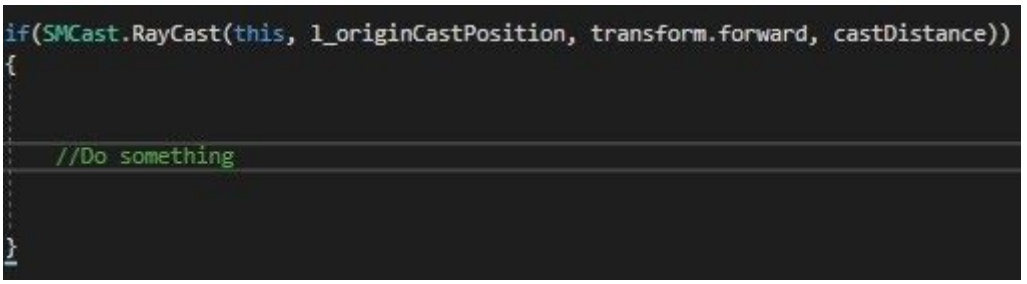
VISUAL RAYCAST

BY SIMPLE MAN

VISUAL RAYCAST ASSET this is an extension to the Physics.Raycast system that already exists in Unity. A distinctive feature of the innovation is the ability to visually represent the operation of this system. The ray will react to hitting the object by changing its color, which can also be adjusted. Visualization of the work of Physics.Raycast allows you to easily debug your project, without writing additional debuggers. The asset will also be extremely useful for beginners in Unity, as it clearly shows the Physics.Raycast system works.

HOW TO USE RAYCAST?

To use the raycast method, you need to access the static **SMCast** class and call the **RayCast** method by specifying the necessary parameters. Example of calling a ray from a certain starting position in the forward direction with the maximum distance in [cast distance]:



FOR WHAT CAST RESULT IS NEEDED?

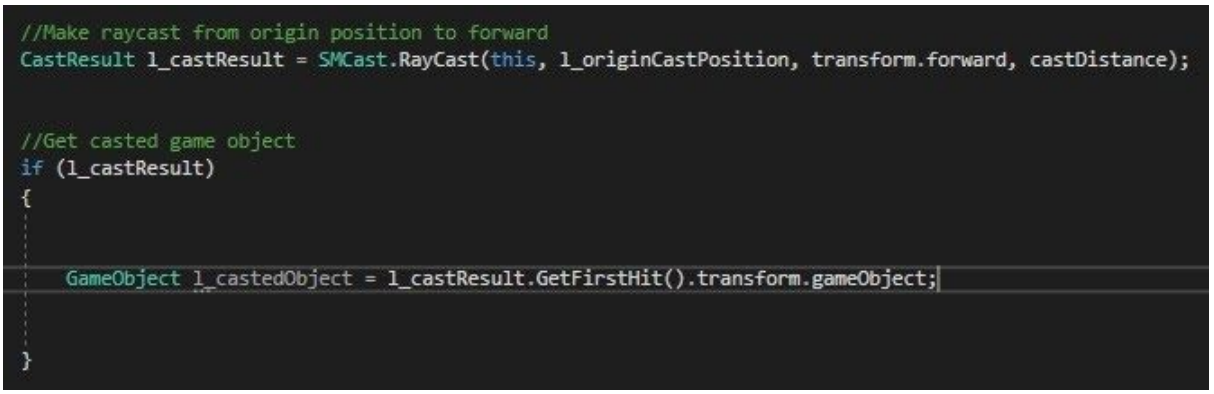
Method RayCast returns the class “CastResult” - result of cast operation.

The class “CastResult” contains the next data:

- RaycastHit[] hits - Recorded collisions with the objects
- RaycastHit GetFirstHit() - Returns first collision
- RaycastHit GetLastHit() - Returns last collision

HOW TO DETECT WHERE DID THE RAY HIT?

To detect which obstacle did the ray hit, write the following code and use the **GetFirstHit ()** command, which returns the first object that the ray encountered (it will be the only one when using raycast) :



```
//Make raycast from origin position to forward
CastResult l_castResult = SMCast.RayCast(this, l_originCastPosition, transform.forward, castDistance);


//Get casted game object
if (l_castResult)
{


    GameObject l_castedObject = l_castResult.GetFirstHit().transform.gameObject;


}
```

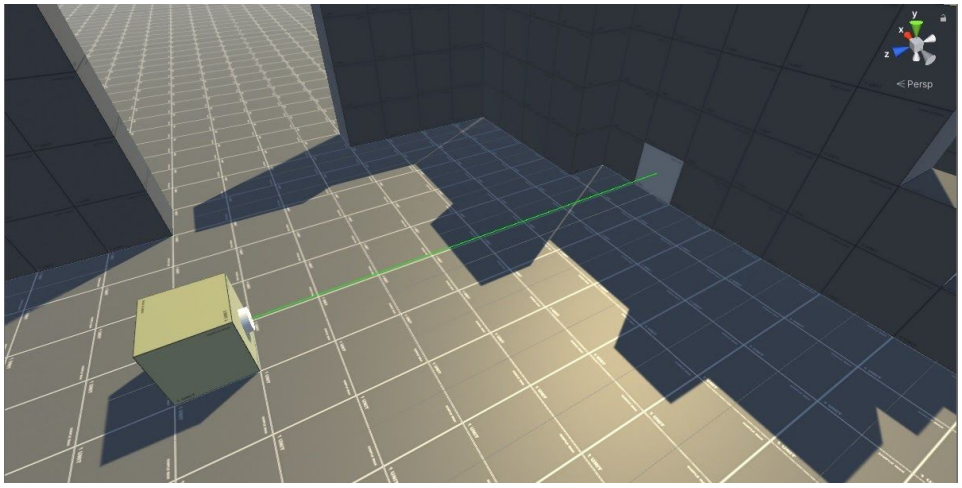
HOW TO USE RAYCAST ALL?

Raycast all is almost no different from the raycast discussed earlier. Its peculiarity is that it continues its path even after a collision with an object.

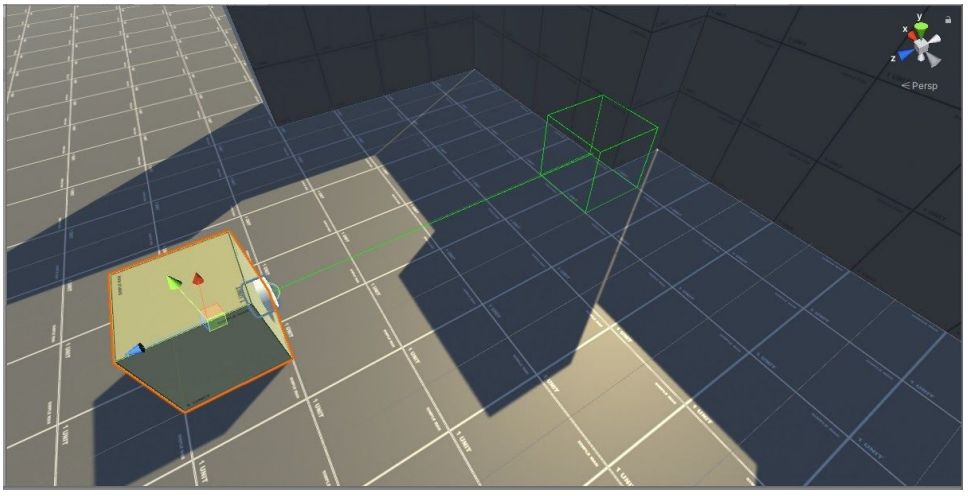
If you use the Raycast all method, note that all recorded hits will fall into the raycasthit[] hits array in the CastResult class returned.

* **BOX AND SPHERE CAST** calls in the same way. Examples of cast:

Raycast



Boxcast



Spherecast