

# UECasts.com - UE4 C++ Cheat Sheet

UPROPERTY	UPROPERTY(VisibleAnywhere, Category='Player')
BlueprintAssignable	Multicast Delegates only. Exposes property for assigning in Blueprints
BlueprintCallable	Multicast Delegates only. Property exposed for calling in Blueprints
BlueprintReadOnly	Readable from blueprints, but not writeable
BlueprintReadWrite	Read or writeable from blueprints
Category	Category of the property. Nested categories with   operator
EditAnywhere	Can be edited by property windows, on archetypes & instances
EditDefaultsOnly	Edited by property windows, but only on archetypes
EditFixedSize	Prevent changing the length of an array (useful for dynamic arrays)
EditInstanceOnly	Edited by property windows, but only on instances, not on archetypes
Transient	Should not be saved, zero-filled at load time
VisibleAnywhere	Visible in property windows, but can't be edited at all
VisibleDefaultsOnly	Visible in property windows for archetypes, & can't be edited
VisibleInstanceOnly	Visible in property windows for instances, not archetypes, & can't be edited

UFUNCTION	UFUNCTION(BlueprintCallable, Category = Power)
BlueprintAuthorityOnly	Will not execute from Blueprint code if running on something without network authority
BlueprintCallable	Can be executed in a Blueprint or Level Blueprint graph
BlueprintCosmetic	Is cosmetic and will not run on dedicated servers
BlueprintImplementableEvent	Can be overridden in a Blueprint or Level Blueprint graph
BlueprintNativeEvent	Designed to be overridden by a Blueprint, but also has a native implementation
BlueprintPure	Does not affect the owning object in any way and can be executed in a Blueprint or Level Blueprint graph
Category	Category of the function. Nested categories with   operator
Client	Only executed on the client that owns the Object the function belongs to
Exec	Can be executed from the in-game console
NetMulticast	Executed locally on the server and replicated to all clients, regardless of the Actor's NetOwner
Reliable	Replicated over the network, and is guaranteed to arrive regardless of bandwidth or network errors
Server	Only executed on the server
Unreliable	Replicated over the network but can fail due to bandwidth limitations or network errors

TypeName	Prefix	Example
AActor	A	ACharacter
Boolean	b	bool bIsTeaDelicious;
Enums	E	enum EPlayerType;
Interfaces	I	INetworkConnection
Struct	F	FMyStruct;
SWidget	S	SMyWidget;
Template	T	TArray<int> MyIntArray;
UObject	U	UCameraComponent * ThirdPersonCamera;

## Naming & Coding Standards (PascalCase or UpperCamelCase)

bool	bool bIsTeaDelicious;
float	float TeaWeight;
int32	int32 TeaCount;
FName	FName TeaName;
FString	FString TeaFriendlyName;
UClass	UClass* TeaClass;
USoundCue	USoundCue* TeaSound;
UTexture	UTexture* TeaTexture;

