



```
#pragma once
#include "GameFramework/Actor.h"
#include "VJTimeline.generated.h"
UENUM(BlueprintType)
enum ETimeline_Beats
{
    Timeline_Beats_01 = 1, Timeline_Beats_04 = 4, Timeline_Beats_08 = 8, Timeline_Beats_16 =
    16,
    Timeline_Beats_24 = 24, Timeline_Beats_32 = 32, Timeline_Beats_64 = 64,
    Timeline_Beats_128 = 128
};
UENUM(BlueprintType)
enum ETimeline_Degree
{
    Timeline_Degree_025, Timeline_Degree_045, Timeline_Degree_075, Timeline_Degree_090,
    Timeline_Degree_115, Timeline_Degree_135, Timeline_Degree_155,
    Timeline_Degree_180, Timeline_Degree_205, Timeline_Degree_225, Timeline_Degree_245,
    Timeline_Degree_270, Timeline_Degree_295, Timeline_Degree_315,
    Timeline_Degree_335, Timeline_Degree_360, Timeline_Degree_720, Timeline_Degree_1080
};
UCLASS()
class CRASHANGELARTS_API AVJTimeline : public AActor
{
    GENERATED_BODY()
    FTimeline TimeLine;
    FTimerHandle TimerHandle;
    FRichCurve xEditCurve;
    FKeyHandle KeyHandle;
    UCurveFloat* xCurveFloat;

    bool StartConfig;
    bool xTimeLineUpdate;
    bool xTimeLineChange;
    UFUNCTION()
    float CalculateBPMSecondsToBeats(float xBPM, ETimeline_Beats xBeats);
```

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UFUNCTION()
float CalculateDegree(ETimeline_Degree xDegree);
UFUNCTION()
void TickTimeline();
UFUNCTION()
void Timeline_Execute_Change();
UFUNCTION()
void TimeLine_Update(float xValue);
public:
AVJTimeline();
virtual void BeginPlay() override;
virtual void Tick(float DeltaSeconds) override;
UPROPERTY(BlueprintReadWrite, Category = "CrashAngelArts|VJTimeline")
TEnumAsByte<ETimeline_Beats> Beats;
UPROPERTY(BlueprintReadWrite, Category = "CrashAngelArts|VJTimeline")
TEnumAsByte<ETimeline_Degree> Degree;
UPROPERTY(BlueprintReadWrite, Category = "CrashAngelArts|VJTimeline")
TEnumAsByte<ERichCurveInterpMode> Curve;
UPROPERTY(BlueprintReadWrite, Category = "CrashAngelArts|VJTimeline")
float BPM;
UPROPERTY(BlueprintReadWrite, Category = "CrashAngelArts|VJTimeline")
float DeltaTime;
UPROPERTY(BlueprintReadWrite, Category = "CrashAngelArts|VJTimeline")
bool IsLoop;
UPROPERTY(BlueprintReadWrite, Category = "CrashAngelArts|VJTimeline")
float ReturnFloat;
UFUNCTION(BlueprintCallable, Category = "CrashAngelArts|VJTimeline")
void VJTimeLine_Execute();
UFUNCTION(BlueprintCallable, Category = "CrashAngelArts|VJTimeline")
void VJTimeLine_Update(float xValue);
};
```