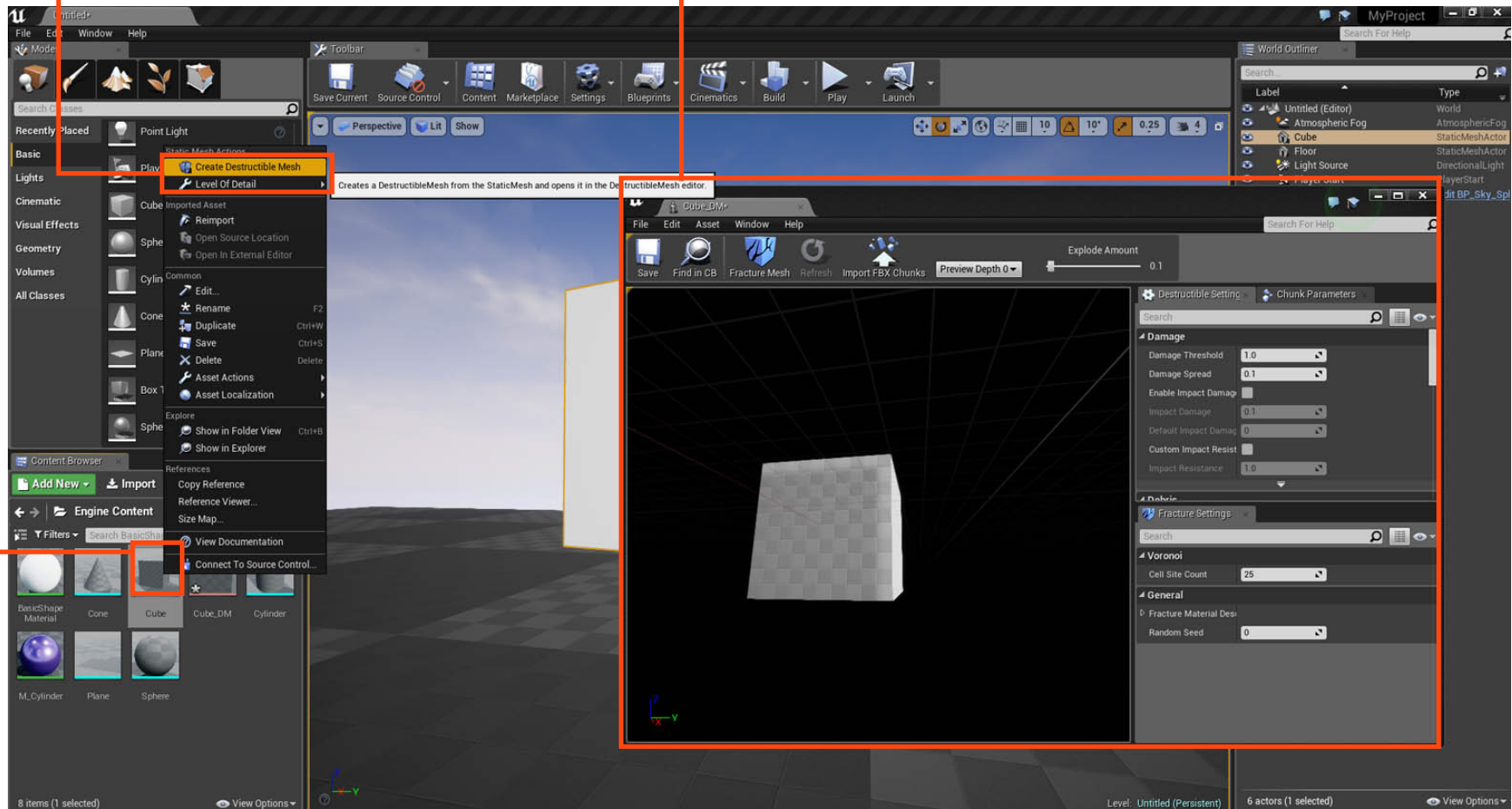


Unreal 4.15

1. Open your FPS project level.
2. Find a Cube (or import your own 3DMax mesh) in the Content Browser - Starter Content
3. Right click the cube and select "Create Destructible Mesh". A copy of the cube will generate.
4. Open the copy into the Destruction Editor

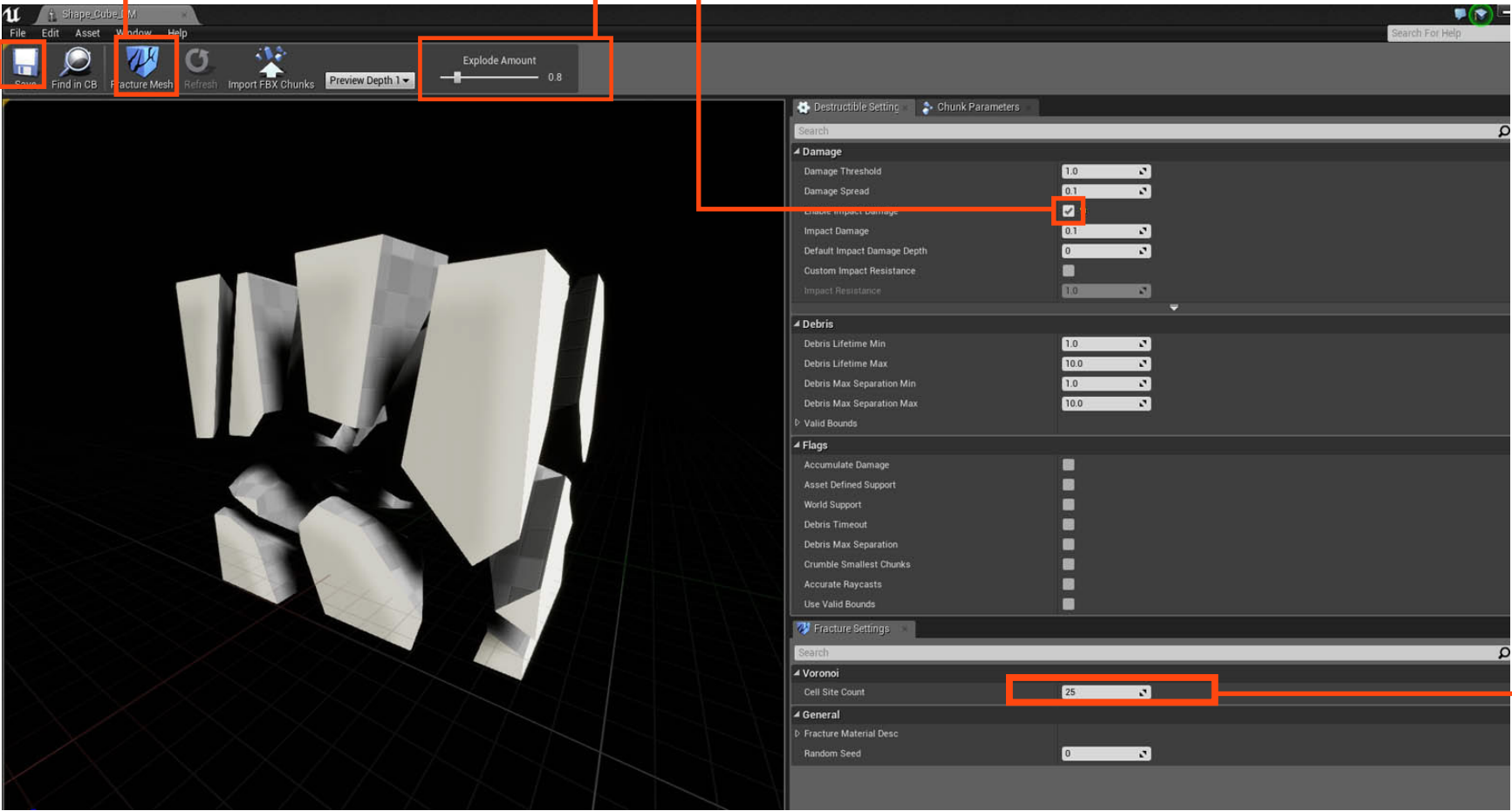
NOTE: If you are using Unreal 4.18 you must activate the Apex Plugin found under EDIT_PLUGINS_PHYSICS



5. Next we'll enable "Damage".

6. Then set the number of pieces we want the sphere to break into.

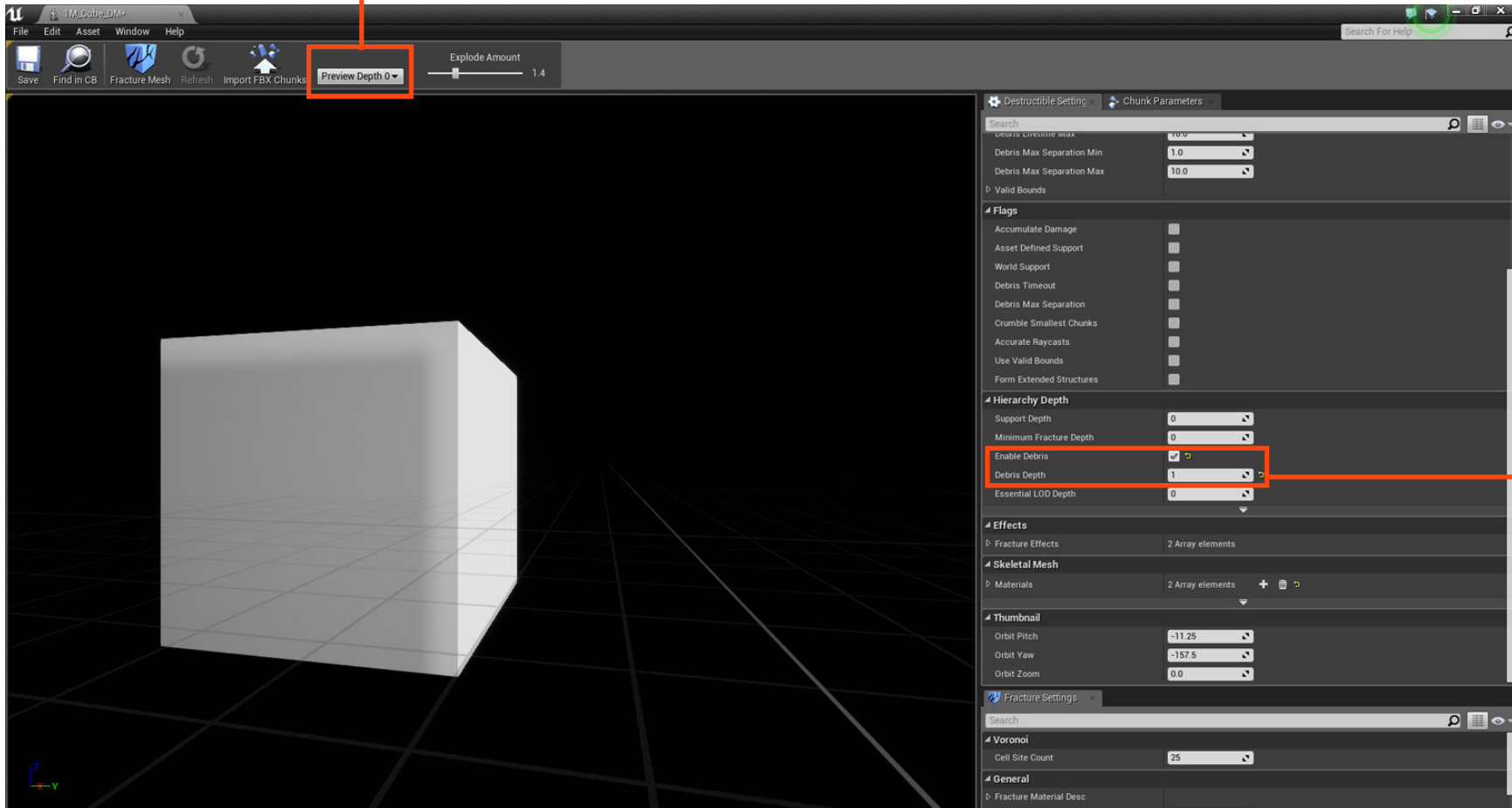
7. Click "Fracture Mesh" and slide the effect.



8. Save the mesh and drag it from the Content Browser into your scene.

9. Next check "Enable Debris" and change Debris Depth to 1

This will allow for 2 depth channels - Unfractured and fractured.
You can install 3rd party plugins that increase the depth levels of fracturing.
This will allow you to break pieces into smaller pieces.

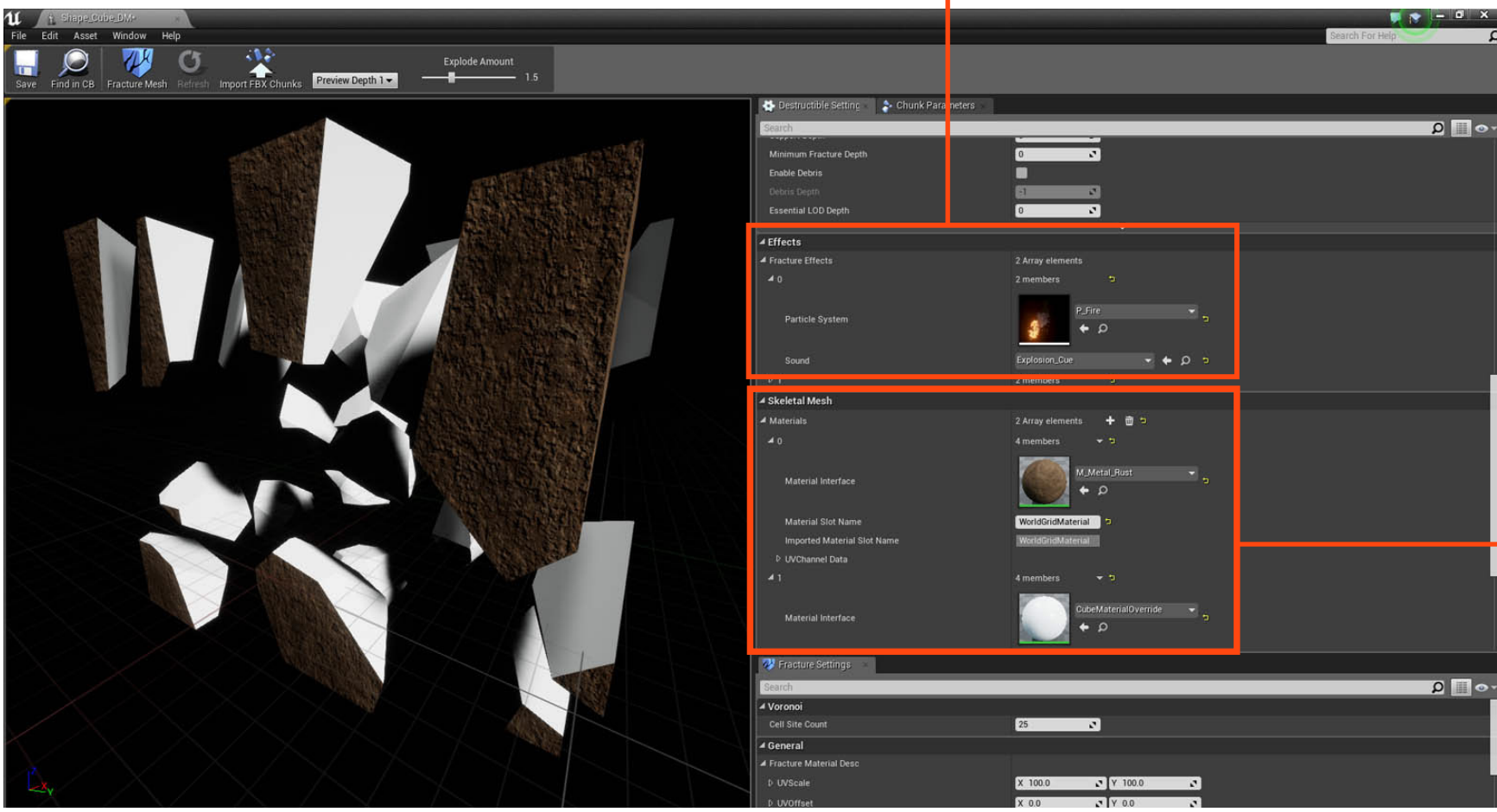




Locate "Effects" and "Skeletal Mesh" on the Destruction Settings Panel

11. Now, let's add a material to outside of the cube (0) and the inside (1).

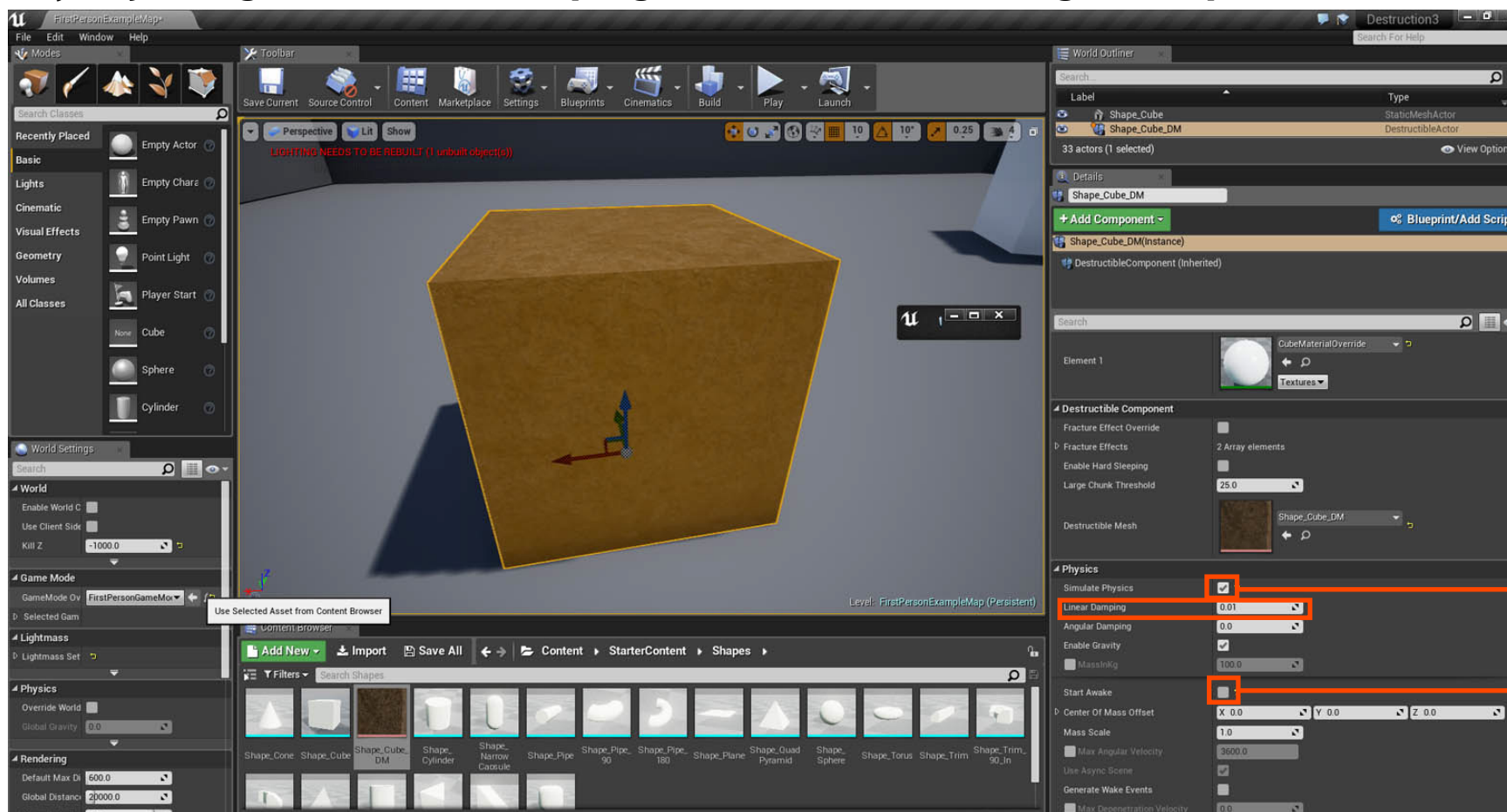
10. Finally we'll put an explosion Particle System and Sound Effect into the scene.



11. Select the cube and in the Details panel click “Simulate Physics” and open and uncheck “Start Awake”.

This will prevent the cube from crumbling through the mere force of gravity, even before you try and break it.

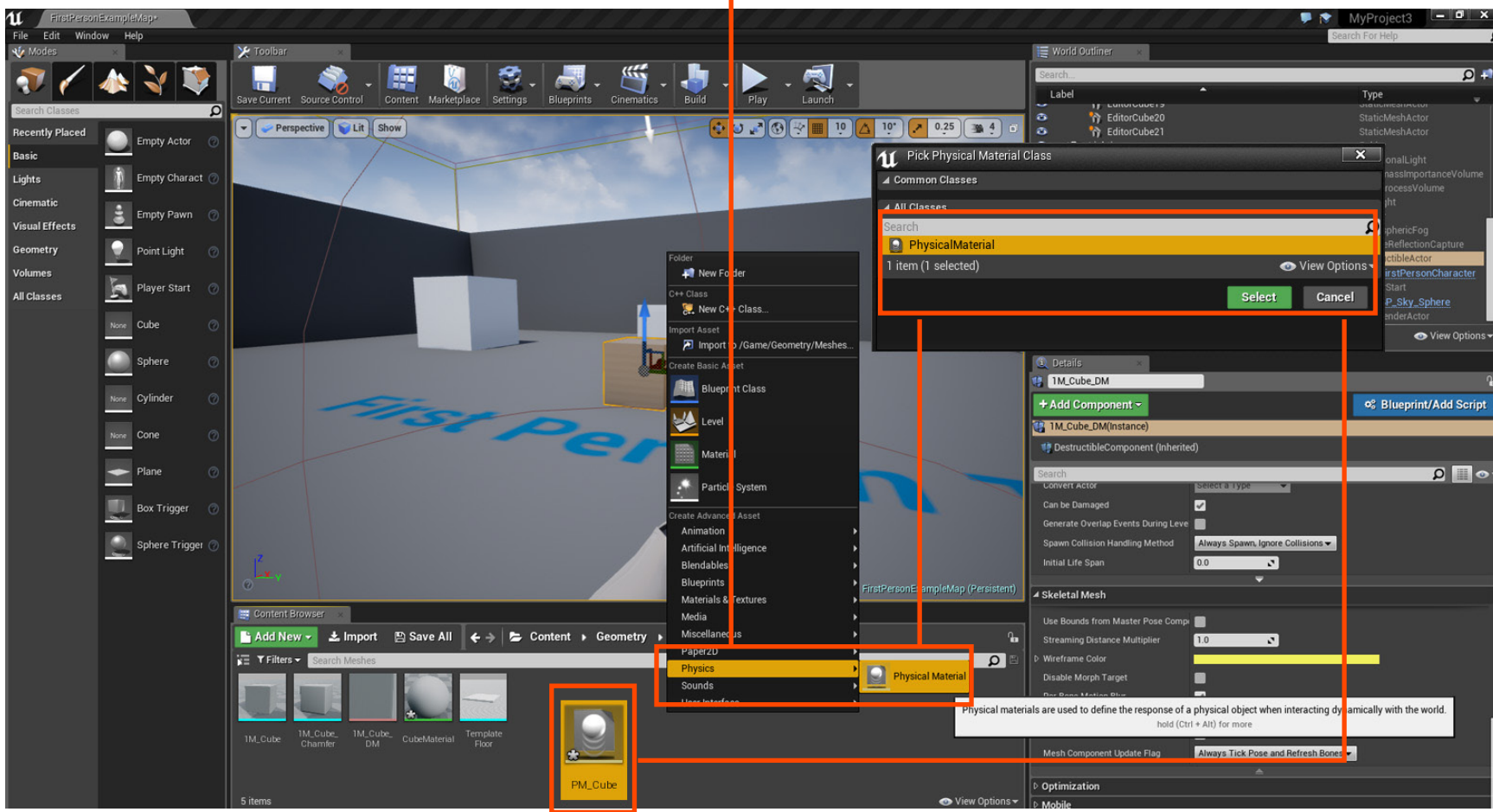
Try adjusting the “Linear Damping” to slow the scattering of the parts



NOTE: Where you place the box is important. A box floating above the floor behaves differently than a box embedded into the floor or a box flat on the floor.

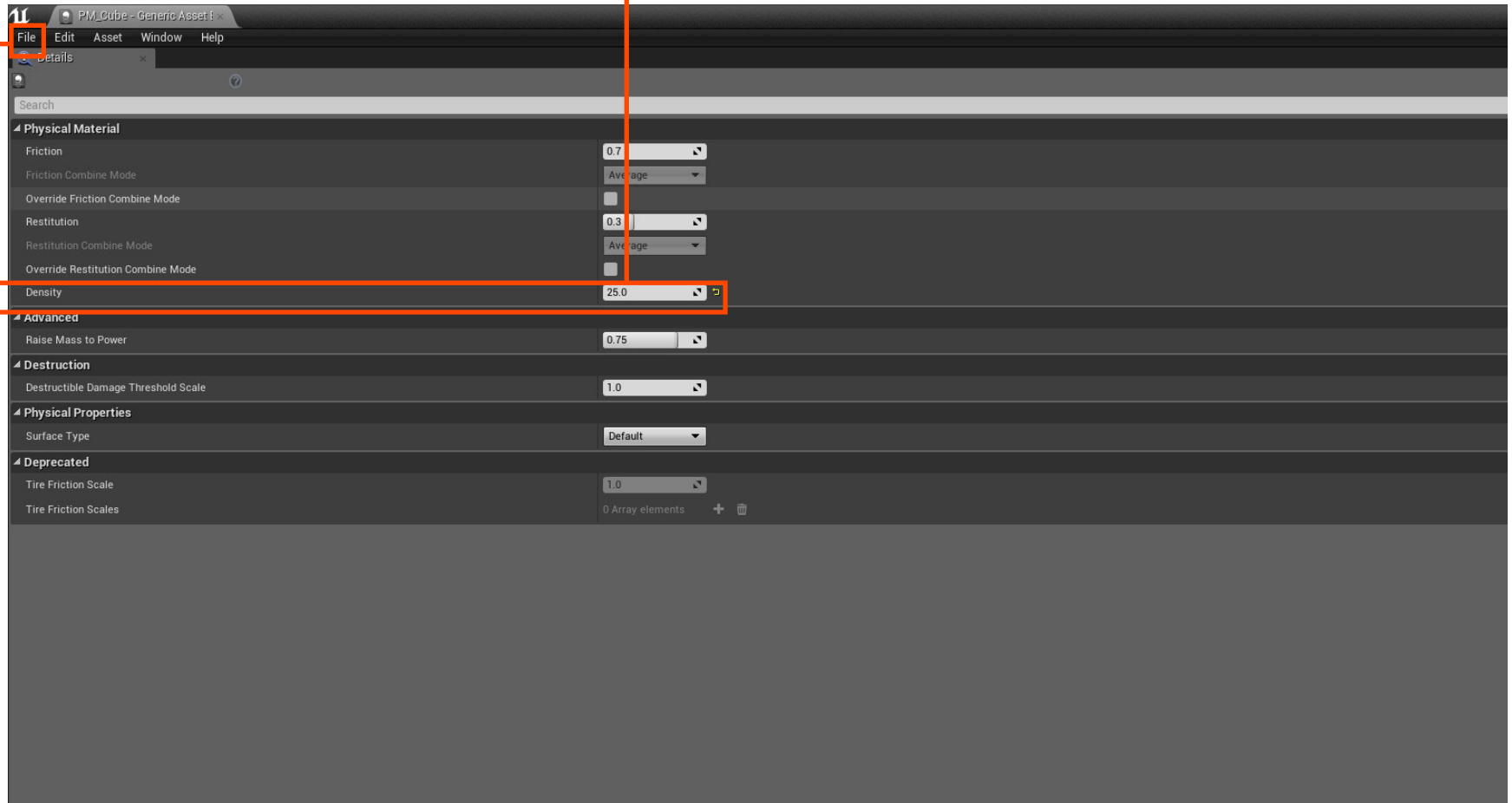
To gain more control over the fracturing of a mesh you need to add a "Physical Material".

12. Select the cube and right click in the Content Browser and create a new Physical Material. Name it.

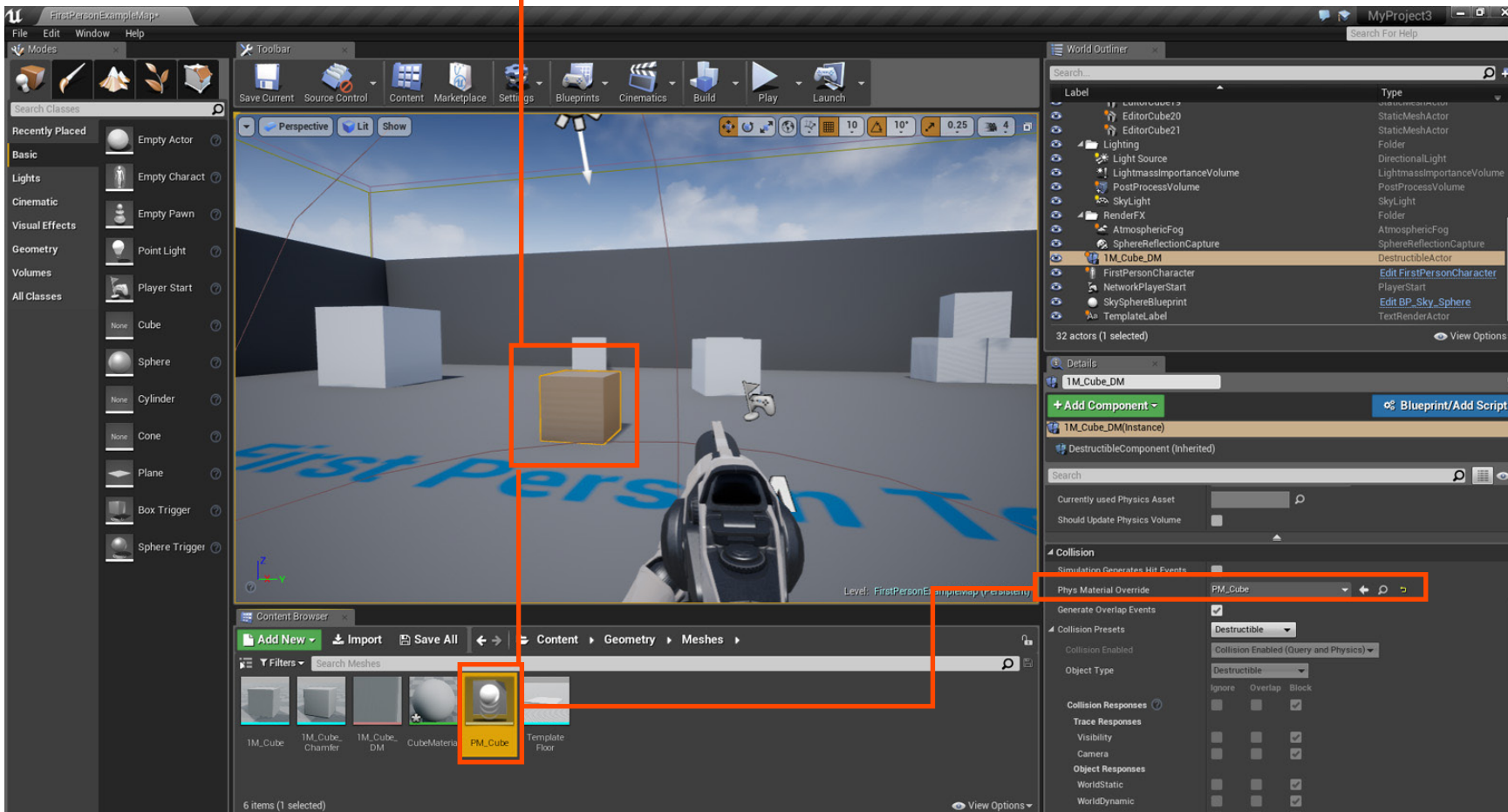


13. Double click the new Physical Material and adjust the Density.

Save.



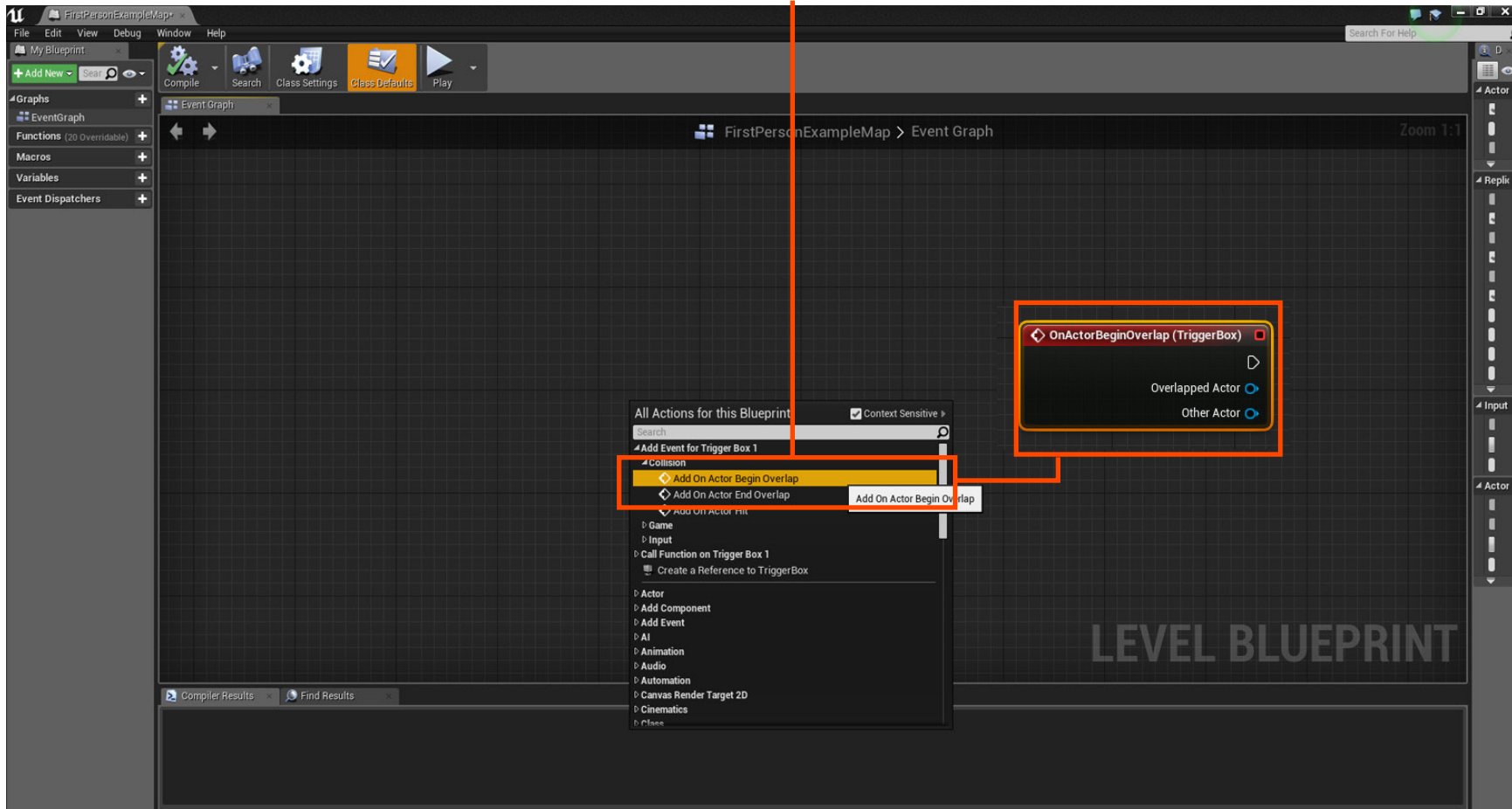
14. Select the cube in the viewport and drag the Physical Material into the override slot.



Suppose rather than shooting at the mesh you want to trigger the explosion. You might use this to set off a land mine or destroy a wall and open a secret passage.

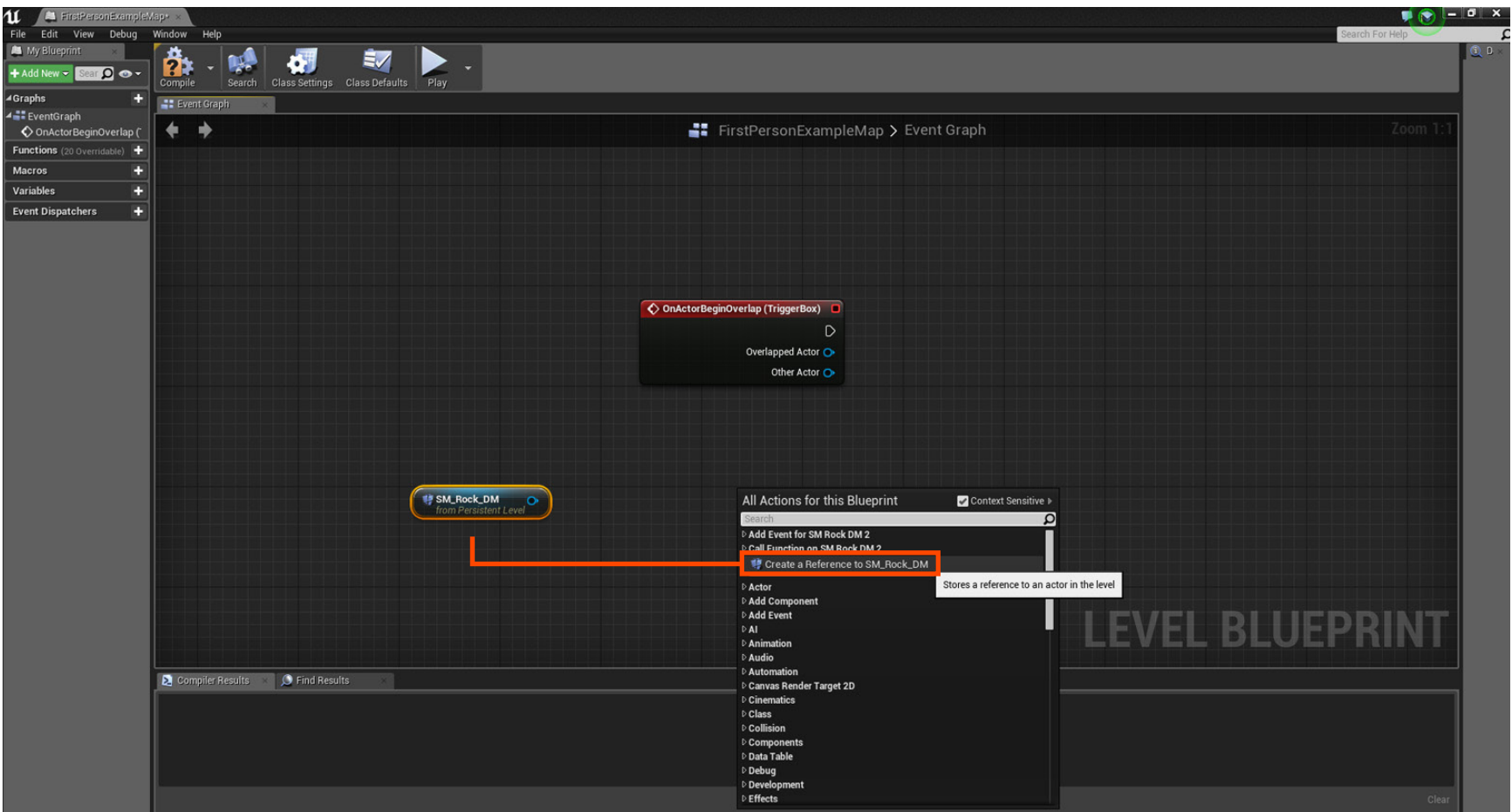
Place a Box Trigger into your scene. Select it and open a Blueprint

Right click in Blueprint window and select

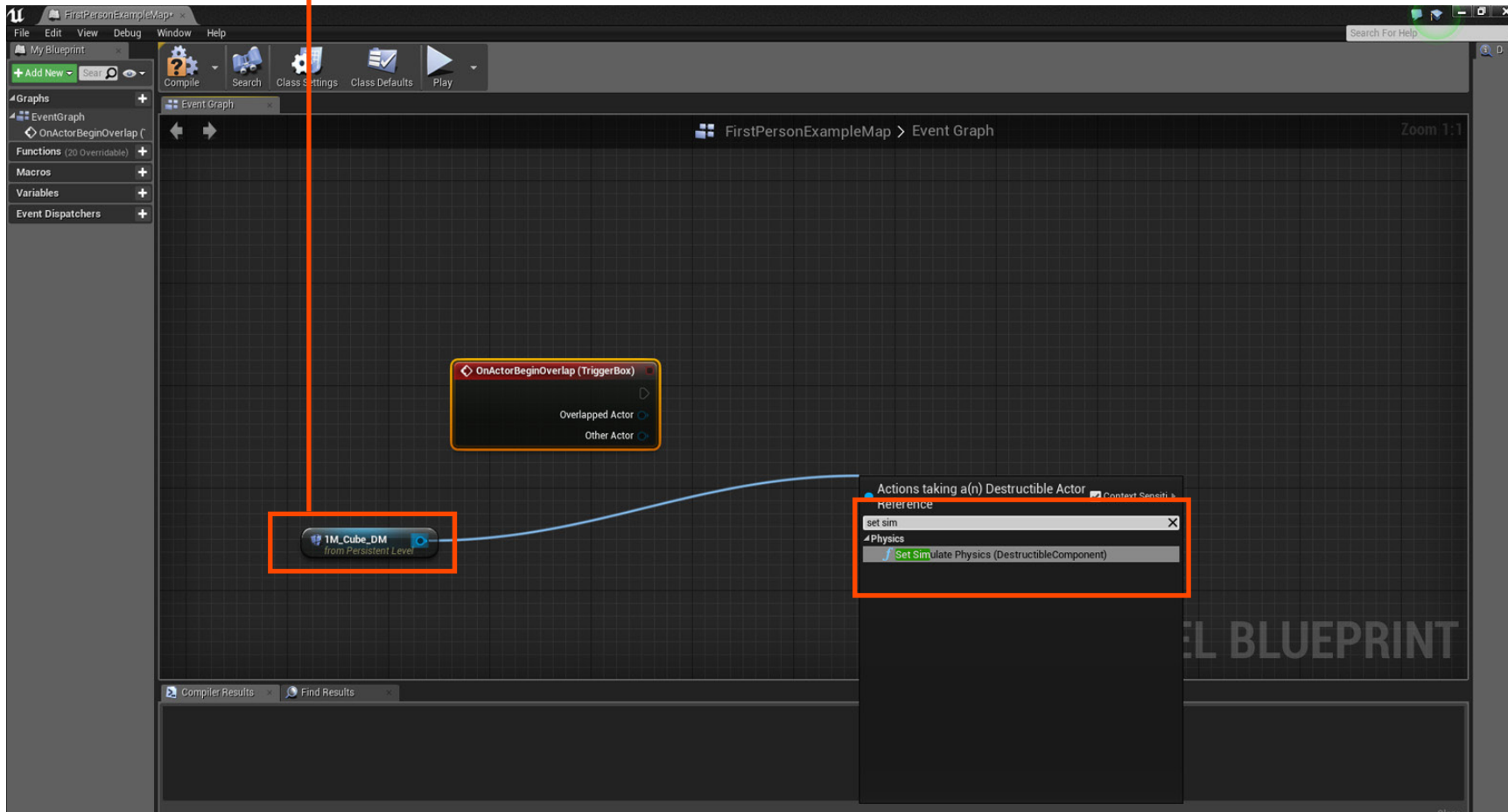




Select the object that you're destroying in your scene. Open the Blueprint, right click and type choose "Create Reference To ..."

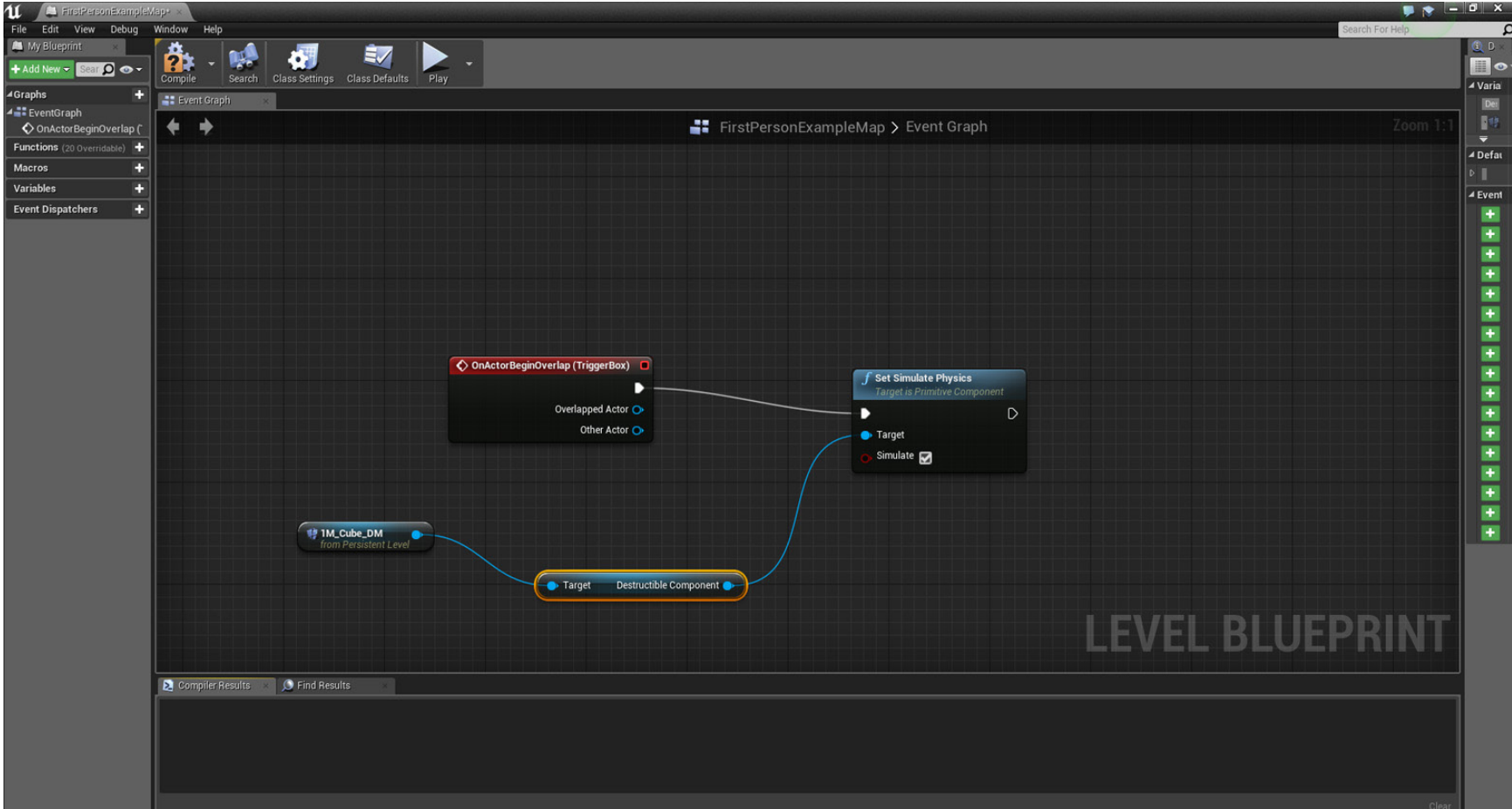


Drag from the reference and type "Set Sim.."





Continue constructing the Blueprint as shown





Continue constructing the Blueprint as shown

