

Object resets to original position

When an object that has been picked up by the player enters a trigger, it will leave the player's hands and revert back to its original location.

- 1) To begin, place some basic objects for the player to walk around on, then add the player controls (for this demo I simply used a preset FPS controller).
- 2) Create a cube and place it on a section of the floor, on the above demo I placed it at the start of a tunnel, where a separate behavior teleports the player to another location. Turn off the Mesh Renderer in the object's properties, and tick "Is Trigger" in the box collider.
- 3) Make sure the object contains a collider and rigidbody.
- 4) Add a new script to the cube, or for my demo, add to the script that contains the pick-up function that is attached to the object.

```
Vector3 originalPos;
Quaternion originalRot;

// Use this for initialization
void Start () {

    originalPos = new Vector3(gameObject.transform.position.x, gameObject.transform.position.y, gameObject.transform.position.z);
    originalRot = Quaternion.Euler(gameObject.transform.rotation.x, gameObject.transform.rotation.y, gameObject.transform.rotation.z);

}

void OnTriggerEnter(Collider other)
{
    if (other.gameObject.tag == "teleport" )
    {
        gameObject.transform.position = originalPos;
        gameObject.transform.rotation = originalRot;
    }
}
```

4) Create a “Vector3” and “Quaternion” variable, this will read the object’s position and rotation respectively. Name them “originalPos” and “originalRot”.

5) In the Start event, the code will assign the starting position and rotation of the object to the variable using the code, “originalPos = new Vector3(gameObject.transform.position.x, gameObject.transform.position.y, gameObject.transform.position.z);”. This will need to be repeated below, replacing “position” with “rotation”, “Vector3” with “Quaternion”, and “originalPos” with “originalRot”.

6) Inside the OnTriggerEnter event, create the if statement, “ if (other.gameObject.tag == “teleport”)”. This will make the object only activate if the trigger that the object passes through has the tag “teleport”.

7) Inside the if statement, type “gameObject.transform.position = originalPos” and “gameObject.transform.rotation = originalRot;”. When the object passes through the trigger, this will change the object’s position and rotation to what was read at the beginning of the scene.

