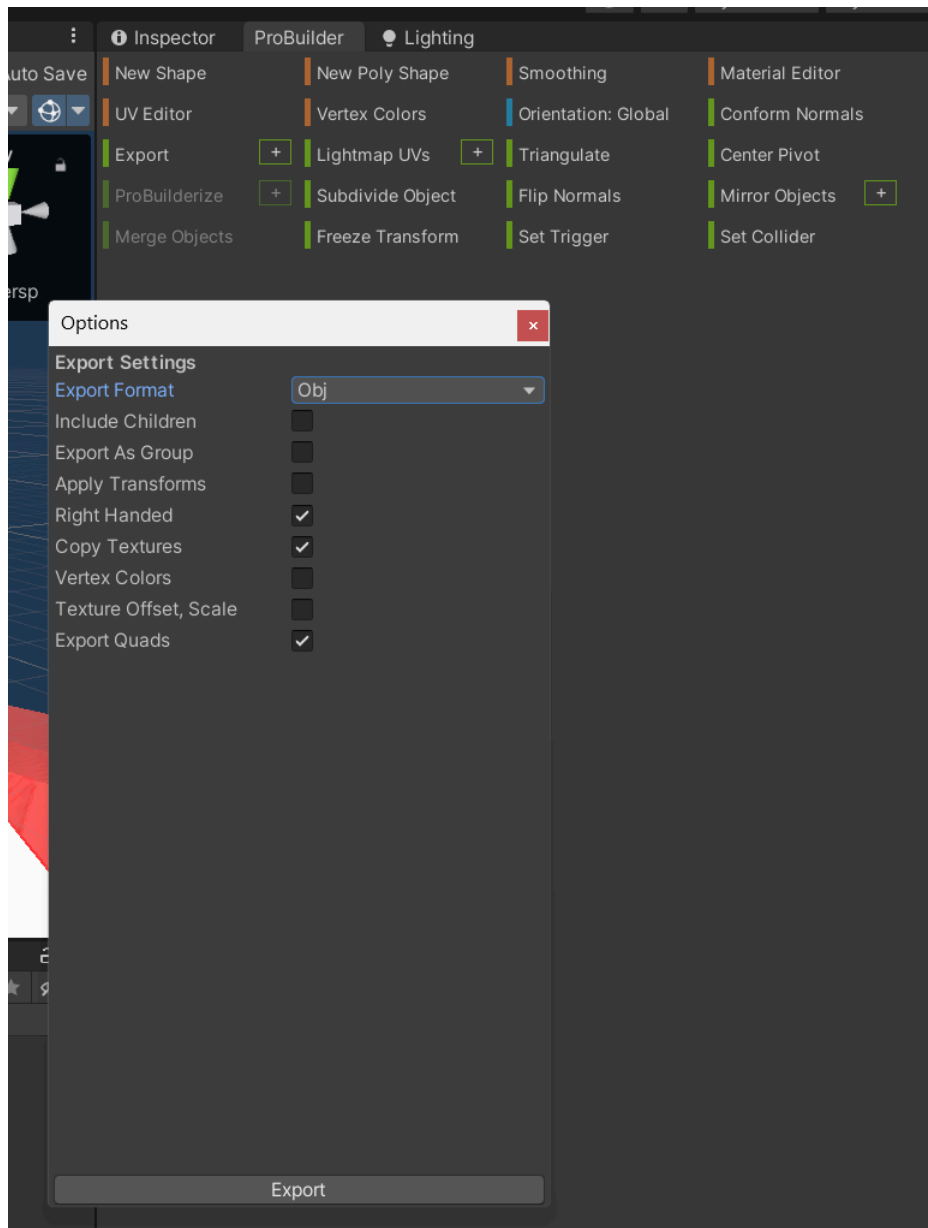


Export Probuilder Mesh



Select object/objects you want to export in the scene.

In Probuilder menu, click the “+” next to export to bring up the export settings.
Export Format set to Obj.

Consider

1. Checking “Apply Transforms” if you did a lot of scaling, since the modifiers in blender will apply to the unscaled object.

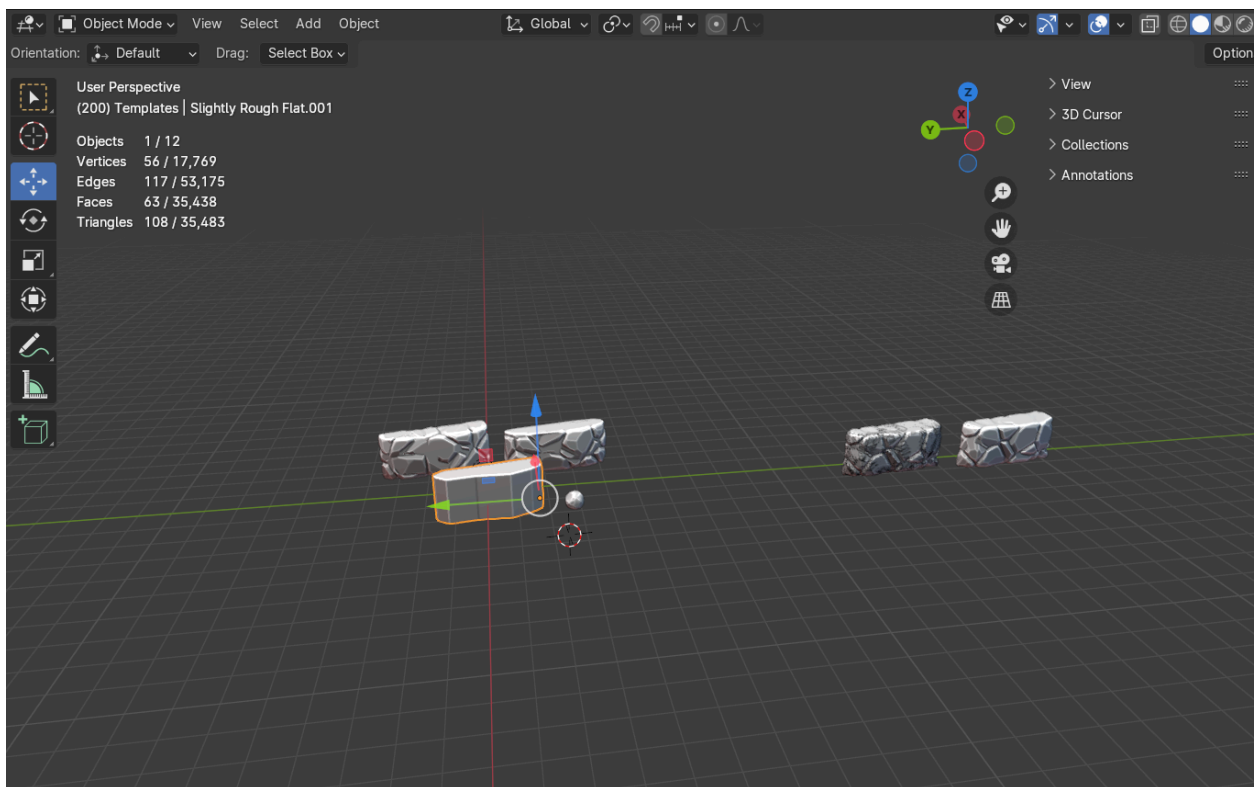
2. Checking Export as Group is you want to turn multiple probuilder meshes into one mesh.
(See [If you want to combine your meshes](#) in the Blender section)

Blender Pipeline

Install Blender 4.x <https://www.blender.org/download/>

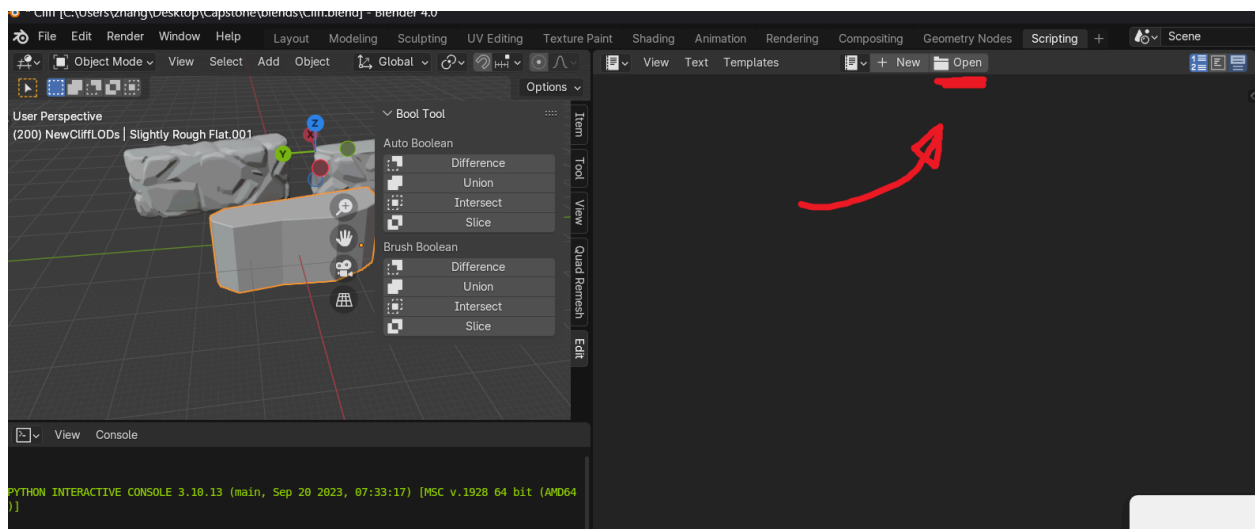
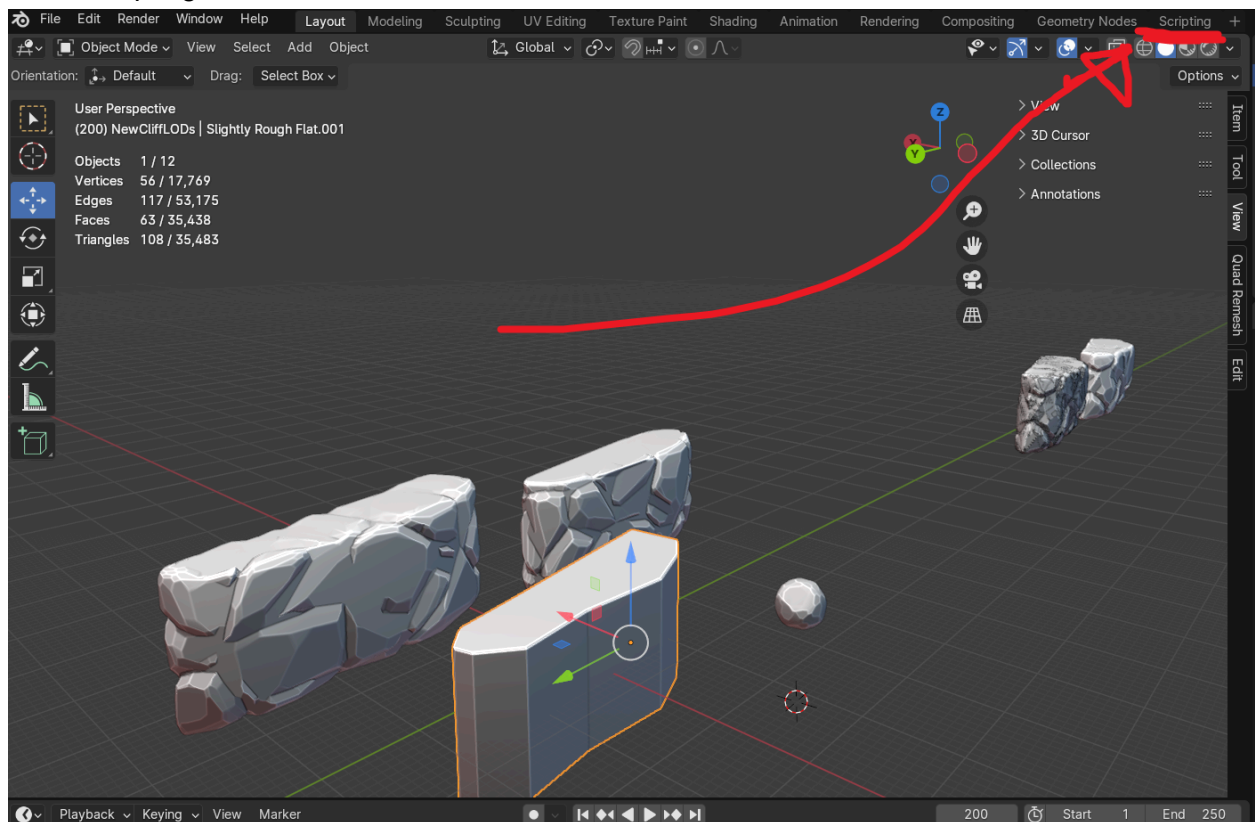
Get Cliff.blend and GreyboxToFinal.py files from Ryan

Open Cliff.blend with Blender 4.x

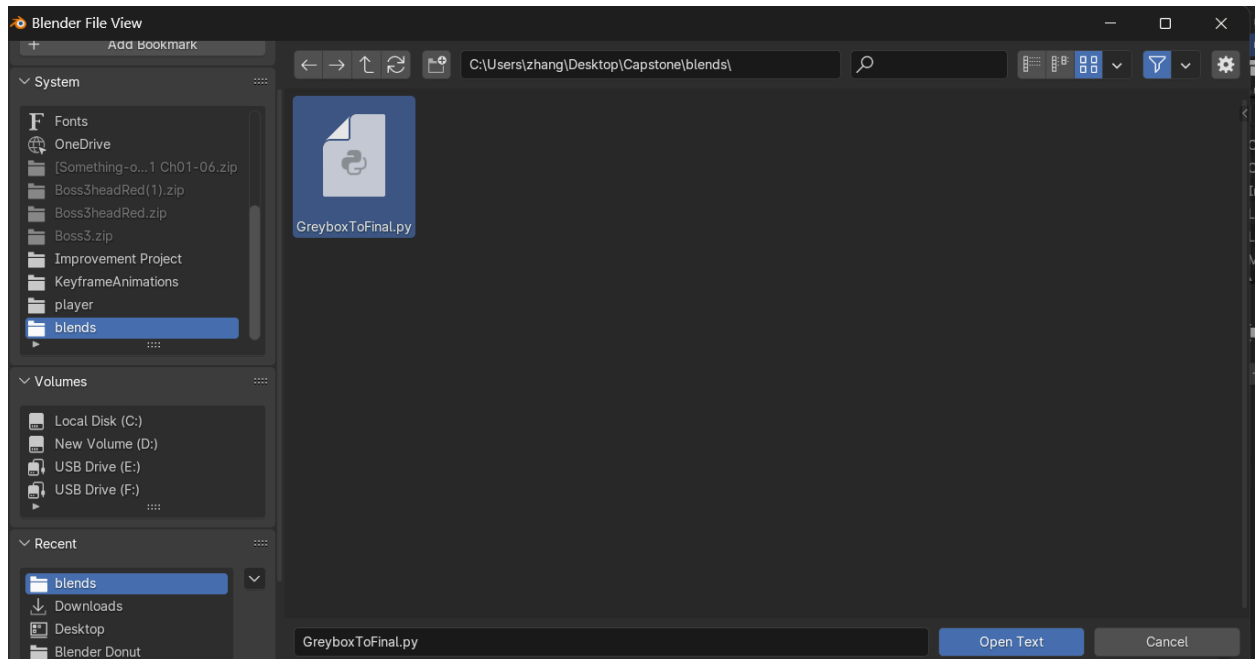


Your scene should look something like this.

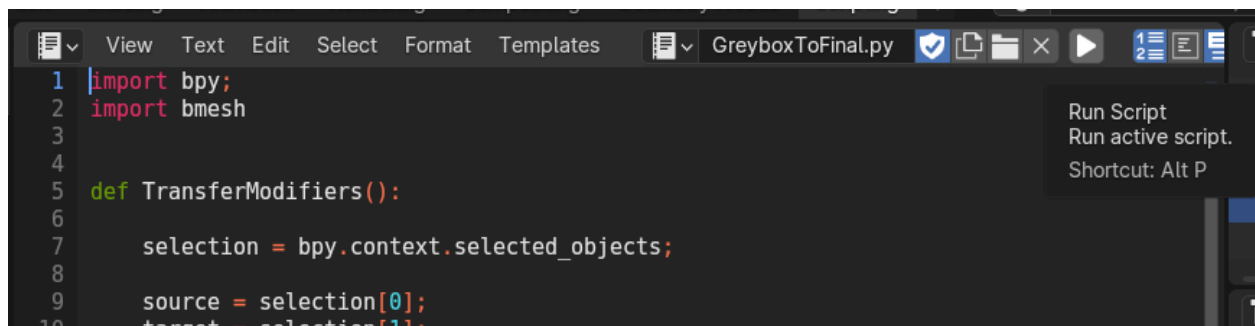
Go to Scripting tab



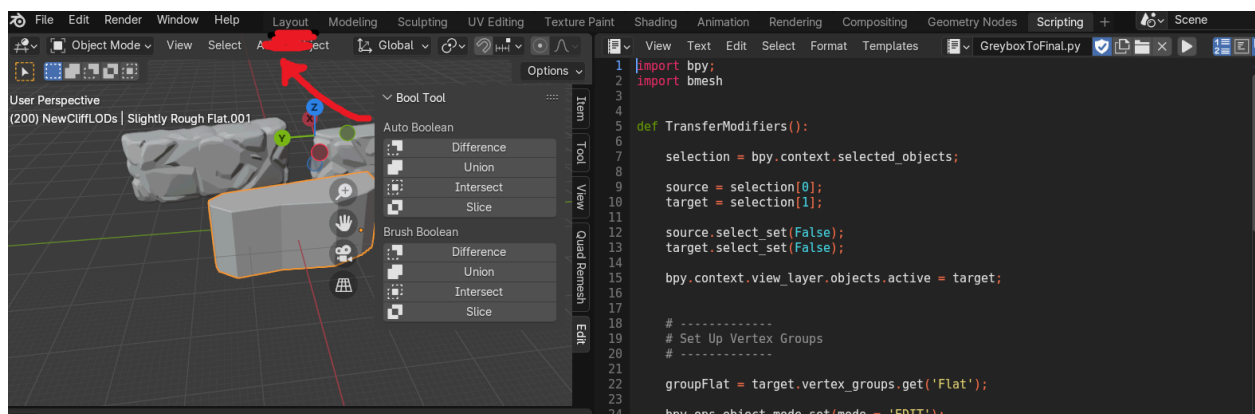
Hit open.



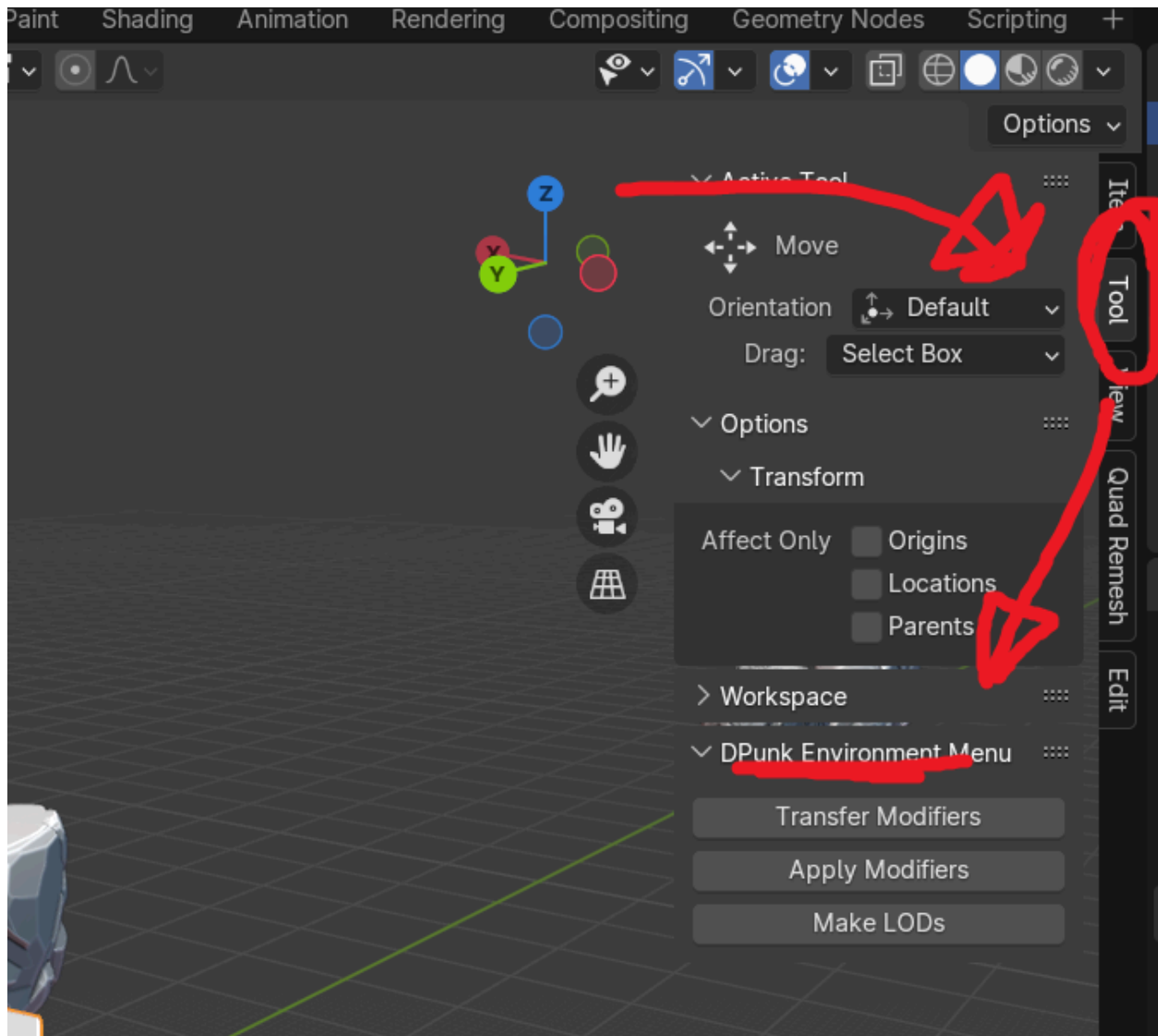
Navigate to and Open GreyboxToFinal.py



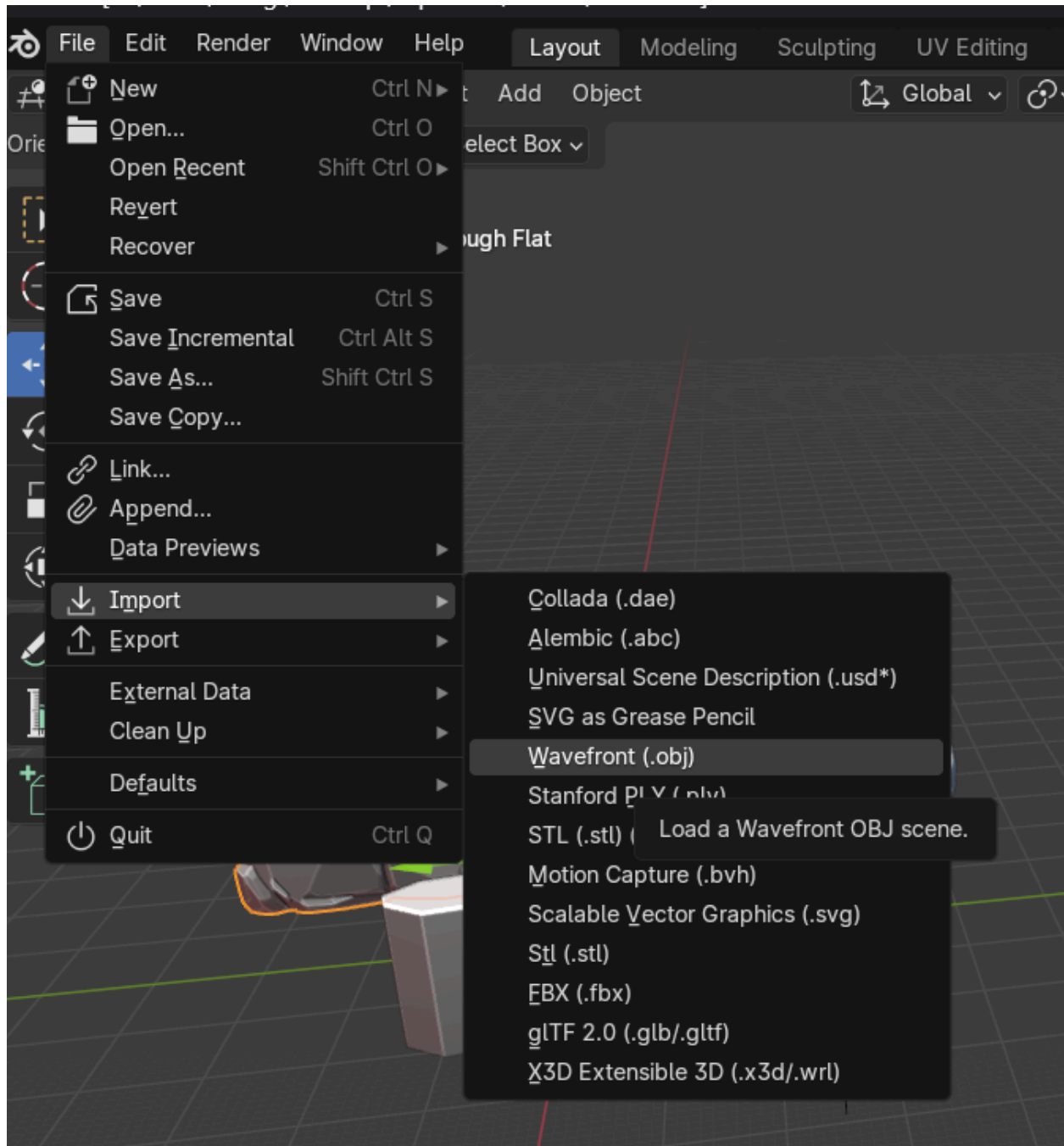
Run the script by pressing the arrow key



Return to Layout tab.



In the 3D viewport sidebar, click tools, and you should see DPunk Environment Menu at the very bottom.



Go to File -> Import -> .obj to import your mesh.

That's it for setting up Blender, next is how to use the three buttons in that menu.

Optional

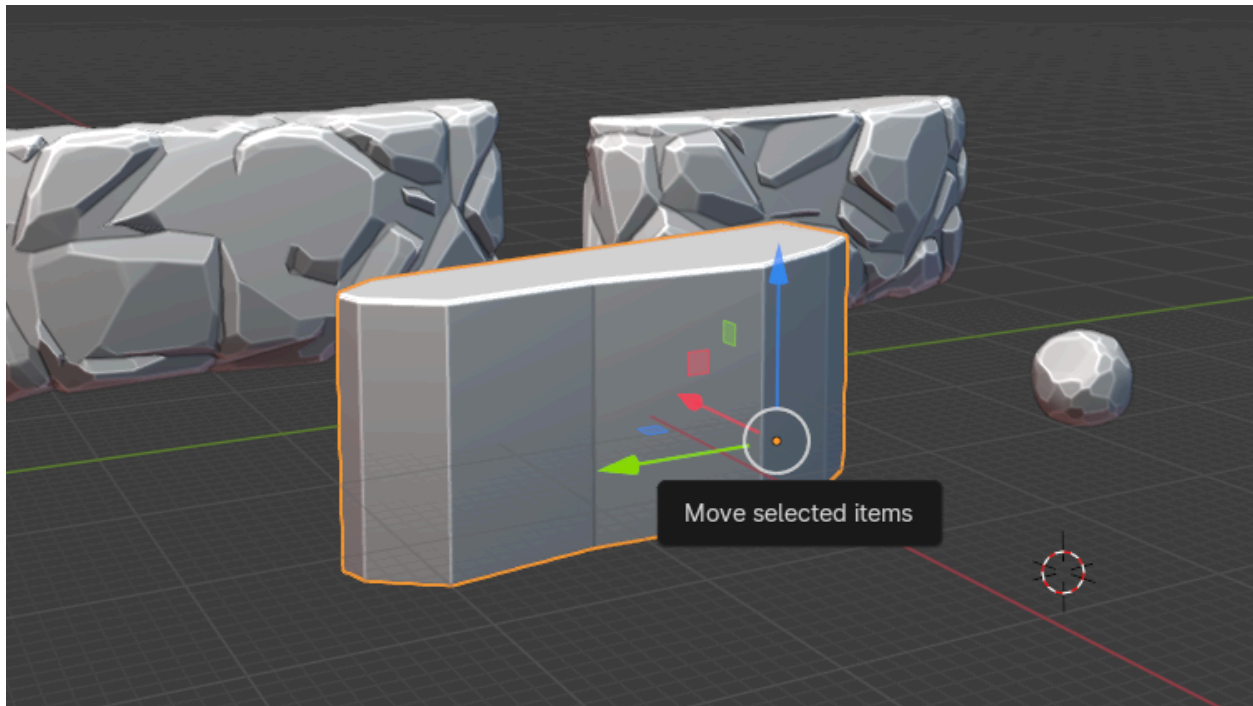
If you want to combine your meshes

Enable Blender's Bool Tool add on and use union on all of your meshes to reduce vertice counts.

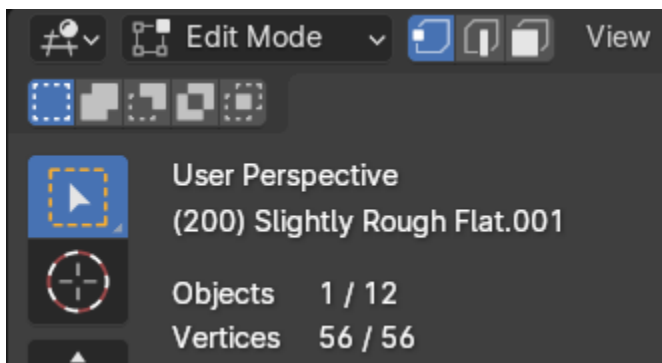
(Recommended) Bevel your mesh

It is recommended that you bevel some edges of your mesh before proceeding, this is to help it maintain its shape in the following steps.

To bevel:

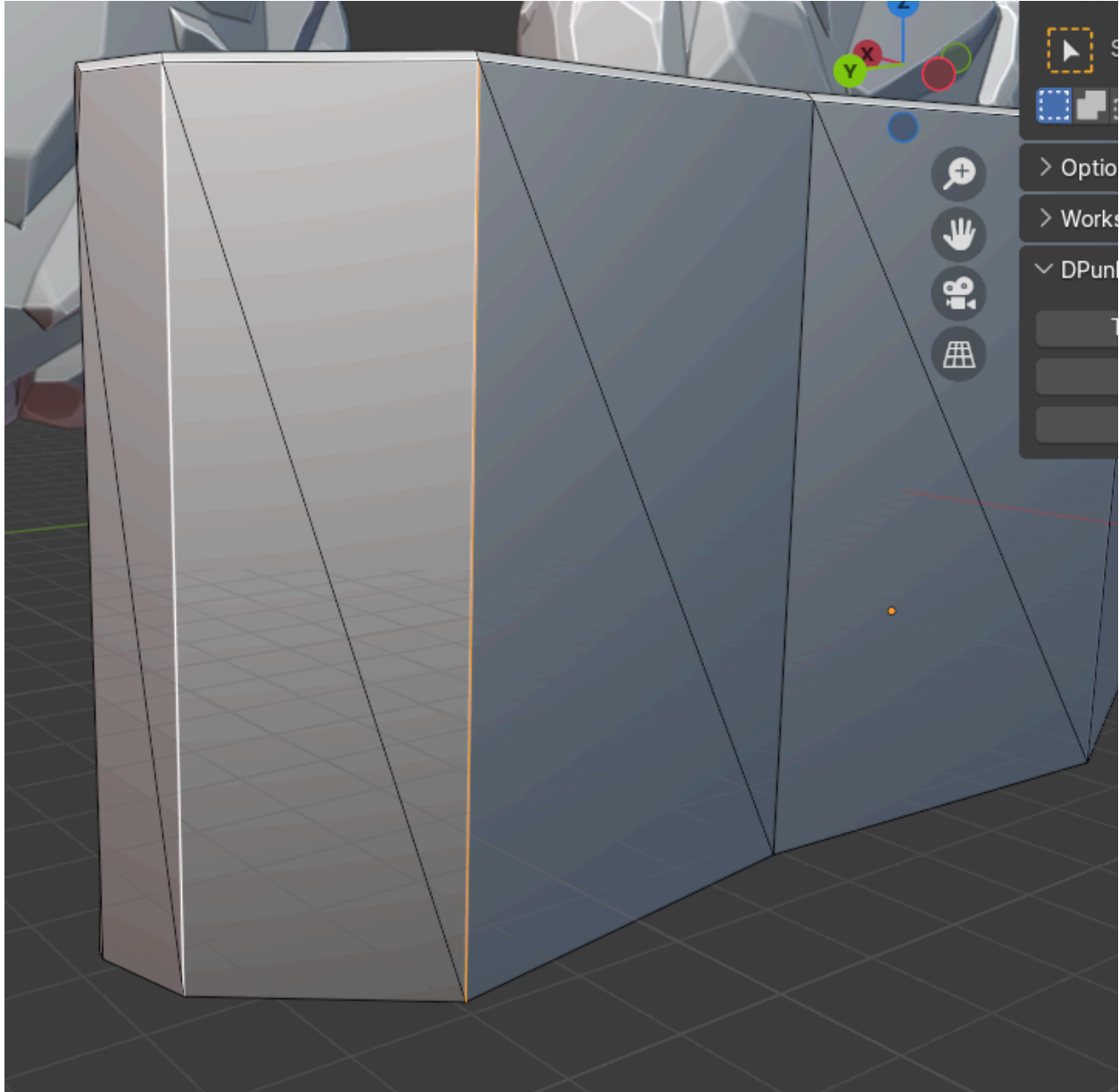


Select the mesh



Switch mode from Object to Edit, either by pressing the TAB key or going to the dropdown menu in the top left.

And switch select mode to vertices by pressing the 2 key or clicking the edge button which is the second button from edit mode (cube outline with the solid white line on it).



Select edges with left-click and shift left-click to select additional edges.

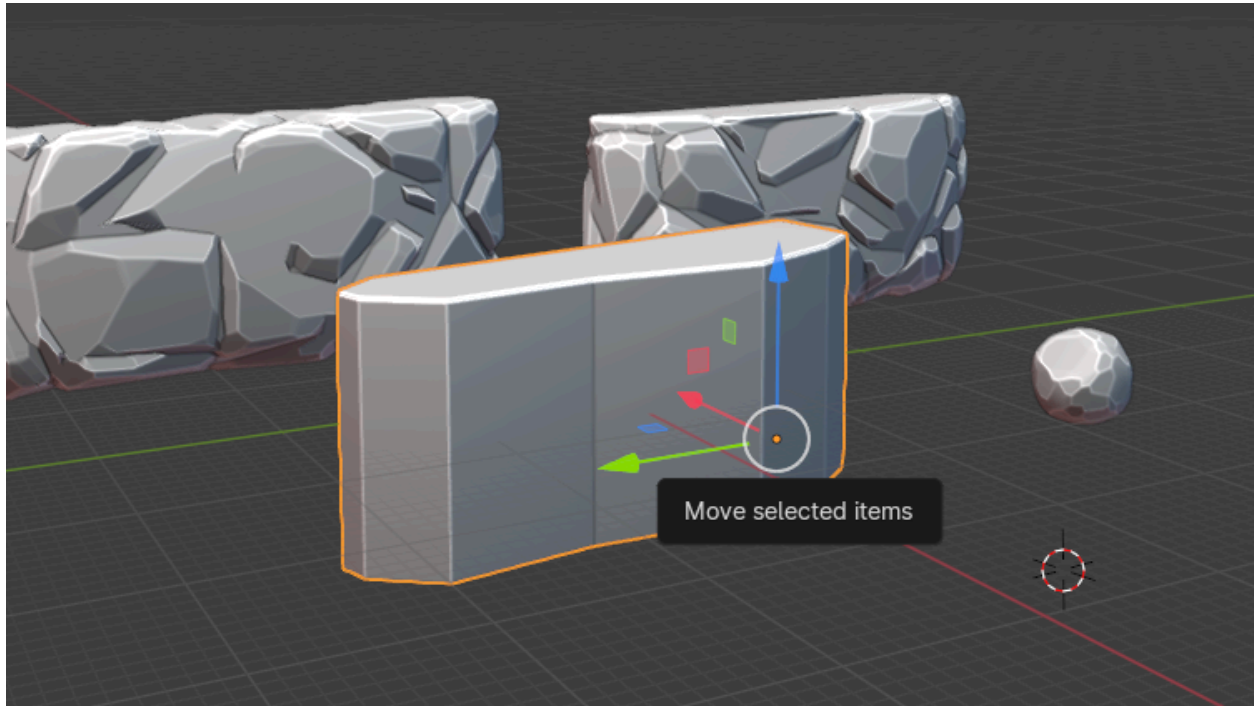
Press CTRL+B to bevel. Use mouse to move around the bevel and left-click to confirm. A context menu will appear, use that to adjust your bevel.

Required

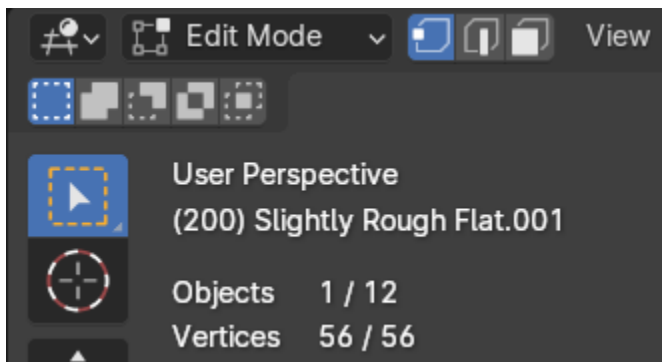
Adding Flat Vertex Group

Not strictly required but you should consider every mesh you convert.

Do this step to make walkable surfaces flatter and to reduce vertices in places the player won't see.

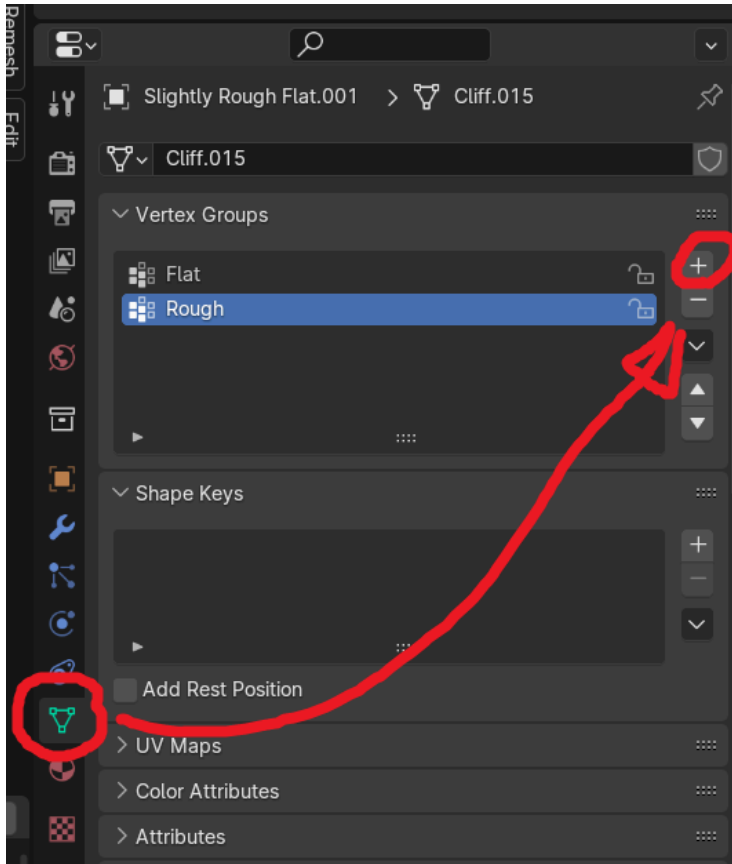


Select the mesh

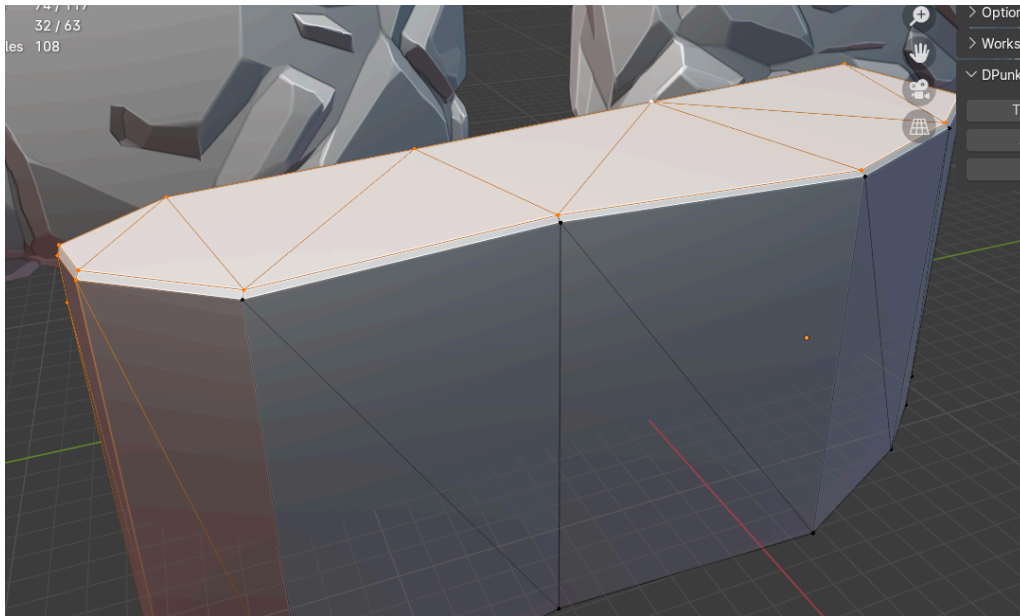


Switch mode from Object to Edit, either by pressing the TAB key or going to the dropdown menu in the top left.

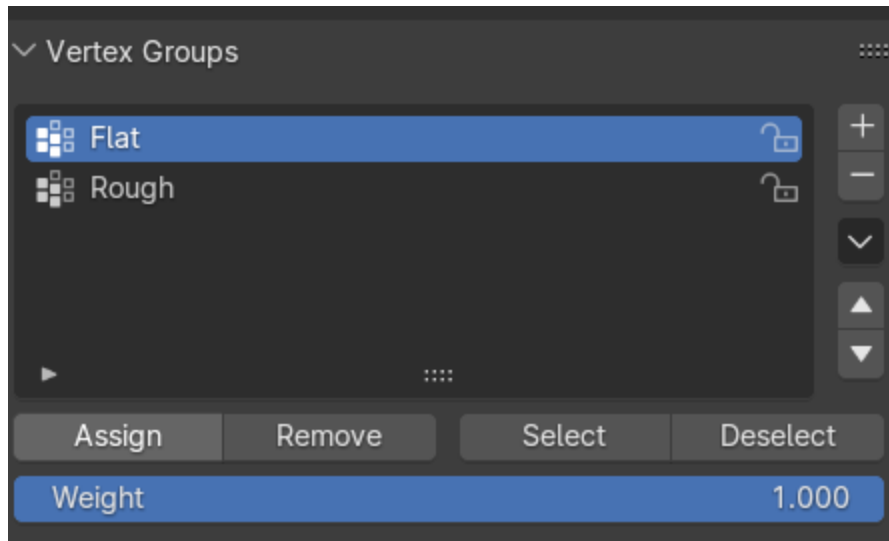
And switch select mode to vertices by pressing the 1 key or clicking the vertex button which is the first button from edit mode (currently selected in the image).



Go to the data tab on the bottom right, and click the plus to create a new vertex, name it Flat (Rough will be automatically generated as an inverse of Flat in a later step, so ignore it).

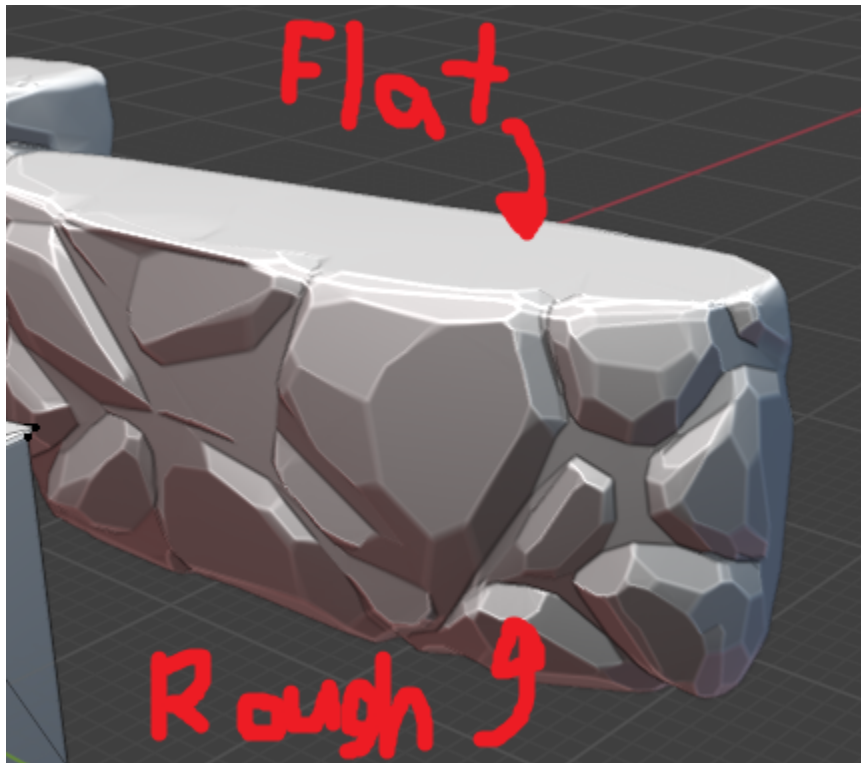


Select the vertices that you want to be flat.



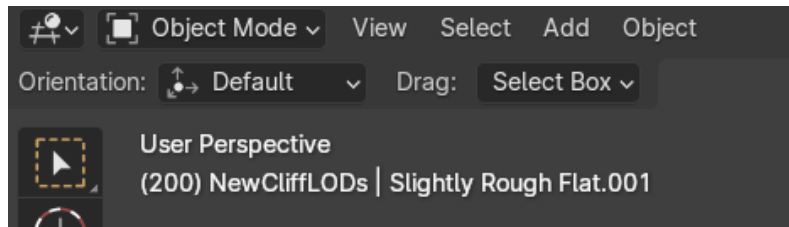
Make sure weight is set to 1.0 (reduce if you want the vertex to be less flat) and click **Assign** while Flat is the selected vertex group.

Now you are done!

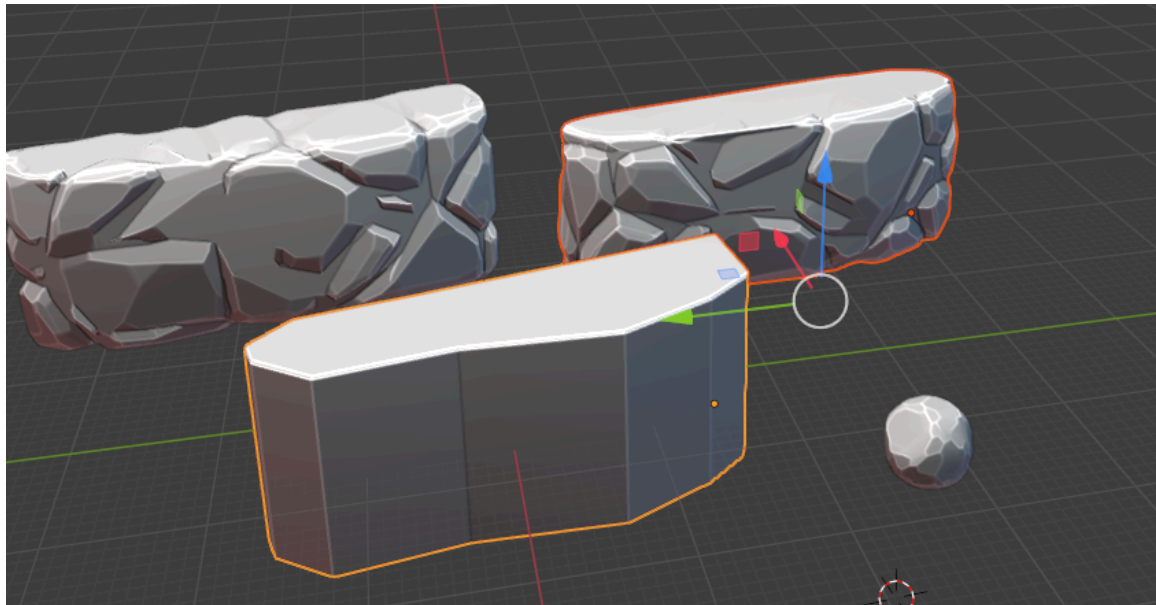


This is what applying a Flat Vertex group will look like by the end.

Transfer Modifiers

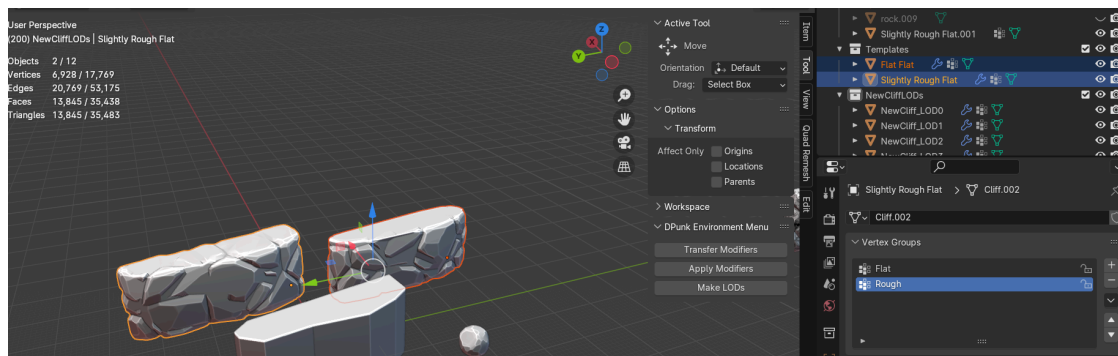


Switch to Object mode using the dropdown on the top-left.
Or press TAB if you are in any other mode.



Left-click one of the template meshes then Shift-Left-Click your target mesh.

Templates?

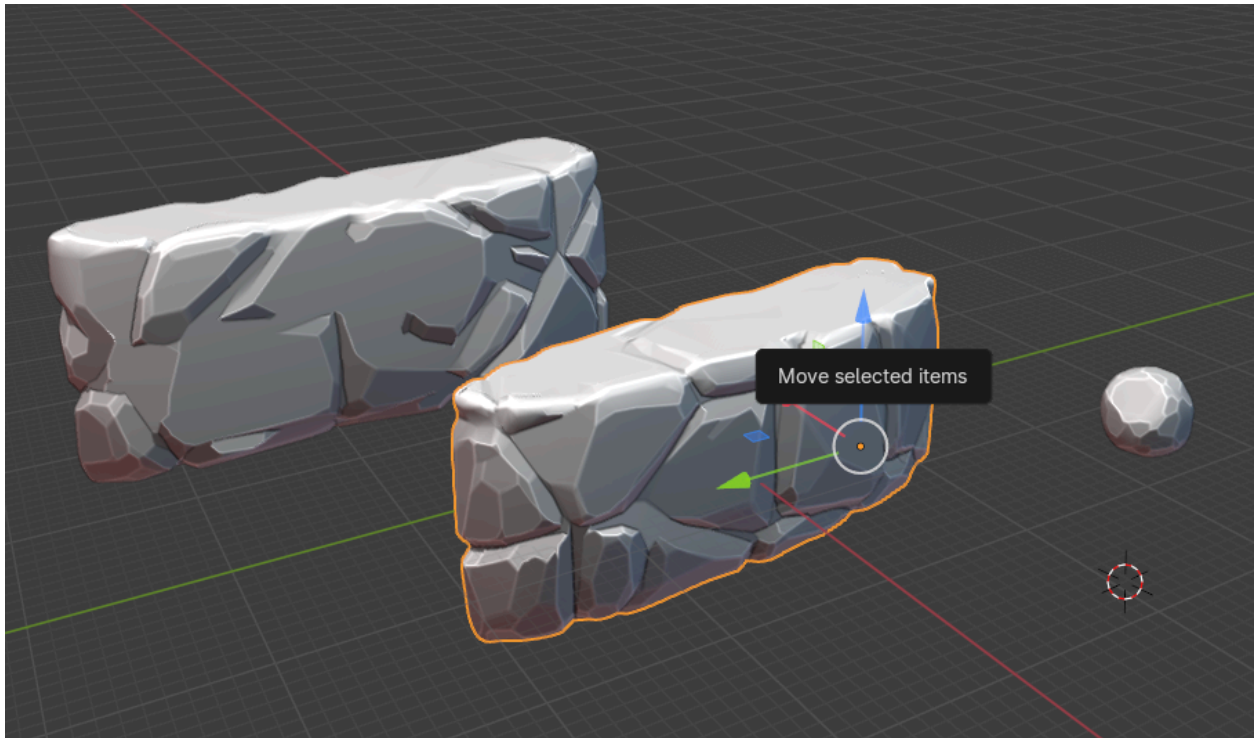


There is only one template now.

Templates are the meshes in the template collection, they differ slightly, use the one you like as your base.

You can make a copy of one of the templates and modify the settings to make your own.

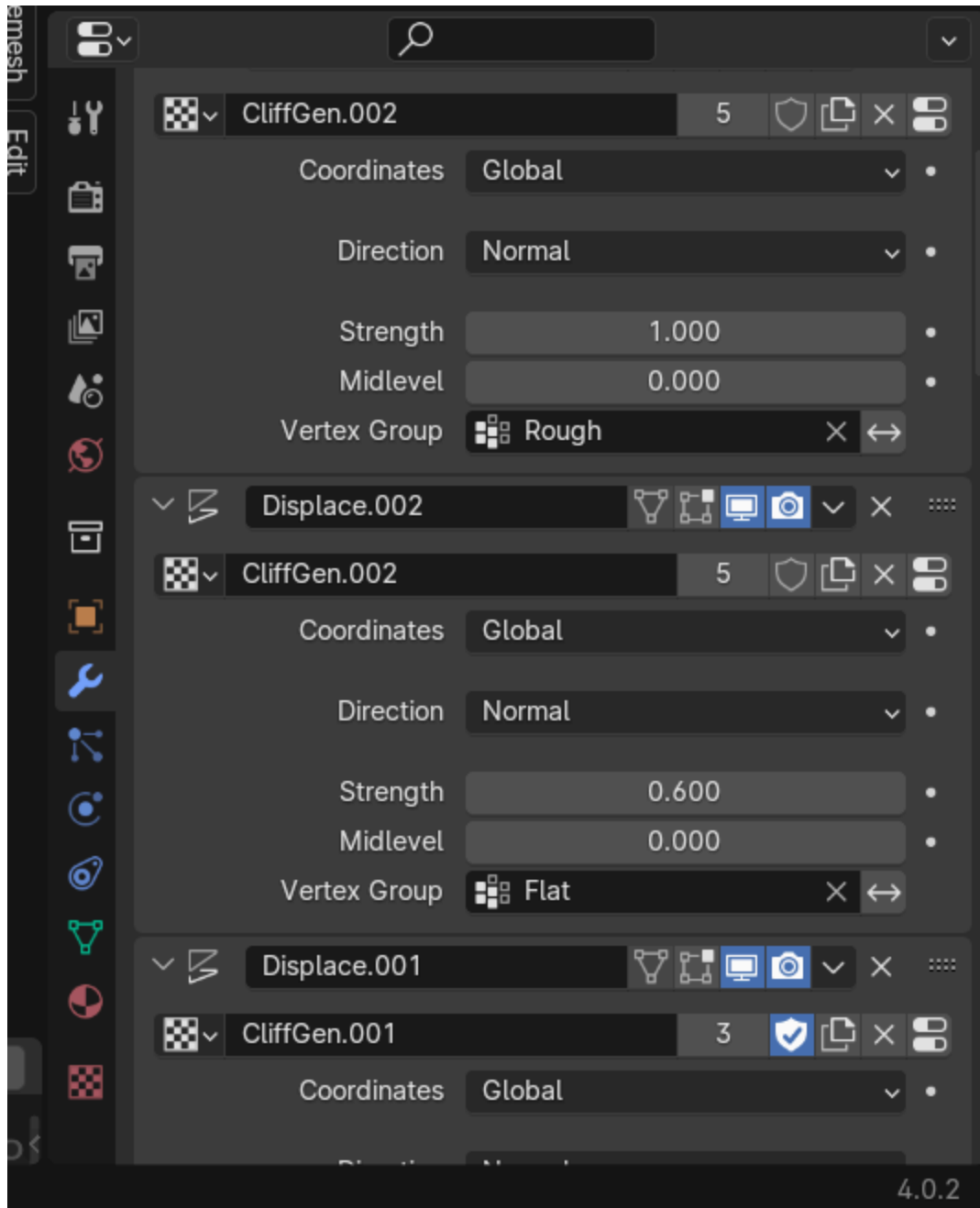
Click Transfer Modifiers from the DPunk menu. (Blender will take a while to load, let it run).



Here's what the modified mesh looks like!

Edit and Apply Modifiers

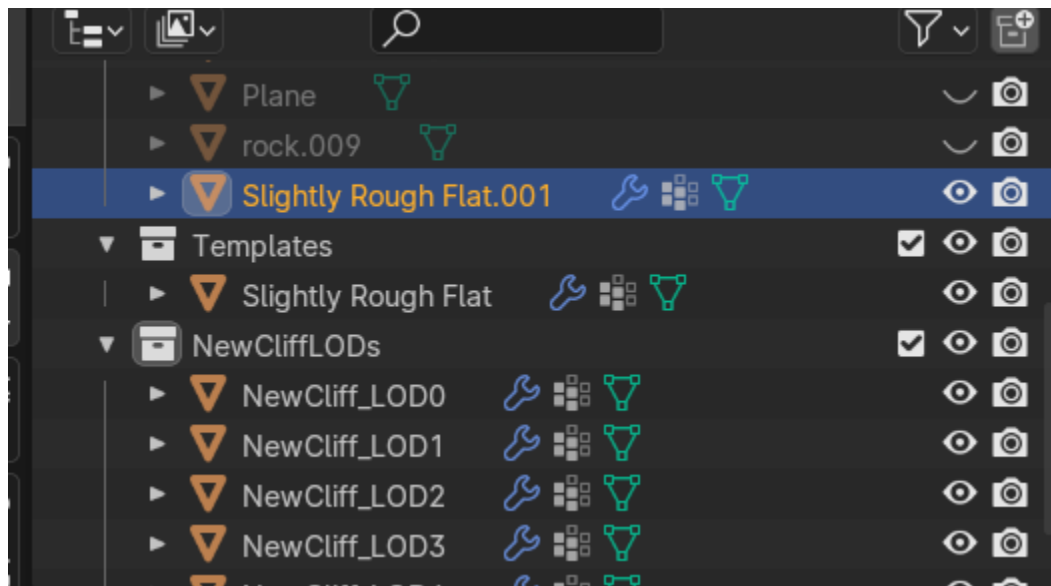
The modifiers use location data to seed the randomness, so you can move your newly modified mesh around the scene to reseed it.



You can also press the wrench icon to enter the modifiers tab and mess around with the settings from there.

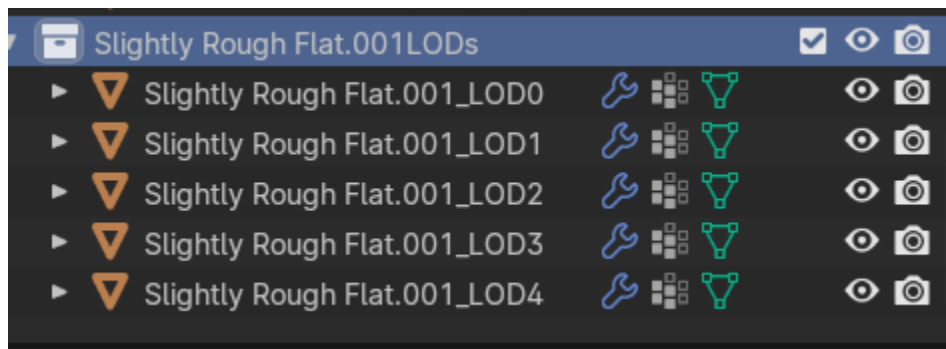
Once you are done, select your mesh and press Apply Modifiers from the DPunk Menu to apply the modifiers.

Generate LODs and Export



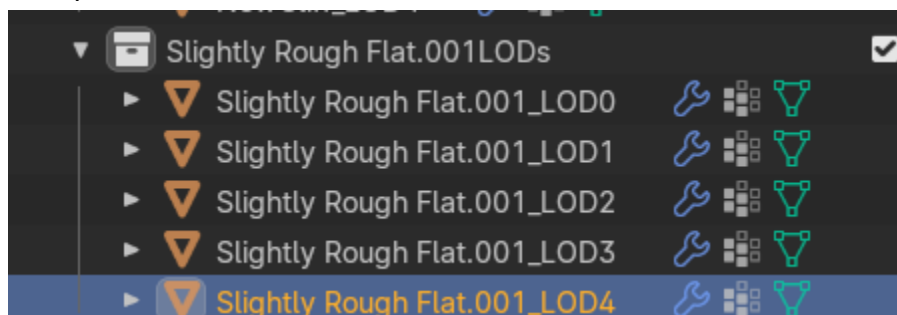
In the scene hierarchy, rename your mesh into something you want to export it as.

Then press Make LODs from the DPunk menu to generate the lods.



This will generate a collection of LODs for you to use.

To export:

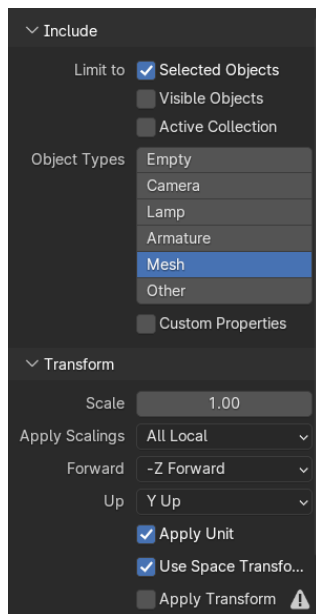


Select LOD4 first



Then shift-select LOD0, **THIS ORDER IS IMPORTANT**

Then go to File -> Export -> .fbx

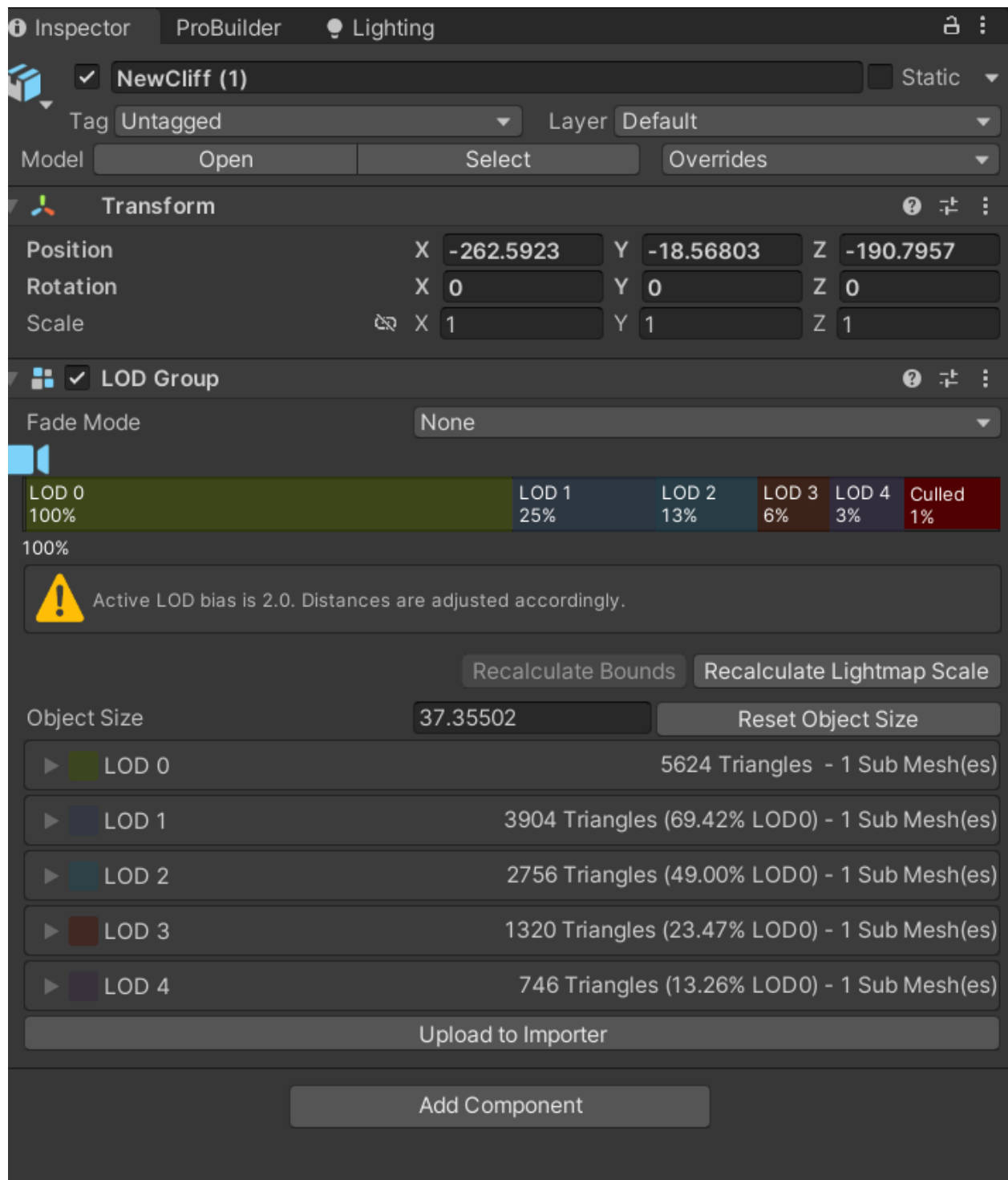


Make sure your export settings look like this, you can also check Apply Transform if you feel like it works better for your mesh.

In Geometry of export of settings, make sure Apply Modifiers is checked.

Import Back into Unity

Drag your newly exported mesh into unity.



Dragging it into the scene should get you an LOD group in the inspector.

Adjust the settings to optimize it for the game.

RULE OF THUMB: LOD0 should appear as little as possible since that's the highest fidelity one, try to make it so that the higher numbering LODs are used more often than the lower numbered ones to improve performance.