HUBS NAVIGATION MESH



Co-funded by the European Union



2024-1-PL01-KA220-VET-000243150

JACEK KAWAŁEK





I WILL NOW PRESENT THE SECOND WAY WE USE TO CREATE INTERACTIONIN CLASS-VR GLASSES





IN ORDER FOR **EVERYTHING TO WORK CORRECTLY, WE NEED TO CORRECTLY SELECT THE VERSION OF THE BLENDER AND THE HUBS ADD-ON**





IN OUR CASE WE USE BLENDER 3.0 AND HUBS 1.6.0





INSTALL HUBS 1.6.0

🔊 Blender Preferences

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CLICK ON ADD COMPONENT

Animation	Avatar	Elements	Lights	
← Loop Animation	Morph Audio Feedback	🖉 Link	Ambient Light	
E Ov Scroll	2 Personal Space Invader	, Media Frame	Set Directional Light	
	✓. Scale Audio Feedback	R Particle Emitter	. Hemisphere Light	
		🖉 Simple Water	Point Light	
		👫 Spawner	河 Spot Light	
		a Te <u>x</u> t		
		📩 Waypoint		
Media	Object	Scene		
()) <u>A</u> udio	🏠 Ammo Shape (deprecated)	∑¦3 Mirror		
🦟 Audio Source	💽 Billboard	# Navigation Mesh		
((J Audio Target	💽 Frustum	😋 Scene Preview Camera		
🗍 Audio Zone	Ψ Grabbable	💝 Skybox		
💽 Image	🖐 Moveable			
🍪 Model	🐻 Physics Shape			
PDF	💽 RigidBody			
▶ Video	🕐 Shadow	(undocun	(undocumented operator).	
	Custom Tags			





WE HAVE TO LEARN SOME ELEMENTS BY OURSELVES AS THERE IS NO DETAILED DOCUMENTATION

	Animation	Avatar	Elements	Lights
5	Loop Animation	Morph Audio Feedback	C Link	🔊 Ambient Light
88	UV Scroll	Ω Personal Space Invader	🔳 Media Frame	🔆 Directional Light
		炎 Scale Audio Feedback	🂦 Particle Emitter	💭 Hemisphere Light
			🖒 Simple Water	Point Light
			👫 Spawner	河 Spot Light
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٦	Audio Zone	Ψ Grabbable	👌 Skybox	
.	Image	🖐 Moveable		
16	Model	👌 Physics Shape		
	PDF	C RigidBody		
À	Video	🕐 Shadow	(undocur	mented operator).
		🖪 Custom Tags		





NAVIGATION MESH

IT IS A SURFACE ON WHICH WE CAN MOVE

Animation	Avatar	Elements	Lights
← Loop Animation	了 Morph Audio Feedback	& Link	💭 Ambient Light
🔛 UV Scroll	<u>Ω</u> Personal Space Invader	🔳 Media Frame	🔆 Directional Light
	炎 Scale Audio Feedback	💦 Particle Emitter	浢 Hemisphere Light
		🖒 Simple Water	Point Light
		រីក្តី Spawner	ତ Spot
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🦟 Audio Source	💽 Billboard	# Navigation Mesh	
((J Audio <u>T</u> arget	💽 Frustum	ာ္ခြို့ Scene Preview Camera	
🗍 Audio Zone	🖐 Grabbable	൙ Skybox	
🖍 Image	👑 Moveable		
\delta Model	👌 Physics Shape		
	💽 RigidBody		
Video	🕑 Shadow	(undocu	mented operator).
	🔄 Custom Tags		





I WILL PRESENT THIS ON THE EXAMPLE OF THE KOŁOBRZEG PARK







USING CURVES WE RECREATE THE PATHS IN THE PARK









WE CREATE A SEPARATE OBJECT ON WHICH WE WILL WALK IN OUR CASE IT IS A WHITE MESH





POWER OF AR AND VR WE ADD A COMPONENT NAVIGATION MESH







PLACE ON THE GROUND SURFACE WE DO NOT TURN ON VISIBILITY







THE MODEL CAN HAVE ONLY ONE NAVIGATION MESH





WE ASSUME THAT THERE IS ANOTHER PARK NEARBY BLUE







POWER OF AR AND VR USING CTRL+J WE CONNECT BOTH WHITE MESHES







IF WE WANT TO MOVE USING A JOYSTICK, WE HAVE TO CONNECT THE MESHES TO CREATE A PLANE







IF WE WANT TO MOVE USING TELEPORTATION WE HAVE TO CONNECT THE MESHES BUT NOT CREATING A PLANE, WE JUST ADD AN EDGE







THEN ADD EMPTY OBJECT







PLACE IT ON THE SURFACE OF THE PATH







WHEN IT'S SELECTED GIVE IT A WAYPOINT







YOU WILL SEE THE AVATAR SYMBOL







FOR AVATAR SELECT







BASED ON EVACUATION PLANS IN THE BLENDER PROGRAM WE DID A PROJECT FOR OUR SCHOOL







WE HAVE ADAPTED FOR 3D GLASSES







VIEW FOR GLB EXPORT WITH SKY









Co-funded by European Un







THANKS TO THIS, YOU CAN MOVEIN DIFFERENT DEVICES







YOU CAN TELEPORT WITH 3D GLASSES







TEACHER'S VIEW IN CLASS-VR

YouTube

https://youtu.be/Eb3tFqcdFDM





BASED ON THE CREATED MODEL WE CREATE AN INTERACTIVE EVACUATION MODEL OF THE SCHOOL









WE USE THIS WAY OF PRESENTATION IN VARIOUS SHOWS AND TRAININGS







WE ARE CONTINUALLY IMPLEMENTING OUR PROJECT BY INCREASING THE MODEL DATABASE





THANK YOU FOR YOUR ATTENTION



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