This tutorial is based on two types of project, first you have an existing project & you want to add VR support for that also some options for meshes in level and second you want to make a project from beginning with this tools.

So when you see "Existing" project it means you made a project before and now you want to add options to it and when you see "Clean" project it means you want to create a project from base with this tools and you should know this is more optimized. Totally both works good.

Note: using clean project is very more optimized specially on large projects. So with a little time you can make your project more optimized for VR.

How to add options to static meshes (This mesh will not move in your project)?

Existing project:

1- Go to "ArchVisVR/Blueprints/Actor" and drag & drop "ArchVisVR_StaticActor_BP" into your map.
2- Optional: Move that actor near to your actor for better management.
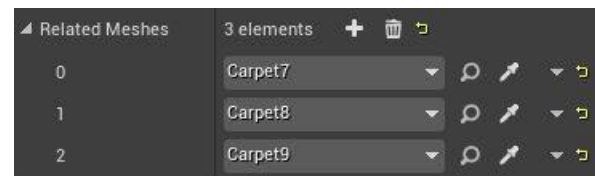3- Click on the plus icon in front of related meshes:
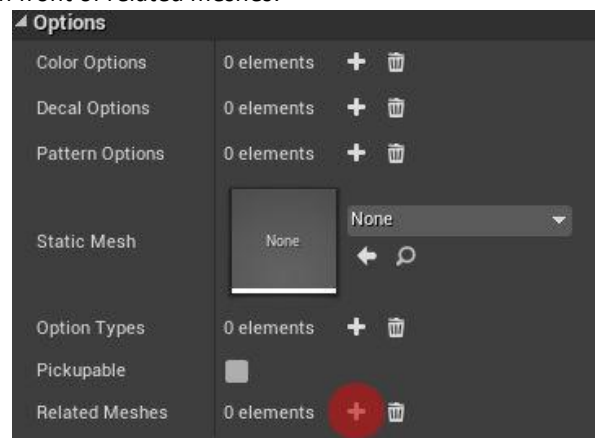
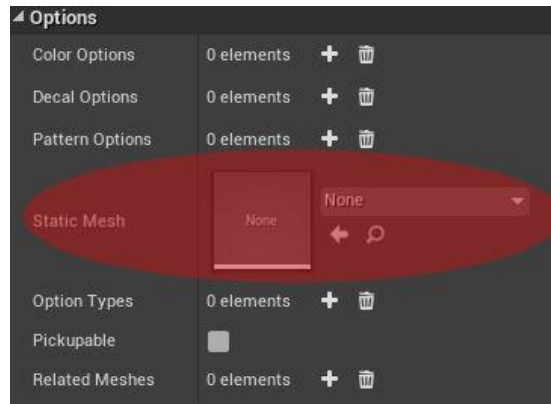4- After that try to pick one or more meshe(s) from your map with eyedropper icon:
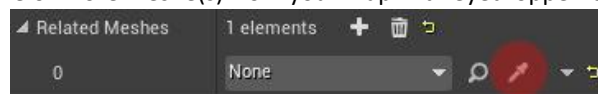
Note: if you want to share this options with more than one mesh, click on plus icon for each of them and then pick one by one.
So with this feature you can easily share options without need to copy and copy again and you can save lot of time.
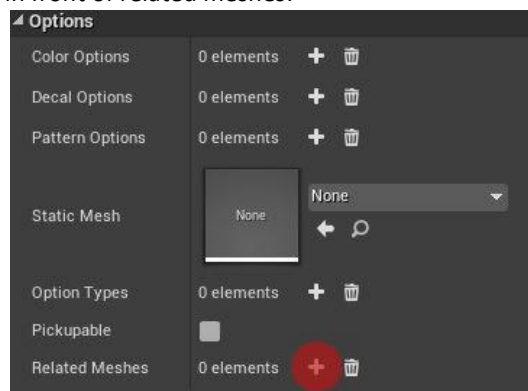

Clean project:

1- Go to "ArchVisVR/Blueprints/Actor" and drag & drop "ArchVisVR_BaseActor_BP" into your map.
2- Select the mesh you want from Content Browser and then click on arrow in front of Static Mesh.

3- Optional : If you want to share options from this mesh to other meshes too you can use Related Meshes part:

A) Click on the plus icon in front of related meshes:
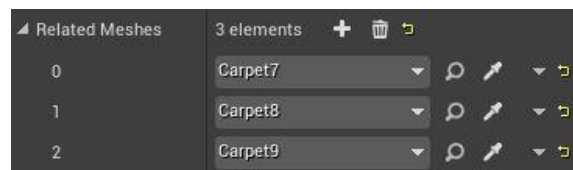

B) After that try to pick one or more meshe(s) from your map with eyedropper icon:

Note: if you want to share these options with more than one mesh, click on plus icon for each of them and then pick one by one.
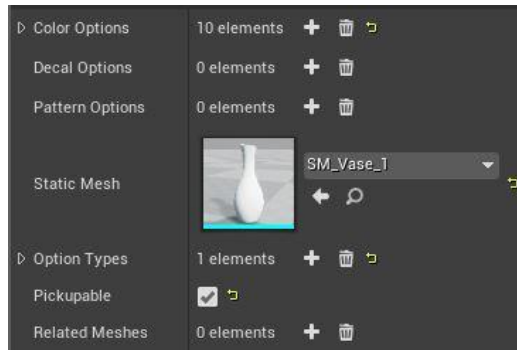
So with this feature you can easily share options without need to copy and copy again and you can save lot of time.

How to add dynamic meshes (You can pick up and move)?

Clean project:

1- Go to "ArchVisVR/Blueprints/Actor" and drag & drop "ArchVisVR_MoveAbleActor_BP'" into your map.
2- Select a mesh from Content Browser for Static Mesh.

3- Click on check box in front of Pickup able and enable that.

Note: You can just use Related Meshes for sharing options they'll not be dynamic or moveable.

What's Options Types?

After you select a mesh for your options, you must activate one or more options type for that mesh as an example:

If you want activate Color Options easily click on the plus icon in front of Option Types and select Color
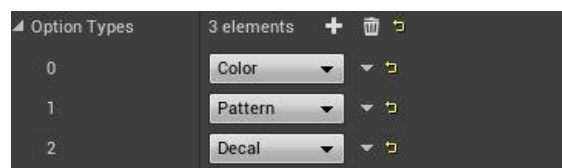
Also you can select up to three options here (Duplicated options will ignore).

Note: If you forget to add Option Types you can't use your options. So it's very important to have at least one Option Types.

What's Color Options?

Note: If you want to use this first add Color to Option Types.

With this type of options you can easily change the overall color of your mesh or a part of your mesh.
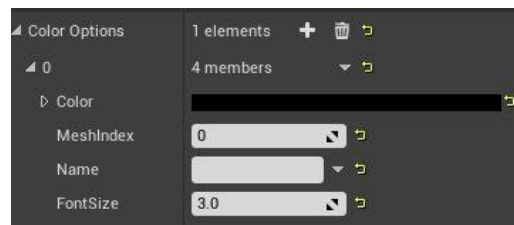
By clicking on the plus icon in front of Color Options you can add new color to the list

Each Color Option has four options inside that you must setup:

1- Color: The color you want to apply.
2- MeshIndex: Mesh index or in another word MatID that you want apply this color to that.
3- Name: It's optional if you want to show color name or code you can write here.

4- FontSize: You can set a font size for name to display.

Note:

You must setup a Dynamic Parameter node in your material named "Color" to this easily open your material and then hold "3" on your keyboard and at same time a left mouse click on the material editor you should have something similar to this:
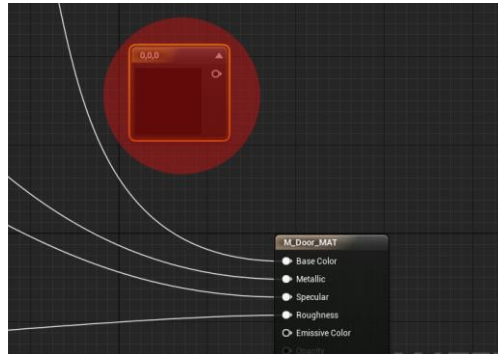
Then right click on that node and choose Convert To Parameter, and change name to "Color", and finally multiply to whatever going to Base Color like this:
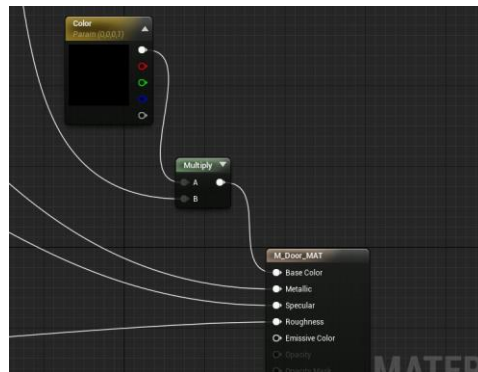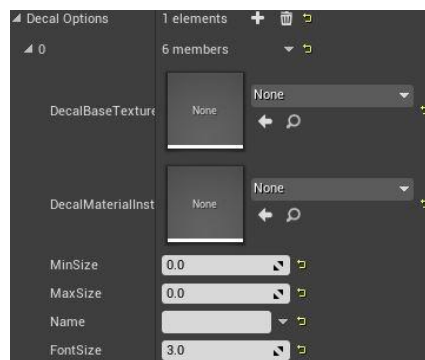

What's Decal Options?

Note: If you want to use this option first add Decal to Option Types.

To design your Room (Map) you can use different Decals and you can switch easily between them, resize and also relocate them.

To do this you must add Decal Options by clicking on the plus icon in front of Decal Options.

Each Decal Option has six different options inside that you must setup:

1- DecalBaseTexture: This is base texture that you want to show in option handler.
2- DecalMaterialInstance: You must create a Material Instance from your base decal material and then use it here as an option.
3- MinSize: Minimum size of decal when users trying to resize that
4- MaxSize: Maximum size of decal when users trying to resize that
5- Name: It's optional if you want to show a name or code you can write here.
6- FontSize: You can set a font size for name to display.

Note: To have a better control to design your initial decal it's easier first create a child blueprint class from "ArchVisVR_MoveAbleActor_BP" or "ArchVisVR_StaticActor_BP" or "Door_Interactive_BP" depends on what you need.
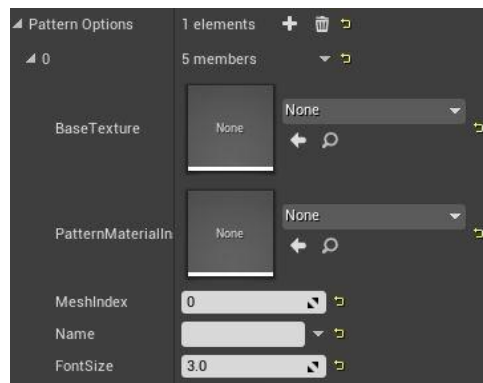
You can change "DecalProjectorLocation" and "DecalActor" inside that class.

DecalProjectorLocation is the location of the projector that users can use it to move you decal.

What's the Pattern Options?

Note: If you want to use this option first add Pattern to Option Types.

With this types of options you can easily change the material for a mesh or a part of that.

By clicking on the plus icon in front of Pattern Options you can add new material instance to the list

Each Pattern Option has five options inside that you must setup:

1- BaseTexture: This is base texture that you want to show in option handler to users.
2- PatternMaterialInstance: You can set the material instance you want to apply here.
3- MeshIndex: Mesh index or in another word MatID that you want apply this material instance.
4- Name: It's optional if you want to show a name or code you can write here.
5- FontSize: You can set a font size for name to display.

How to take Screenshot in VR?

Go to "ArchVisVR/Blueprints/Actor" then drag & drop "ArchVisVR_Camera_BP" into your map.

Now you can pick up with your right hand and you can take photo with Shoulder Button.

How to add Interactive door?

For now this pack has one type of Sliding door with support all three axis.

Go to "ArchVisVR/Blueprints/Actor" and create a child blueprint from "Door_Interactive_BP". And then you can drag and drop into your map.

Now you can open and set meshes and other options too inside your new blueprint.

It's better to create a new blueprint class because it's lot more easier to set Handler collision size and location to your mesh.

Each Door has 3 specific options (All other options are available too):
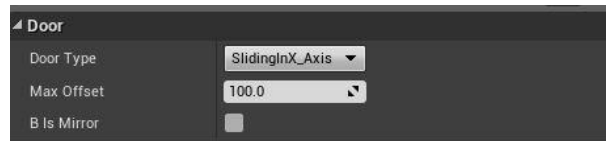
DoorType: You can choose the axis of the door wants to slide.

MaxOffset: Distance of the sliding from base location.

bIsMirror: To set the door mirror.

Note: The Rotating type is under development and will be available in next update.

How to add Movable area?

To add movable area easily drag & drop Nav Mesh Bound Volume from left panel in editor.

Then try to adjust that box size to fit your level, to see navigable area you can press "P" button on keyboard or enable Navigation in Show menu.

Sometimes engine can't show the area very good there's a way to refresh that:

Add and then remove an option to one of your meshes that you have in your map.

As you can see after add and then remove an option to one of mesh in level the Nav mesh refreshed and works good.
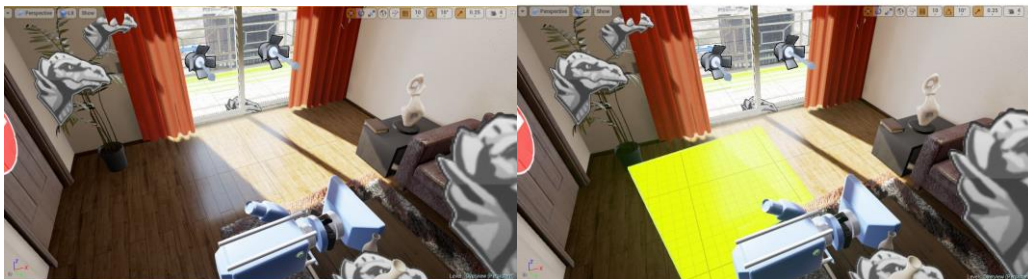
If you have any question or need to add new abilities to your personal project feel free to contact us at:

info@azadiapps.com