

# UECasts.com - UE4 C++ Cheat Sheet

UPROPERTY	UPROPERTY(VisibleAnywhere, Category='Player')	TypeName	Prefix	Example
<b>BlueprintAssignable</b>	Multicast Delegates only. Exposes property for assigning in Blueprints	<b>AActor</b>	A	ACharacter
<b>BlueprintCallable</b>	Multicast Delegates only. Property property for calling in Blueprints	<b>Boolean</b>	b	bool blsTeaDelicious;
<b>BlueprintReadOnly</b>	Readable from blueprints, but not writeable	<b>Enums</b>	E	enum EPlayerType;
<b>BlueprintReadWrite</b>	Read or writeable from blueprints	<b>Interfaces</b>	I	INetworkConnection
<b>Category</b>	Category of the property. Nested categories with   operator	<b>Struct</b>	F	FMyStruct;
<b>EditAnywhere</b>	Can be edited by property windows, on archetypes & instances	<b>SWidget</b>	S	SMyWidget;
<b>EditDefaultsOnly</b>	Edited by property windows, but only on archetypes	<b>Template</b>	T	TArray<int> MyIntArray;
<b>EditFixedSize</b>	Prevent changing the length of an array (useful for dynamic arrays)	<b>UObject</b>	U	UCameraComponent * ThirdPersonCamera;
<b>EditInstanceOnly</b>	Edited by property windows, but only on instances, not on archetypes			
<b>Transient</b>	Should not be saved, zero-filled at load time			
<b>VisibleAnywhere</b>	Visible in property windows, but can't be edited at all	<b>Naming &amp; Coding Standards (PascalCase or UpperCamelCase)</b>		
<b>VisibleDefaultsOnly</b>	Visible in property windows for archetypes, & can't be edited	<b>bool</b>		bool blsTeaDelicious;
<b>VisibleInstanceOnly</b>	Visible in property windows for instances, not archetypes, & can't be edited	<b>float</b>		float TeaWeight;
		<b>int32</b>		int32 TeaCount;
		<b>FName</b>		FName TeaName;
<b>UFUNCTION</b>	<b>UFUNCTION(BlueprintCallable, Category = Power)</b>	<b>FString</b>		FString TeaFriendlyName;
<b>BlueprintAuthorityOnly</b>	Will not execute from Blueprint code if running on something without network authority	<b>UClass</b>		UClass* TeaClass;
<b>BlueprintCallable</b>	Can be executed in a Blueprint or Level Blueprint graph	<b>USoundCue</b>		USoundCue* TeaSound;
<b>BlueprintCosmetic</b>	Is cosmetic and will not run on dedicated servers	<b>UTexture</b>		UTexture* TeaTexture;
<b>BlueprintImplementableEvent</b>	Can be overridden in a Blueprint or Level Blueprint graph			
<b>BlueprintNativeEvent</b>	Designed to be overridden by a Blueprint, but also has a native implementation			
<b>BlueprintPure</b>	Does not affect the owning object in any way and can be executed in a Blueprint or Level Blueprint graph			
<b>Category</b>	Category of the function. Nested categories with   operator			
<b>Client</b>	Only executed on the client that owns the Object the function belongs to			
<b>Exec</b>	Can be executed from the in-game console			
<b>NetMulticast</b>	Executed locally on the server and replicated to all clients, regardless of the Actor's NetOwner			
<b>Reliable</b>	Replicated over the network, and is guaranteed to arrive regardless of bandwidth or network errors			
<b>Server</b>	Only executed on the server			
<b>Unreliable</b>	Replicated over the network but can fail due to bandwidth limitations or network errors			

