Fire Anim Montage object.
- void [MulticastFireGunEffects](#) ([AStickyProjectile](#) *LocalProjectileActorPtr)
Multicasted VFX/SFX trigger.

Protected Member Functions

- void [SuccessFireEffects](#) ()
Succeeded with fire effects.
- void [FailFireEffects](#) ()
Failed with fire effects.
- void [ServerOnFire](#) ()
Server Only OnFire event.
- void [OnFire](#) ()
Tries spawning projectile, if successful then use a round of ammo.
- void [PrepDeferredSpawnProjectile](#) ([AStickyProjectile](#) *LocalProjectileActorPtr)
Prepare Deferred Spawn of [AStickyProjectile](#) object.
- bool [FinishSpawnProjectile](#) ([AStickyProjectile](#) *LocalProjectileActorPtr, [FTransform](#) const &SpawnTransform)
Finishes spawning the projectile.
- void [GenerateCurve](#) ()
Generates a [UCurve](#) asset.

Protected Attributes

- [USkeletalMesh](#) * [MeshPtr](#) = nullptr
- [FVector](#) [GunOffset](#)
Actual Skeletal Mesh asset.
- [TSubclassOf](#)< [AStickyProjectile](#) > [ProjectileClass](#)
Gun muzzle's offset from the characters location.
- [USoundBase](#) * [FireSound](#)
Projectile class to spawn.
- [UAnimMontage](#) * [FireAnimation](#)
Sound to play each time we fire.
- [USceneComponent](#) * [PlacementComp](#)
AnimMontage to play each time we fire.
- [UAmmoComp](#) * [AmmoComp](#)
Spawn-point for projectiles.
- [ABaseShooter](#) * [OwningCharacter](#)
- [UCurveFloat](#) * [FloatCurve](#) = nullptr
- [FRichCurve](#) * [GeneratedRichCurve](#)

5.29.1 Detailed Description

Networked weapon component.

Derived from USkeletalMeshComponent, Designed to be used with [ABaseShooter](#) derived classes

5.29.2 Constructor & Destructor Documentation

5.29.2.1 UStickyGunSkeletalComp() `UStickyGunSkeletalComp::UStickyGunSkeletalComp ()`

Construct a new [UStickyGunSkeletalComp](#) object.

5.29.3 Member Function Documentation

5.29.3.1 FailFireEffects() `void UStickyGunSkeletalComp::FailFireEffects () [protected]`

Failed with fire effects.

5.29.3.2 FinishSpawnProjectile() `bool UStickyGunSkeletalComp::FinishSpawnProjectile (AStickyProjectile * LocalProjectileActorPtr, FTransform const & SpawnTransform) [protected]`

Finishes spawning the projectile.

Parameters

<i>LocalProjectileActorPtr</i>	
<i>SpawnTransform</i>	

Returns

true | false (true if successful spawn)

5.29.3.3 GenerateCurve() `void UStickyGunSkeletalComp::GenerateCurve () [protected]`

Generates a UCurve asset.

Generates a FRichCurve, point by point, then stores the FRichCurve into UCurve->CurveFloat

5.29.3.4 GetAmmoComp() `UAmmoComp * UStickyGunSkeletalComp::GetAmmoComp ()`

Get the Ammo Comp object.

Returns

UAmmoComp*

5.29.3.5 GetFireAnimMontage() `UAnimMontage * UStickyGunSkeletalComp::GetFireAnimMontage ()`

Get the Fire Anim Montage object.

Returns

UAnimMontage*

5.29.3.6 GetFireSound() `USoundBase * UStickyGunSkeletalComp::GetFireSound ()`

Get the Fire Sound object.

Returns

USoundBase*

5.29.3.7 GetOwningCharacter() `ABaseShooter * UStickyGunSkeletalComp::GetOwningCharacter ()`

Get the Owning Character object.

Returns

ABaseShooter*

5.29.3.8 InitStickyGun() `void UStickyGunSkeletalComp::InitStickyGun (
ABaseShooter * Caller,
FVector GunOffset,
USceneComponent * MuzzlePlacementComp)`

Called after constructing StickyGunSkeletalComp as a subobject.

Parameters

<i>Caller</i>	
<i>GunOffset</i>	
<i>MuzzlePlacementComp</i>	

5.29.3.9 MulticastFireGunEffects() `void UStickyGunSkeletalComp::MulticastFireGunEffects (
 AStickyProjectile * LocalProjectileActorPtr)`

Multicasted VFX/SFX trigger.

Parameters

<i>LocalProjectileActorPtr</i>	
--------------------------------	--

5.29.3.10 OnFire() `void UStickyGunSkeletalComp::OnFire () [protected]`

Tries spawning projectile, if successful then use a round of ammo.

5.29.3.11 PrepDeferredSpawnProjectile() `void UStickyGunSkeletalComp::PrepDeferredSpawnProjectile (
 AStickyProjectile * LocalProjectileActorPtr) [protected]`

Prepare Deferred Spawn of [AStickyProjectile](#) object.

Takes the deferred spawn and sets some member of the object before actually executing the spawn

Parameters

<i>LocalProjectileActorPtr</i>	
--------------------------------	--

5.29.3.12 ServerOnFire() `void UStickyGunSkeletalComp::ServerOnFire () [protected]`

Server Only OnFire event.

When called only server can handle it, from there server calls protected OnFire method

5.29.3.13 SuccessFireEffects() `void UStickyGunSkeletalComp::SuccessFireEffects () [protected]`

Succeeded with fire effects.

5.29.3.14 TryStartFire() `void UStickyGunSkeletalComp::TryStartFire ()`

Request to fire weapon, does not guarantee a spawned projectile.

5.29.4 Member Data Documentation

5.29.4.1 AmmoComp `UAmmoComp* UStickyGunSkeletalComp::AmmoComp [protected]`

Spawn-point for projectiles.

5.29.4.2 FireAnimation `UAnimMontage* UStickyGunSkeletalComp::FireAnimation [protected]`

Sound to play each time we fire.

5.29.4.3 FireSound `USoundBase* UStickyGunSkeletalComp::FireSound [protected]`

Projectile class to spawn.

5.29.4.4 FloatCurve `UCurveFloat* UStickyGunSkeletalComp::FloatCurve = nullptr [protected]`

5.29.4.5 GeneratedRichCurve `FRichCurve* UStickyGunSkeletalComp::GeneratedRichCurve [protected]`

5.29.4.6 GunOffset `FVector UStickyGunSkeletalComp::GunOffset [protected]`

Actual Skeletal Mesh asset.

5.29.4.7 MeshPtr `USkeletalMesh* UStickyGunSkeletalComp::MeshPtr = nullptr [protected]`

5.29.4.8 OwningCharacter `ABaseShooter* UStickyGunSkeletalComp::OwningCharacter [protected]`

5.29.4.9 PlacementComp `USceneComponent* UStickyGunSkeletalComp::PlacementComp [protected]`

AnimMontage to play each time we fire.

5.29.4.10 ProjectileClass `TSubclassOf<AStickyProjectile> UStickyGunSkeletalComp::Projectile↔
Class [protected]`

Gun muzzle's offset from the characters location.

The documentation for this class was generated from the following files:

- Source/ario_stickyBomb_UE4/Public/Components/[StickyGunSkeletalComp.h](#)
- Source/ario_stickyBomb_UE4/Private/Components/[StickyGunSkeletalComp.cpp](#)

5.30 UStickyLinetraceComp Class Reference

Not much more than a linetracer. Almost a functor,.

```
#include <StickyLinetraceComp.h>
```

5.30.1 Detailed Description

Not much more than a linetracer. Almost a functor,.

It is not quite a functor, but it is very small and serves only one function, the tick-component function. It runs a tick on 0.2 second period, in which it shoots a linetrace about 2.5 meters adjusted from Unreal Units. It is designed in a way that it is attached to the camera of [ABaseShooter](#) (and derived) actors and will activate the component by pressing the designated key for it,

The documentation for this class was generated from the following file:

- Source/ario_stickyBomb_UE4/Private/Components/[StickyLinetraceComp.cpp](#)

6 File Documentation

6.1 Source/ario_stickyBomb_UE4.Target.cs File Reference

Classes

- class [ario_stickyBomb_UE4Target](#)

6.2 Source/ario_stickyBomb_UE4/ario_stickyBomb_UE4.Build.cs File Reference

Classes

- class [ario_stickyBomb_UE4](#)

6.3 Source/ario_stickyBomb_UE4/ario_stickyBomb_UE4.cpp File Reference

```
#include "ario_stickyBomb_UE4.h"
#include "Modules/ModuleManager.h"
```

Functions

- [IMPLEMENT_PRIMARY_GAME_MODULE](#) (FDefaultGameModuleImpl, [ario_stickyBomb_UE4](#), "ario_stickyBomb_UE4")

6.3.1 Function Documentation

6.3.1.1 IMPLEMENT_PRIMARY_GAME_MODULE() `IMPLEMENT_PRIMARY_GAME_MODULE (FDefaultGameModuleImpl , ario_stickyBomb_UE4 , "ario_stickyBomb_UE4")`

6.4 Source/ario_stickyBomb_UE4/ario_stickyBomb_UE4.h File Reference

```
#include "CoreMinimal.h"
```

6.5 Source/ario_stickyBomb_UE4/Private/Actors/StickyBaseActor.cpp File Reference

```
#include "Actors/StickyBaseActor.h"
```

6.6 Source/ario_stickyBomb_UE4/Private/Actors/StickyPickup.cpp File Reference

```
#include "Actors/StickyPickup.h"
#include "Characters/BaseShooter.h"
#include "Interfaces/InteractionUOI.h"
#include "Components/AmmoComp.h"
#include "Components/StickyGunSkeletalComp.h"
#include "Helpers/CollisionChannels.h"
#include "Helpers/Macros.h"
#include <Kismet/KismetSystemLibrary.h>
#include <Net/UnrealNetwork.h>
#include <UObject/ConstructorHelpers.h>
#include <Components/SphereComponent.h>
#include <Materials/MaterialInstanceDynamic.h>
```

6.7 Source/ario_stickyBomb_UE4/Private/Actors/StickyPickupContainer.cpp File Reference

```
#include "Actors/StickyPickupContainer.h"
#include "Helpers/CollisionChannels.h"
#include "Helpers/Macros.h"
#include <Kismet/KismetSystemLibrary.h>
#include <Net/UnrealNetwork.h>
#include <UObject/ConstructorHelpers.h>
#include <Materials/MaterialInstanceDynamic.h>
```

6.7.1 Detailed Description

Author

Ario Amin

6.8 Source/ario_stickyBomb_UE4/Private/Actors/StickyProjectile.cpp File Reference

```
#include "Actors/StickyProjectile.h"
#include "Characters/BaseShooter.h"
#include "Interfaces/InteractionUOI.h"
#include "StickyGameMode.h"
#include "StickyPlayerState.h"
#include "Components/AmmoComp.h"
#include "Components/HealthComp.h"
#include "Components/StickyGunSkeletalComp.h"
#include "Helpers/CollisionChannels.h"
#include "Helpers/Macros.h"
#include <Kismet/GameplayStatics.h>
#include <Kismet/KismetSystemLibrary.h>
#include <Net/UnrealNetwork.h>
#include <UObject/ConstructorHelpers.h>
#include <Components/SphereComponent.h>
#include <GameFramework/ProjectileMovementComponent.h>
#include <Particles/ParticleSystemComponent.h>
#include <GameFramework/DamageType.h>
#include <Materials/MaterialInstanceDynamic.h>
#include <Sound/SoundBase.h>
```

6.8.1 Detailed Description

Author

Ario Amin

6.9 Source/ario_stickyBomb_UE4/Private/Characters/BaseShooter.cpp File Reference

```
#include "Characters/BaseShooter.h"
#include "Actors/StickyProjectile.h"
#include "Helpers/CollisionChannels.h"
#include "StickyPlayerState.h"
#include "Components/AmmoComp.h"
#include "Components/HealthComp.h"
#include "Components/StickyGunSkeletalComp.h"
#include "Components/StickyLinetraceComp.h"
#include <Camera/CameraComponent.h>
#include <Components/CapsuleComponent.h>
#include <Components/InputComponent.h>
#include <GameFramework/CharacterMovementComponent.h>
#include <MotionControllerComponent.h>
#include <Animation/AnimInstance.h>
#include <GameFramework/DamageType.h>
#include <GameFramework/InputSettings.h>
#include <Net/UnrealNetwork.h>
#include <Animation/AnimBlueprint.h>
#include <Kismet/GameplayStatics.h>
#include <UObject/ConstructorHelpers.h>
#include <HeadMountedDisplayFunctionLibrary.h>
#include <XRMotionControllerBase.h>
```

Functions

- [DEFINE_LOG_CATEGORY_STATIC](#) (LogFPChar, Warning, All)

6.9.1 Function Documentation

6.9.1.1 DEFINE_LOG_CATEGORY_STATIC() `DEFINE_LOG_CATEGORY_STATIC (`
 LogFPChar ,
 Warning ,
 All)

6.10 Source/ario_stickyBomb_UE4/Private/Characters/Bombberman.cpp File Reference

```
#include "Characters/Bombberman.h"
#include "Components/StickyGunSkeletalComp.h"
#include "Interfaces/InteractionUOI.h"
#include <Camera/CameraComponent.h>
#include <Components/CapsuleComponent.h>
#include <Components/InputComponent.h>
#include <MotionControllerComponent.h>
#include <Animation/AnimInstance.h>
#include <GameFramework/InputSettings.h>
#include <GameFramework/PlayerInput.h>
#include <HeadMountedDisplayFunctionLibrary.h>
#include <XRMotionControllerBase.h>
#include <Kismet/GameplayStatics.h>
#include <UObject/UObjectGlobals.h>
```

Functions

- [DEFINE_LOG_CATEGORY_STATIC](#) (LogFPChar, Warning, All)

6.10.1 Function Documentation

6.10.1.1 DEFINE_LOG_CATEGORY_STATIC() `DEFINE_LOG_CATEGORY_STATIC (`
 LogFPChar ,
 Warning ,
 All)

6.11 Source/ario_stickyBomb_UE4/Private/Components/AmmoComp.cpp File Reference

```
#include "Components/AmmoComp.h"  
#include "Characters/BaseShooter.h"  
#include "StickyGameMode.h"  
#include "Helpers/Macros.h"  
#include <Net/UnrealNetwork.h>
```

6.11.1 Detailed Description

Author

Ario Amin

6.12 Source/ario_stickyBomb_UE4/Private/Components/HealthComp.cpp File Reference

```
#include "Components/HealthComp.h"  
#include "StickyGameMode.h"  
#include "Helpers/Macros.h"  
#include <GameFramework/Actor.h>  
#include <Math/UnrealMathUtility.h>  
#include <Net/UnrealNetwork.h>
```

6.12.1 Detailed Description

Author

Ario Amin

6.13 Source/ario_stickyBomb_UE4/Private/Components/StickyGunSkeletalComp.cpp File Reference

```
#include "Components/StickyGunSkeletalComp.h"
#include "Actors/StickyProjectile.h"
#include "Components/AmmoComp.h"
#include "Helpers/CollisionChannels.h"
#include <Components/SkeletalMeshComponent.h>
#include <Kismet/GameplayStatics.h>
#include <Net/UnrealNetwork.h>
#include <UObject/ConstructorHelpers.h>
#include <Animation/AnimInstance.h>
#include <Sound/SoundBase.h>
```

6.13.1 Detailed Description

Author

Ario Amin

6.14 Source/ario_stickyBomb_UE4/Private/Components/StickyLinetraceComp.cpp File Reference

```
#include "Components/StickyLinetraceComp.h"
#include "Actors/StickyBaseActor.h"
#include "Characters/BaseShooter.h"
#include "Components/AmmoComp.h"
#include "Interfaces/InteractionUOI.h"
#include <Kismet/KismetSystemLibrary.h>
```

6.15 Source/ario_stickyBomb_UE4/Private/Effects/MaterialGenerator.cpp File Reference

```
#include "Effects/MaterialGenerator.h"
#include <AssetRegistry/AssetRegistryModule.h>
#include <Factories/MaterialFactoryNew.h>
#include <Materials/MaterialExpressionAppendVector.h>
#include <MaterialExpressionIO.h>
#include <Materials/MaterialExpressionAdd.h>
#include <Materials/MaterialExpressionCeil.h>
#include <Materials/MaterialExpressionComponentMask.h>
#include <Materials/MaterialExpressionConstant.h>
#include <Materials/MaterialExpressionConstant3Vector.h>
#include <Materials/MaterialExpressionDotProduct.h>
#include <Materials/MaterialExpressionDynamicParameter.h>
#include <Materials/MaterialExpressionLinearInterpolate.h>
#include <Materials/MaterialExpressionMultiply.h>
#include <Materials/MaterialExpressionOneMinus.h>
#include <Materials/MaterialExpressionPanner.h>
#include <Materials/MaterialExpressionSaturate.h>
```

```
#include <Materials/MaterialExpressionScalarParameter.h>
#include <Materials/MaterialExpressionSubtract.h>
#include <Materials/MaterialExpressionTextureCoordinate.h>
#include <Materials/MaterialExpressionTextureSample.h>
#include <Materials/MaterialExpressionVectorParameter.h>
#include <Materials/MaterialExpressionVertexNormalWS.h>
```

6.15.1 Detailed Description

Author

Ario Amin

6.16 Source/ario_stickyBomb_UE4/Private/Effects/StickyFXManager.cpp File Reference

6.16.1 Detailed Description

Author

Ario Amin

6.17 Source/ario_stickyBomb_UE4/Private/Interfaces/InteractionUOI.cpp File Reference

```
#include "Interfaces/InteractionUOI.h"
```

6.17.1 Detailed Description

Author

Ario Amin

6.18 Source/ario_stickyBomb_UE4/Private/StickyGameMode.cpp File Reference

```
#include "StickyGameMode.h"
#include "Characters/Bomberman.h"
#include "StickyGameState.h"
#include "StickyPlayerController.h"
#include "StickyPlayerState.h"
#include "Components/AmmoComp.h"
#include "Components/HealthComp.h"
#include "UI/StickyHUD.h"
#include "Effects/MaterialGenerator.h"
#include <Engine/World.h>
#include <EngineUtils.h>
#include <GameFramework/Actor.h>
#include <TimerManager.h>
#include <UObject/ConstructorHelpers.h>
#include <Widgets/DeclarativeSyntaxSupport.h>
```

6.18.1 Detailed Description

Author

Ario Amin

6.19 Source/ario_stickyBomb_UE4/Private/StickyGameSession.cpp File Reference

```
#include "StickyGameSession.h"
```

6.19.1 Detailed Description

Author

Ario Amin

6.20 Source/ario_stickyBomb_UE4/Private/StickyGameState.cpp File Reference

```
#include "StickyGameState.h"
```

6.20.1 Detailed Description

Author

Ario Amin

6.21 Source/ario_stickyBomb_UE4/Private/StickyPlayerCameraManager.cpp File Reference

```
#include "StickyPlayerCameraManager.h"
```

6.21.1 Detailed Description

Author

Ario Amin

6.22 Source/ario_stickyBomb_UE4/Private/StickyPlayerController.cpp File Reference

```
#include "StickyPlayerController.h"  
#include "StickyPlayerCameraManager.h"
```

6.22.1 Detailed Description

Author

Ario Amin

6.23 Source/ario_stickyBomb_UE4/Private/StickyPlayerState.cpp File Reference

```
#include "StickyPlayerState.h"
#include "StickyGameMode.h"
#include "UI/StickyHUD.h"
#include <Engine/Engine.h>
#include <Kismet/GameplayStatics.h>
#include <Net/UnrealNetwork.h>
```

6.23.1 Detailed Description

Author

Ario Amin

6.24 Source/ario_stickyBomb_UE4/Private/UI/SInGameOverlay.cpp File Reference

```
#include "UI/SInGameOverlay.h"
#include "SlateOptMacros.h"
```

6.24.1 Detailed Description

Author

Ario Amin

6.25 Source/ario_stickyBomb_UE4/Private/UI/StickyHUD.cpp File Reference

```
#include "UI/StickyHUD.h"
#include "StickyGameMode.h"
#include "StickyPlayerState.h"
#include "Helpers/Macros.h"
#include "UI/Widgets/SAmmoWidget.h"
#include "UI/Widgets/SKillContentContainer.h"
#include "UI/Widgets/SKillWidget.h"
#include "UI/Widgets/SSlideInText.h"
#include <Engine/Engine.h>
#include <Widgets/DeclarativeSyntaxSupport.h>
#include <Widgets/SWeakWidget.h>
```

6.25.1 Detailed Description

Author

Ario Amin

6.26 Source/ario_stickyBomb_UE4/Private/UI/Widgets/SAMmoWidget.cpp File Reference

```
#include "UI/Widgets/SAMmoWidget.h"
#include "Helpers/Macros.h"
#include "SlateOptMacros.h"
#include <Internationalization/Internationalization.h>
#include <Widgets/DeclarativeSyntaxSupport.h>
#include <Widgets/SOverlay.h>
#include <Widgets/Text/STextBlock.h>
```

Macros

- #define [LOCTEXT_NAMESPACE](#) "SAMmoWidget"

6.26.1 Macro Definition Documentation

6.26.1.1 LOCTEXT_NAMESPACE #define LOCTEXT_NAMESPACE "SAMmoWidget"

6.27 Source/ario_stickyBomb_UE4/Private/UI/Widgets/SKillContentContainer.cpp File Reference

```
#include "UI/Widgets/SKillContentContainer.h"
#include "SlateOptMacros.h"
#include "UI/Widgets/SslideInText.h"
#include <Engine/World.h>
#include <Containers/UnrealString.h>
#include <Templates/SharedPointer.h>
#include <Widgets/Input/SButton.h>
#include <Widgets/Layout/SWrapBox.h>
#include <Widgets/SCompoundWidget.h>
#include <Widgets/Views/SListView.h>
#include <Widgets/Views/STableRow.h>
```

6.28 Source/ario_stickyBomb_UE4/Private/UI/Widgets/SKillWidget.cpp File Reference

```
#include "UI/Widgets/SKillWidget.h"
#include "SlateOptMacros.h"
#include <Internationalization/Internationalization.h>
#include <Widgets/DeclarativeSyntaxSupport.h>
#include <Widgets/SOverlay.h>
#include <Widgets/Text/STextBlock.h>
```

Macros

- `#define LOCTEXT_NAMESPACE "SScoreWidget"`

6.28.1 Detailed Description

Author

Ario Amin

6.28.2 Macro Definition Documentation

6.28.2.1 LOCTEXT_NAMESPACE `#define LOCTEXT_NAMESPACE "SScoreWidget"`

6.29 Source/ario_stickyBomb_UE4/Private/UI/Widgets/SSlideInText.cpp File Reference

```
#include "UI/Widgets/SSlideInText.h"
#include "SlateOptMacros.h"
#include <Animation/CurveHandle.h>
#include <Animation/CurveSequence.h>
#include <Engine/World.h>
#include <Engine/EngineTypes.h>
#include <Fonts/SlateFontInfo.h>
#include <Misc/Paths.h>
#include <Widgets/DeclarativeSyntaxSupport.h>
#include <Widgets/Layout/SBorder.h>
#include <Widgets/Layout/SConstraintCanvas.h>
#include <Widgets/SCanvas.h>
#include <Widgets/SCompoundWidget.h>
#include <Widgets/SOverlay.h>
```

6.29.1 Detailed Description

Author

Ario Amin

6.30 Source/ario_stickyBomb_UE4/Public/Actors/StickyBaseActor.h File Reference

```
#include "CoreMinimal.h"
#include "Interfaces/InteractionUOI.h"
#include <GameFramework/Actor.h>
#include "StickyBaseActor.generated.h"
```

Classes

- class [AStickyBaseActor](#)

A simple shell of a class to be expanded upon.

6.30.1 Detailed Description

Author

Ario Amin

6.31 Source/ario_stickyBomb_UE4/Public/Actors/StickyPickup.h File Reference

```
#include "Actors/StickyBaseActor.h"
#include "CoreMinimal.h"
#include "Helpers/ForwardDecls.h"
#include "Interfaces/InteractionUOI.h"
#include <Templates/SharedPointer.h>
#include "StickyPickup.generated.h"
```

Classes

- class [AStickyPickup](#)

A simple pickup actor.

6.31.1 Detailed Description

Author

Ario Amin

6.32 Source/ario_stickyBomb_UE4/Public/Actors/StickyPickupContainer.h File Reference

```
#include "Actors/StickyBaseActor.h"
#include "CoreMinimal.h"
#include "Helpers/ForwardDecls.h"
#include "Interfaces/InteractionUOI.h"
#include <Templates/SharedPointer.h>
#include "StickyPickupContainer.generated.h"
```

Classes

- class [AStickyPickupContainer](#)

A simple actor which holds a static mesh container.

6.32.1 Detailed Description

Author

Ario Amin

6.33 Source/ario_stickyBomb_UE4/Public/Actors/StickyProjectile.h File Reference

```
#include "Actors/StickyBaseActor.h"
#include "CoreMinimal.h"
#include "Helpers/ForwardDecls.h"
#include <Components/TimelineComponent.h>
#include "StickyProjectile.generated.h"
```

Classes

- class [AStickyProjectile](#)
A projectile moving actor class.

6.33.1 Detailed Description

Author

Ario Amin

6.34 Source/ario_stickyBomb_UE4/Public/Characters/BaseShooter.h File Reference

```
#include "CoreMinimal.h"
#include "Helpers/ForwardDecls.h"
#include "Interfaces/InteractionUOI.h"
#include <Delegates/Delegate.h>
#include <GameFramework/Character.h>
#include "BaseShooter.generated.h"
```

Classes

- class [ABaseShooter](#)

6.35 Source/ario_stickyBomb_UE4/Public/Characters/Bombberman.h File Reference

```
#include "Characters/BaseShooter.h"
#include "CoreMinimal.h"
#include "Helpers/ForwardDecls.h"
#include "Bombberman.generated.h"
```


Classes

- class [ABomberman](#)

Inherits from ACharacter & [InteractionUOI](#).

6.36 Source/ario_stickyBomb_UE4/Public/Components/AmmoComp.h File Reference

```
#include "Components/ActorComponent.h"
#include "CoreMinimal.h"
#include "Helpers/ForwardDecls.h"
#include "Helpers/Macros.h"
#include <Engine/EngineTypes.h>
#include "AmmoComp.generated.h"
```

Functions

- [DECLARE_DYNAMIC_MULTICAST_DELEGATE_FourParams](#) (FOnAmmoChangedSignature, [UAmmoComp](#) *, OwningAmmoComp, int, Ammo, int, AmmoDelta, AController *, InstigatedBy)

6.36.1 Detailed Description

Author

Ario Amin

6.36.2 Function Documentation

6.36.2.1 DECLARE_DYNAMIC_MULTICAST_DELEGATE_FourParams() `DECLARE_DYNAMIC_MULTICAST_DELEGATE_FourParams (FOnAmmoChangedSignature , UAmmoComp * , OwningAmmoComp , int , Ammo , int , AmmoDelta , AController * , InstigatedBy)`

6.37 Source/ario_stickyBomb_UE4/Public/Components/HealthComp.h File Reference

```
#include "Components/ActorComponent.h"
#include "CoreMinimal.h"
#include "Helpers/ForwardDecls.h"
#include <Engine/EngineTypes.h>
#include "HealthComp.generated.h"
```

Functions

- [DECLARE_DYNAMIC_MULTICAST_DELEGATE_SixParams](#) (FOnHealthChangedSignature, [UHealthComp](#) *, OwningHealthComp, float, Health, float, HealthDelta, const UDamageType *, DamageType, AController *, InstigatedBy, AActor *, DamageCauser)

6.37.1 Detailed Description

Author

Ario Amin

6.37.2 Function Documentation

6.37.2.1 DECLARE_DYNAMIC_MULTICAST_DELEGATE_SixParams()

```
DECLARE_DYNAMIC_MULTICAST_DELEGATE_SixParams (
    FOnHealthChangedSignature ,
    UHealthComp * ,
    OwningHealthComp ,
    float ,
    Health ,
    float ,
    HealthDelta ,
    const UDamageType * ,
    DamageType ,
    AController * ,
    InstigatedBy ,
    AActor * ,
    DamageCauser )
```

6.38 Source/ario_stickyBomb_UE4/Public/Components/StickyGunSkeletalComp.h File Reference

```
#include "Characters/BaseShooter.h"
#include "CoreMinimal.h"
#include "Helpers/ForwardDecls.h"
#include <Components/SkeletalMeshComponent.h>
#include "StickyGunSkeletalComp.generated.h"
```

Classes

- class [UStickyGunSkeletalComp](#)
Networked weapon component.

6.38.1 Detailed Description

Author

Ario Amin

6.39 Source/ario_stickyBomb_UE4/Public/Components/StickyLinetraceComp.h File Reference

```
#include "CoreMinimal.h"
#include "Helpers/ForwardDecls.h"
#include "Helpers/Macros.h"
#include <Components/SceneComponent.h>
#include "StickyLinetraceComp.generated.h"
```

6.40 Source/ario_stickyBomb_UE4/Public/Effects/MaterialGenerator.h File Reference

```
#include "CoreMinimal.h"
```

Classes

- class [FMaterialGenerator](#)
A WIP utility class for Material creation/editing.

6.40.1 Detailed Description

Author

Ario Amin

6.41 Source/ario_stickyBomb_UE4/Public/Effects/StickyFXManager.h File Reference

6.41.1 Detailed Description

Author

Ario Amin

6.42 Source/ario_stickyBomb_UE4/Public/Helpers/CollisionChannels.h File Reference

Collision Channels defintions.

Macros

- #define [ECC_StickyProjectile](#) ECollisionChannel::ECC_GameTraceChannel3
- #define [ECC_StickyGun](#) ECollisionChannel::ECC_GameTraceChannel4
- #define [ECC_CharacterMesh](#) ECollisionChannel::ECC_GameTraceChannel5

6.42.1 Detailed Description

Collision Channels definitions.

Author

Ario Amin

6.42.2 Macro Definition Documentation

6.42.2.1 ECC_CharacterMesh `#define ECC_CharacterMesh ECollisionChannel::ECC_GameTrace↔
Channel5`

6.42.2.2 ECC_StickyGun `#define ECC_StickyGun ECollisionChannel::ECC_GameTraceChannel4`

6.42.2.3 ECC_StickyProjectile `#define ECC_StickyProjectile ECollisionChannel::ECC_GameTrace↔
Channel3`

6.43 Source/ario_stickyBomb_UE4/Public/Helpers/ForwardDecls.h File Reference

Forward Declarations.

6.43.1 Detailed Description

Forward Declarations.

Author

Ario Amin

Not pretty, but makes the actual headers look a bit cleaner

6.44 Source/ario_stickyBomb_UE4/Public/Helpers/Macros.h File Reference

Various macros.

Macros

- `#define STICKY_DEBUG`
- `#define LL_IF(A, B, CondA) (A * (CondA)) + (B * !(CondA))`
Branchless Numeric If.
- `#define LL_IFELSE(A, B, CondA, CondB) (A * (CondA)) + (B * (CondB))`
Branchless Numeric 'If-Else'.
- `#define LL_CLAMP(Value, Min, Max) (0 * (Value < Min)) + (Max * (Value > Max)) + (Value * (Value >= Min && Value <= Max))`
Branchless Arithmetic Clamp.
- `#define DEBUG_PRINT_LOC(Position) UE_LOG(LogTemp, Warning, TEXT("git commit -S -m \"LOCATION: {%f,%f,%f}!\", Position.X, Position.Y, Position.Z);`
Print Location.
- `#define DEFAULT_STICKY_GUN_MAX 3`
- `#define MAKETEXT(InString) Text(FText::FromString(InString))`
Regarding Slate SWidget based classes prefix with . when using these during create using SNew()
- `#define MAKETEXTBOUND(Function) Text(this, &Function)`
- `#define MAKEROBOTO(FontSize) Font(FSlateFontInfo(FPaths::EngineContentDir() / TEXT("Slate/Fonts/Roboto-Bold.ttf"), FontSize))`
- `#define MAKECOLOR(FLinearColorA, FLinearColorB) ShadowColorAndOpacity(FLinearColorA).ColorAndOpacity(FLinearColorB)`
- `#define MAKESHADOW_OFFSET(OffsetMin, OffsetMax) ShadowOffset(FIntPoint(OffsetMin, OffsetMax))`

6.44.1 Detailed Description

Various macros.

Author

Ario Amin

Some arithmetic if statements for efficiency and some shorthands for nasty Slate function calls

6.44.2 Macro Definition Documentation

6.44.2.1 DEBUG_PRINT_LOC `#define DEBUG_PRINT_LOC (`
 Position `) UE_LOG(LogTemp, Warning, TEXT("git commit -S -m \"LOCATION: {%f,%f,%f}!\",`
 Position.X, Position.Y, Position.Z `);`

Print Location.

6.44.2.2 DEFAULT_STICKY_GUN_MAX `#define DEFAULT_STICKY_GUN_MAX 3`

6.44.2.3 LL_CLAMP `#define LL_CLAMP(
 Value,
 Min,
 Max) (0 * (Value < Min)) + (Max * (Value > Max)) + (Value * (Value >= Min &&
Value <= Max))`

Branchless Arithmetic Clamp.

6.44.2.4 LL_IF `#define LL_IF(
 A,
 B,
 CondA) (A * (CondA)) + (B * !(CondA))`

Branchless Numeric If.

6.44.2.5 LL_IFELSE `#define LL_IFELSE(
 A,
 B,
 CondA,
 CondB) (A * (CondA)) + (B * (CondB))`

Branchless Numeric 'If-Else'.

6.44.2.6 MAKECOLOR `#define MAKECOLOR(
 FLinearColorA,
 FLinearColorB) ShadowColorAndOpacity(FLinearColorA).ColorAndOpacity(FLinear↵
ColorB)`

6.44.2.7 MAKEROBOTO `#define MAKEROBOTO(
 FontSize) Font(FSlateFontInfo(FPaths::EngineContentDir() / TEXT("Slate/Fonts/Roboto-Bold.↵
ttf"), FontSize))`

6.44.2.8 MAKESHADOW_OFFSET `#define MAKESHADOW_OFFSET(
 OffsetMin,
 OffsetMax) ShadowOffset(FIntPoint(OffsetMin, OffsetMax))`

6.44.2.9 MAKETEXT `#define MAKETEXT(
 InString) Text(FText::FromString(InString))`

Regarding Slate SWidget based classes prefix with . when using these during create using SNew()

```
6.44.2.10 MAKETEXTBOUND #define MAKETEXTBOUND(  
    Function ) Text(this, &Function)
```

```
6.44.2.11 STICKY_DEBUG #define STICKY_DEBUG
```

6.45 Source/ario_stickyBomb_UE4/Public/Interfaces/InteractionUOI.h File Reference

```
#include "CoreMinimal.h"  
#include <UObject/Interface.h>  
#include "InteractionUOI.generated.h"
```

Classes

- class [UInteractionUOI](#)
- class [IInteractionUOI](#)

A simple shell of a class to be expanded upon.

6.45.1 Detailed Description

Author

Ario Amin

6.46 Source/ario_stickyBomb_UE4/Public/StickyGameMode.h File Reference

```
#include "CoreMinimal.h"  
#include "Helpers/ForwardDecls.h"  
#include <Delegates/Delegate.h>  
#include <GameFramework/GameModeBase.h>  
#include "StickyGameMode.generated.h"
```

Classes

- class [ASlickyGameMode](#)

Naive implementation of Gamemode for networked play.

Functions

- [DECLARE_DYNAMIC_MULTICAST_DELEGATE_ThreeParams](#) (FOnActorKilled, AActor *, VictimActor, AActor *, KillerActor, AController *, KillerController)
Declare a new dynamic multicast delegate with three parameters.
- [DECLARE_DYNAMIC_MULTICAST_DELEGATE_FourParams](#) (FOnTargetHitEvent, FVector, HitLocation, FVector, ShotDirection, float, HitValue, AActor *, HitOwner)
Declare a new dynamic multicast delegate with four parameters.

6.46.1 Detailed Description

Author

Ario Amin

6.46.2 Function Documentation

6.46.2.1 DECLARE_DYNAMIC_MULTICAST_DELEGATE_FourParams() DECLARE_DYNAMIC_MULTICAST_↔
`DECLARE_DYNAMIC_MULTICAST_DELEGATE_FourParams (`
 `FOnTargetHitEvent ,`
 `FVector ,`
 `HitLocation ,`
 `FVector ,`
 `ShotDirection ,`
 `float ,`
 `HitValue ,`
 `AActor * ,`
 `HitOwner)`

Declare a new dynamic multicast delegate with four parameters.

6.46.2.2 DECLARE_DYNAMIC_MULTICAST_DELEGATE_ThreeParams() DECLARE_DYNAMIC_MULTICAST_↔
`DECLARE_DYNAMIC_MULTICAST_DELEGATE_ThreeParams (`
 `FOnActorKilled ,`
 `AActor * ,`
 `VictimActor ,`
 `AActor * ,`
 `KillerActor ,`
 `AController * ,`
 `KillerController)`

Declare a new dynamic multicast delegate with three parameters.

6.47 Source/ario_stickyBomb_UE4/Public/StickyGameSession.h File Reference

```
#include "CoreMinimal.h"
#include "GameFramework/GameSession.h"
#include "StickyGameSession.generated.h"
```

Classes

- class [AStickyGameSession](#)
Dummy gamesession class.

6.47.1 Detailed Description

Author

Ario Amin

6.48 Source/ario_stickyBomb_UE4/Public/StickyGameState.h File Reference

```
#include "CoreMinimal.h"
#include "GameFramework/GameStateBase.h"
#include "StickyGameState.generated.h"
```

Classes

- class [AStickyGameState](#)
A simple shell of a class implementation to be expanded upon.

6.48.1 Detailed Description

Author

Ario Amin

6.49 Source/ario_stickyBomb_UE4/Public/StickyPlayerCameraManager.h File Reference

```
#include "Camera/PlayerCameraManager.h"
#include "CoreMinimal.h"
#include "StickyPlayerCameraManager.generated.h"
```

Classes

- class [AStickyPlayerCameraManager](#)
A simple shell of a class implementation to be expanded upon.

6.49.1 Detailed Description

Author

Ario Amin

6.50 Source/ario_stickyBomb_UE4/Public/StickyPlayerController.h File Reference

```
#include "CoreMinimal.h"
#include "GameFramework/PlayerController.h"
#include "StickyPlayerController.generated.h"
```

Classes

- class [AStickyPlayerController](#)

A simple shell of a class implementation to be expanded upon.

6.50.1 Detailed Description

Author

Ario Amin

6.51 Source/ario_stickyBomb_UE4/Public/StickyPlayerState.h File Reference

```
#include "CoreMinimal.h"
#include "StickyGameMode.h"
#include <GameFramework/PlayerState.h>
#include "StickyPlayerState.generated.h"
```

Classes

- class [AStickyPlayerState](#)

Networked Player-state implementation.

6.51.1 Detailed Description

Author

Ario Amin

6.52 Source/ario_stickyBomb_UE4/Public/UI/FPlayerData.h File Reference

```
#include "CoreMinimal.h"
#include "FPlayerData.generated.h"
```

Classes

- struct [FPlayerData](#)

Simple utility struct to pass data into widgets.

6.52.1 Detailed Description

Author

Ario Amin

6.53 Source/ario_stickyBomb_UE4/Public/UI/SInGameOverlay.h File Reference

```
#include "CoreMinimal.h"
#include <Widgets/SCompoundWidget.h>
```

Classes

- class [SInGameOverlay](#)

A simple shell of a class to be expanded upon. Right now it only functions as a blank overlay.

6.53.1 Detailed Description

Author

Ario Amin

6.54 Source/ario_stickyBomb_UE4/Public/UI/StickyHUD.h File Reference

```
#include "CoreMinimal.h"
#include "Helpers/ForwardDecls.h"
#include "Helpers/Macros.h"
#include <Components/WidgetComponent.h>
#include <GameFramework/HUD.h>
#include "StickyHUD.generated.h"
```

Classes

- class [AStickyHUD](#)

A simple HUD class to handle widgets.

6.54.1 Detailed Description

Author

Ario Amin

6.55 Source/ario_stickyBomb_UE4/Public/UI/Widgets/SAmmoWidget.h File Reference

```
#include "CoreMinimal.h"
#include "Helpers/ForwardDecls.h"
#include <Widgets/DeclarativeSyntaxSupport.h>
#include <Widgets/SCompoundWidget.h>
```

Classes

- class [SAmmoWidget](#)

Ammo Widget which derives from SCompoundWidget.

6.55.1 Detailed Description

Author

Ario Amin

6.56 Source/ario_stickyBomb_UE4/Public/UI/Widgets/SKillContentContainer.h File Reference

```
#include "CoreMinimal.h"
#include "Helpers/ForwardDecls.h"
```

Classes

- class [SKillContentContainer](#)

A simple shell of a class to be expanded upon.

6.56.1 Detailed Description

Author

Ario Amin

6.57 Source/ario_stickyBomb_UE4/Public/UI/Widgets/SKillWidget.h File Reference

```
#include "CoreMinimal.h"
#include "Helpers/ForwardDecls.h"
#include <Widgets/DeclarativeSyntaxSupport.h>
#include <Widgets/SCompoundWidget.h>
```

Classes

- class [SKillWidget](#)

A simple shell of a class to be expanded upon to display current kills.

6.57.1 Detailed Description

Author

Ario Amin

6.58 Source/ario_stickyBomb_UE4/Public/UI/Widgets/SSlideInText.h File Reference

```
#include "CoreMinimal.h"
#include "Helpers/ForwardDecls.h"
```

Classes

- class [SSlideInText](#)
A simple widget that kan be used to display a recent player kill.

Enumerations

- enum class [EVisibleState](#) : uint8 { [VS_Animating_To_Show](#) , [VS_Animating_To_Hide](#) , [VS_Visible](#) , [VS_Hidden](#) }

6.58.1 Detailed Description

Author

Ario Amin

6.58.2 Enumeration Type Documentation

6.58.2.1 EVisibleState enum [EVisibleState](#) : uint8 [strong]

Enumerator

VS_Animating_To_Show	
VS_Animating_To_Hide	
VS_Visible	
VS_Hidden	

6.59 Source/ario_stickyBomb_UE4Editor.Target.cs File Reference

Classes

- class [ario_stickyBomb_UE4EditorTarget](#)

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