Blueprint Interface Documentation

ABookMenuActor

Properties

Property Name	Type	Access	Description
BookMenuData	UBookMenuData	EditAnywhere	Default Configuration Data for the Book, containing information such as the the widgets to be displayed as book pages
SkeletalMeshComponent	USkeletalMeshComponent	VisibleAnywhere, BlueprintReadOnly	The animated book mesh
StaticMeshComponent	UStaticMeshComponent	VisibleAnywhere, BlueprintReadOnly	A dummy static mesh component for doing traces. Needed to determine the UV coordinates based on trace hit results. The static mesh will be hidden in game. Must represent the book in a open state.
LeftPageCollision	UBoxComponent	VisibleAnywhere, BlueprintReadOnly	Collision box used to determine which page of the book was traced
RightPageCollision	UBoxComponent	VisibleAnywhere, BlueprintReadOnly	Collision box used to determine which page of the book was traced
InteractionActor	ABookMenuInteractionActor	EditAnywhere, BlueprintReadOnly	Reference to the actor that redirects the interaction to a widget interaction component

Functions

Set Book Menu Data

Can be used to set the book menu data after begin play, during the game

Pin	Direction	Type	Description
In Book Menu Data	Input	UBookMenuData	The new Book Menu Data. Will be cloned internally.

Get Book Menu Data

Can be used to set the book menu data after begin play, during the game

Pin	Direction	Type	Description
Return Value	Output	UBookMenuData	A clone of the current Book Menu Data

Get Current Page Section Index

Can be used to get the current page section index. The page section index indicates the currently shown pair of pages. (Index of the PageSection Array inside the BookMenuData)

Pin	Direction	Type	Description
Return Value	Output	Integer	the current page section index; -1 in case Anim Instance is not defined

Get Pending Page Section Index

https://blueprintue.com/render/vbr9u9x_/

Can be used to get the pending page section index. The pending page section index indicates the currently pending pair of pages while switching pages is in progress.

Pin	Direction	Type	Description
Return Value	Output	Integer	the pending page section index; -1 in case Anim Instance is not defined

Get Current Page Index

https://blueprintue.com/render/mrdwrfyw/

Can be used to get the index of the current page, where the interaction pointer points on.

Pin	Direction	Type	Description
Return Value	Output	Integer	the current page index 0 = Left ; 1 = Right returns -1 in case Anim Instance is not defined

Get Book Is Open

https://blueprintue.com/render/wf9zi83p/

Can be used to check if the book is in an opened state

Pin	Direction	Type	Description

			true if the book is in open
Return Value	Output	Boolean	state; false if the book is in closed state

Get Book Should Open

https://blueprintue.com/render/e9vaxouo/

Can be used to check if the book should be in an opened state but opening is still in progress.

Pin	Direction	Type	Description
Return Value	Output	Boolean	true if the book should be in open state

Get Book Should Close

https://blueprintue.com/render/ho7vx26t/

Can be used to check of the book should be in a closed state but closing is still in progress.

Pin	Direction	Type	Description
Return Value	Output	Boolean	true if the book should be in closed state

Get Page Sections

https://blueprintue.com/render/r_hcbm7k/

Can be used to get the Page Sections.

Pin	Direction	Type	Description
Return Value	Output	TMap<int32,FPageSectionDataStruct>	an Map of the page sections of the book

Get Interaction Actor

https://blueprintue.com/render/j_bb60lt/

Returns the reference to the Book Menu Interaction Actor

Pin	Direction	Type	Description
Return Value	Output	ABookMenuInteractionActor	Returns the reference to the Book Menu Interaction Actor

Set Interaction Actor

https://blueprintue.com/render/2_zevcpm/

Registers the Book Menu Interaction Actor to be used for Interaction with the Book

Pin	Direction	Type	Description
In Interaction Actor	Input	ABookMenuInteractionActor	The Book Menu Interaction Actor to be set

Register Interaction Component

Method to register a Book Menu Interaction Component

Pin	Direction	Type	Description
In Interaction Component	Input	UBookMenuInteractionComponent	The Book Menu Interaction Component to be registered.

Register Interaction Actor

Method to register a Book Menu Interaction Component

Pin	Direction	Type	Description
In Interaction Actor	Input	UBookMenuInteractionActor	The Book Menu Interaction Actor to be registered.

Jump to Page Section

Determines if a forward or backward page turn need to be performed based on the current page section index.

Pin	Direction	Type	Description
Section Index	Input	int32	The index of the Page Section to be displayed

Open Book At

https://blueprintue.com/render/qwkfuf2-/

If the book is closed, this triggers the open book animation and upfront sets the correct section to display.

Pin	Direction	Type	Description
Section Index	Input	int32	The Page Section Index to be displayed while opening the book

Close Book

https://blueprintue.com/render/sz8-0co0/

Triggers the Close Book animation

Pause Book Update

https://blueprintue.com/render/cud5z237/

Pauses the animation update of the anim instance without closing the book first.

Resume Book Update

https://blueprintue.com/render/umzavnsl/

Resume the animation update of the anim instance. Will only resume if the book is already open. Closed books don't need to consume render time

Interact

Performs a Line Trace based on the Start and End Parameters and moves the Widget Interaction pointer of the Book Menu Interaction Actor if it is set. Also tells the Animation Blueprint which page was traced to.

Pin	Direction	Type	Description
Start	Input	FVector	Start of the Line Trace
End	Input	FVector	End of the Line Trace
Debug Trace	Input	bool	Shows a debug trace if true.
Trace Channel	Input	ECollisionChannel	The Collision Channel to be used for the line trace.
Success	Output	EXEC	Indicates if the Interaction was executed successfully
Failed	Output	EXEC	Indicates if the Interaction was not executed successfully
Return Value	Output	bool	returns tru if the operation was successful. Otherwise false

InteractExt (Release 1.4+)

Performs a Line Trace based on the Start and End Parameters and moves the Widget Interaction pointer of the Book Menu Interaction Actor if it is set. Also tells the Animation Blueprint which page was traced to.

Pin	Direction	Type	Description
Start	Input	FVector	Start of the Line Trace

End	Input	FVector	End of the Line Trace
OutUVCoordinates	Output	FVectro2d	The UV coordinates of the traced page
Debug Trace	Input	bool	Shows a debug trace if true.
Trace Channel	Input	ECollisionChannel	The Collision Channel to be used for the line trace.
Success	Output	EXEC	Indicates if the Interaction was executed successfully
Failed	Output	EXEC	Indicates if the Interaction was not executed successfully
Return Value	Output	bool	returns tru if the operation was successful. Otherwise false

Set Keyboard Focus

https://blueprintue.com/render/eq18x_-s/

Pin	Direction	Type	Description
In Page Index	Input	Integer	The page index to set the focus to
Debug Trace	Input	bool	Shows a debug trace if true.
Success	Output	EXEC	Indicates if the Interaction was executed successfully
Failed	Output	EXEC	Indicates if the Interaction was not executed successfully
Return Value	Output	bool	returns tru if the operation was successful. Otherwise false

Get Anim Instance

Returns the Animation Instance of the Animation Blueprint

Pin	Direction	Type	Description
Return Value	Output	UBookMenuAnimInstance	

Get Left Page Collision Box

Returns the Collision Box of the left page

Pin	Direction	Type	Description
Return Value	Output	UBoxComponent	

Get Right Page Collision Box

Returns the Collision Box of the right page

Pin	Direction	Type	Description
Return Value	Output	UBoxComponent	

Get Static Mesh Component

Returns the Static Mesh Component

Pin	Direction	Type	Description
Return Value	Output	UStaticMeshComponent	

ABookMenuInteractionActor

Properties

Property Name	Type	Access	Description
WidgetInteractionComponent	UWidgetInteractionComponent	VisibleAnywhere, BlueprintReadOnly	The widget interaction component used to redirect the book interaction onto a Widget Component
PageWidgetComponentA	UWidgetComponent	VisibleAnywhere, BlueprintReadOnly	The widget component used to display the first page
PageWidgetComponentB	UWidgetComponent	VisibleAnywhere, BlueprintReadOnly	The widget component used to display the second page
PageWidgetComponentC	UWidgetComponent	VisibleAnywhere, BlueprintReadOnly	The widget component used to display the third page
PageWidgetComponentD	UWidgetComponent	VisibleAnywhere, BlueprintReadOnly	The widget component used to display the fourth page
ActiveWidgetComponent	UWidgetComponent	VisibleAnywhere, BlueprintReadOnly	The widget component which is currently under interaction
DrawSize	UStaticMeshComponent	VisibleAnywhere, BlueprintReadOnly	The Draw Size of the Widget. User Widgets and Render Targets must have the same resolution. Will be set via the Book Menu Data of the Book Menu Actor

Functions

Move Pointer

Calculates the world location on the Page Widget based on the UV Coordinates of the Book Actors
Book Mesh

Pin	Direction	Type	Description
UV Coordinates	Input	FVector2D	UV Coordinates of the Book Page
Debug Trace	Input	bool	Shows a debug trace if true
Return Value	Output	bool	returns true if the operation was successful. Otherwise false.

Reset Pointer

Sets the Interaction Pointer to a safe spot which triggers no interaction

Pin	Direction	Type	Description
Debug Trace	Input	bool	Shows a debug trace if true
Return Value	Output	bool	returns true if the operation was successful. Otherwise false.

Get Interaction Component

returns the Widget Interaction Component. Can be used to do further interaction with the widget
such as send keys etc.

Pin	Direction	Type	Description
Return Value	Output	UWidgetInteractionComponent	

UBookMenuData

Properties

Property Name	Type	Access	Description
SkeletalMesh	USkeletalMesh	EditAnywhere	The Skeletal Mesh to be set after Begin Play
AnimInstanceClass	TSubclassOf<UBookMenuAnimInstance>	EditAnywhere	The Animation Blueprint class to be set after Begin Play
PageMaterialIndexMapping	FPageMaterialIndexMapping	EditAnywhere	Mapping that tells us which Material Index of the Skeletal Mesh shall be used for which Page
DefaultPageSection	FPageSectionDataStruct	EditAnywhere, BlueprintReadWrite	The Default Page Section to be used if no concrete Page Section is defined
PageSections	TArray<FPageSectionDataStruct>	EditAnywhere, BlueprintReadWrite	List of Page Sections to be used inside the Book Menu Actor
CoverMaterial	UMaterialInterface	EditAnywhere, BlueprintReadWrite	Material for the Cover
bBookBeginsPlayOpen	bool	EditAnywhere, BlueprintReadWrite	If the book shall begin play in an open state or closed state
StartPageSection	int32	EditAnywhere, BlueprintReadWrite	If the book shall begin play in an open state, this is the page section to open the book at. Can also be accessed by the Book Menu Actor to handle respective behavior.
DrawSize	FVector2D	EditDefaultsOnly	Draw Size of the Render Targets and the Widgets. Used to set the Draw Size on all involved Actors and components
RedrawTime (Release 1.4+)	float	EditDefaultsOnly	Time between redraws. if 0 we would redraw every frame

Functions

No functions

UBookMenuAnimInstance

Properties

Property Name	Type	Access	Description
BookMenuActor	ABookMenuActor	BlueprintReadOnly	The Owning Book Menu Actor
PageSections	TMap<int32,FPageSectionDataStruct>	BlueprintReadOnly	List of all available Page Sections of the current book
PageTextureA	UTextureRenderTarget2D	BlueprintReadWrite	Texture Render Target of the page one. Left side.
PageTextureB	UTextureRenderTarget2D	BlueprintReadWrite	Texture Render Target of the page two. Right side.
PageTextureC	UTextureRenderTarget2D	BlueprintReadWrite	Texture Render Target of the page three. Backside of page two.
PageTextureD	UTextureRenderTarget2D	BlueprintReadWrite	Texture Render Target of the page four. Backside of page one.
MaterialPageA	UMaterialInstanceDynamic	BlueprintReadWrite	Dynamic Material Instance of page one. Must have a Texture Parameter called BC
MaterialPageB	UMaterialInstanceDynamic	BlueprintReadWrite	Dynamic Material Instance of page two. Must have a Texture Parameter called BC
MaterialPageC	UMaterialInstanceDynamic	BlueprintReadWrite	Dynamic Material Instance of page three. Must have a Texture Parameter called BC
MaterialPageD	UMaterialInstanceDynamic	BlueprintReadWrite	Dynamic Material Instance of page four. Must have a Texture Parameter called BC
MaterialCover	UMaterialInstanceDynamic	BlueprintReadWrite	Dynamic Material Instance of The Cover.

PageSectionAIndex	int32	BlueprintReadOnly	Page Section Index for Pages one and two
PageSectionBIndex	int32	BlueprintReadOnly	Page Section Index for Pages three and four
DefaultPageSection	FPageSectionDataStruct	BlueprintReadOnly	The Default Page Section in case there is no defined page section.
CurrentPageSectionIndex	int32	BlueprintReadOnly	The Current Page Section Index to be displayed on page one and two
CurrentPageIndex	int32	BlueprintReadOnly	The current Page the Interaction point on. Can be either the Left or the Right Page.
PendingPageSectionIndex	int32	BlueprintReadOnly	The Page Section Index that is pending while switching pages.
DrawSize	FVector2D	BlueprintReadOnly	The Draw Size of the render targets. Must match the Widget Component Draw Size of the Book Interaction Actor.
bBookIsOpen	bool	EditAnywhere, BlueprintReadOnly	Indicates if the book is or shall be in an opened state
bBookShouldOpen	bool	BlueprintReadWrite	Indicates if the book should open
bBookShouldClose	bool	BlueprintReadWrite	Indicates if the book should close
bBookShouldSetKeyboardFocus	bool	BlueprintReadOnly	Indicates if KeyboardFocus is pending

Functions

Set Page Sections

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https://blueprintue.com/render/9whgh-r_/

Sets or replaces the current list of Page sections

Pin	Direction	Type	Description
InPageSections	Input	TArray<FPageSectionDataStruct>	List of Page Sections to be set.

Init

https://blueprintue.com/render/iebqavm6/

Method to Initialize the Animation Instance and set configurations such as Book Data.

Pin	Direction	Type	Description
InData	Input	UBookMenuData	The Book Menu Data
InBookMenuActor	Inout	ABookMenuActor	The Book Menu Actor

Jump to Page Section

https://blueprintue.com/render/-_r2dvnr/

Determines if a forward or backward page turn need to be performed based on the current page section index.

Pin	Direction	Type	Description
SectionIndex	Input	int32	the index of the Page Section to be displayed

Open Book At

If the book is closed, this triggers the open book animation and upfront sets the correct section to display.

Pin	Direction	Type	Description
SectionIndex	Input	int32	The Page Section Index to be displayed while opening the book

Close Book

Triggers the Close Book animation

Play Page Turn Forward Anim

34yv0-ma Method to be overwritten in the Anim Blueprint. Shall start the Page Turn forward animation.

Play Page Turn Reverse Anim

Method to be overwritten in the Anim Blueprint. Shall start the Page Turn backward animation.

Play Open Book Anim

https://blueprintue.com/render/5kdaq6c5/

5kdaq6c5 Method to be overwritten in the Anim Blueprint. Shall start the Open Book animation.

Play Close Book Anim

https://blueprintue.com/render/ri698gd6/

Method to be overwritten in the Anim Blueprint. Shall start the Close Book animation.

Play Idle Book Anim

https://blueprintue.com/render/ijmqh64o/

Method to be overwritten in the Anim Blueprint. Shall start the Idle animation.

On Page Turn Anim End

https://blueprintue.com/render/ragbcbzd/

If the book is closed, this triggers the open book animation and upfront sets the correct section to display.

Pin	Direction	Type	Description
IsTurnForward	Input	bool	Indicates if a page forward (true) or a page backward (false) animation was executed.

On Book Open Anim End

https://blueprintue.com/render/d2bmd8sz/

Method to be called at the end of the Open Book Animation. You want to use Anim Notifies to find out when to call this Method.

On Book Close Anim End

https://blueprintue.com/render/4v3mln33/

Method to be called at the end of the Close Book Animation. You want to use Anim Notifies to find out when to call this Method.

On Book Idle Anim End

https://blueprintue.com/render/cenjkp8e/

Method to be called at the end of the Idle Book Animation. e.g. to restart the Idle animation. You want to use Anim Notifies to find out when to call this Method.

On Paused

https://blueprintue.com/render/mpcc8ir7/

Called when the Anim Blueprint gets Paused to do some "pausing" stuff in the Blueprint

On Resumed

https://blueprintue.com/render/a8dfk999/

Called when the Anim Blueprint gets Resumed to do some "resuming" stuff in the Blueprint

UBookMenuComponent

Properties

Property Name	Type	Access	Description
BookMenuActor	ABookMenuActor	VisibleAnywhere, BlueprintReadOnly	The spawned Book Menu Actor
BookMenuData	UBookMenuData	VisibleAnywhere, BlueprintReadOnly	The Book Menu Data to initialize the spawned Book Menu Actor
BookMenuActorClass	TSubclassOf<ABookMenuActor>	VisibleAnywhere, BlueprintReadOnly	The Class of the Book Menu Actor to be spawned at Begin Play

Functions

Register Interaction Component

https://blueprintue.com/render/3y6m764w/

Calculates the world location on the Page Widget based on the UV Coordinates of the Book Actors Book Mesh

Pin	Direction	Type	Description
In Interaction Component	Input		

Register Interaction Actor

Calculates the world location on the Page Widget based on the UV Coordinates of the Book Actors Book Mesh

Pin	Direction	Type	Description
In Interaction Actor	Input		

Interact

Performs a Line Trace based on the Start and End Parameters and moves the Widget Interaction pointer of the Book Menu Interaction Actor if it is set. Also tells the Animation Blueprint which page was traced to.

Pin	Direction	Type	Description
Start	Input	FVector	Start of the Line Trace
End	Input	FVector	End of the Line Trace
Debug Trace	Input	bool	Shows a debug trace if true.
Trace Channel	Input	ECollisionChannel	The Collision Channel to be used for the line trace.
Success	Output	EXEC	Indicates if the Interaction was executed successfully
Failed	Output	EXEC	Indicates if the Interaction was not executed successfully
Return Value	Output	bool	returns true if the operation was successful. Otherwise false

Interact Ext

Performs a Line Trace based on the Start and End Parameters and moves the Widget Interaction pointer of the Book Menu Interaction Actor if it is set. Also tells the Animation Blueprint which page was traced to.

Pin	Direction	Type	Description
Start	Input	FVector	Start of the Line Trace
End	Input	FVector	End of the Line Trace
Out UV Coordinates	Output	FVector2d	The UV Coordinate of the trace page
Debug Trace	Input	bool	Shows a debug trace if true.
Trace Channel	Input	ECollisionChannel	The Collision Channel to be used for the line trace.
Success	Output	EXEC	Indicates if the Interaction was executed successfully
Failed	Output	EXEC	Indicates if the Interaction was not executed successfully
Return Value	Output	bool	returns true if the operation was successful. Otherwise false

UBookMenuInteractionComp onent

Properties

Property Name	Type	Access	Description
BookMenuInteractionActorClass	TSubclassOf<ABookMenuInteractionActor>	EditAnywhere	The Class of the Book Menu Interaction Actor to be spawned at Begin Play
InteractionActor	ABookMenuInteractionActor	BlueprintReadOnly	The spawned Book Menu Interaction Actor

Functions

Get Widget Interaction Component

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https://blueprintue.com/render/n5y_1hg5/

returns the Widget Interaction Component

Pin	Direction	Type	Description
Return Value	Output	UWidgetInteractionComponent	

UBookMenuStatics

Properties

The static Blueprint Function Library does not define any properties.

Functions

Create Mouse Trace Parameters

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https://blueprintue.com/render/e6nrzt8g/

Description

Method to translate the mouse position into trace parameters such as start and end

Pin	Direction	Type	Description
Player Controller	Input	APlayerController	The Player controller
Trace Distance	Input	float	The distance (length) used to perform the trace
Success	Output	EXEC	Indicates if the operation was successful
Failed	Output	EXEC	Indicates if the operation was failed
Out Start	Output	FVector	The resulting Start Coordinate of the Trace Parameters
Out End	Output	FVector	he resulting End Coordinate of the Trace Parameters

Move Widget Interaction Pointer

Description

Calculates the world location on the Page Widget based on the UV Coordinates of the Book Actors Book Mesh

Pin	Direction	Type	Description
In Widget Interaction Component	Input	UWidgetInteractionComponent	The Widget Interaction Component that shall be influenced
In Widget Component	Input	UWidgetComponent	The Widget Component the Pointer shall be moved on
In Reference Rotation	Input	FRotator	A reference rotation in order to do some relative calculations. e.g. the World Rotation of the Book Interaction Actor.
UV Coordinates	Input	FVector2D	UV Coordinates to be translated onto the Widget
Debug Trace	Input	bool	shows a debug trace if true.
Return Value	Output	bool	returns true if the operation was successful. Otherwise false.

Book Uv Trace

Description

Creates a trace based on the given collision channel. If a Book Men uActor was hit the Method determines if the book was hit from the front and tries to determine the current page and the UV Coordinates. This requires the Project Settings to be set to use the generation of UV coordinates from hit results.

Pin	Direction	Type	Description

Book Menu Actor	Input	ABookMenuActor	The Book Menu Actor we ar looking for
Start	Input	FVector	Start of the Trace
End	Input	FVector	End of the Trace
Debug Trace	Input	bool	shows a debug trace if true
Trace Channel	Input	ECollisionChannel	The Collision Channel to be used for the Trace
Out UV Coordinates	Output	FVector2D	The found UV Coordinates
Out Page Index	Output	int32	The found page index 0 = Left ; 1 = Right
Return Value	Output	bool	returns true if the operation was successful. Otherwise false.

Get Local Player Controller

https://blueprintue.com/render/qx76o0ry/

Description:

Method to get the First local Player Controller based on the World Context

Create Texture Render Target 2D

https://blueprintue.com/render/cn3tbhet/

Description

Creates a new Render Target with the specified parameters

Parameter	Direction	Type	Description

Draw Size	Input	FVector2D	The DrawSize of the Render Target
Filter	Input	TextureFilter	The Texture Filter to be applied
Use Gamma Correction	Input	bool	Uses Gamma Correction if true
Return Value	Output	UTextureRenderTarget2D	returns the created Render Target

Draw UserWidget to Render Target 2D

https://blueprintue.com/render/wl5-w2pu/

Description

Method to render a UserWidget onto a TextureRenderTarget2D

Parameter	Direction	Type	Description
User Widget	Input	UUserWidget	The UserWidget to be rendered
Render Target	Input	UTextureRenderTarget2D	The Target to be rendered on
Draw Size	Input	FVector2D	The DrawSize of the Render Target
Delta Time	Input	float	Delta time
Use Gamma Correction	Input	bool	Uses Gamma Correction if true

UBookPageWidget

Properties

Property Name	Type	Access	Description
BookMenuActor	ABookMenuActor	EditAnywhere	The Owning Book Menu Actor of the widget. Can be used to control the Book Menu actor from the widget
PageSectionIndex	int32	VisibleAnywhere, BlueprintReadOnly	The page section index of this widget. Can be used for navigation.
PageIndex	int32	VisibleAnywhere, BlueprintReadOnly	The page index. 0 = Left page, 1 = Right page

Functions

Init

Method to initialize the most important data in the Widget

Pin	Direction	Type	Description
InBookMenuActor	Input	ABookMenuActor	The Owning Book Menu Actor of the widget. Can be used to control the Book Menu actor from the widget
InPageSectionIndex	Input	int32	The page section index of this widget. Can be used for navigation.
InPageIndex	Input	int32	The page index. 0 = Left page, 1 = Right page

OnSetKeyboardFocus

Use this event to handle custom code after the widget received keyboard focus. This function is the counter part the SetKeyBoardFocus Function of the BookMenuActor.