

```
1 using System.Collections;
2 using System.Collections.Generic;
3 using UnityEngine;
4 /* Translates Game levels into readable data for scripts
5  *
6  * NOTE: we may be able to remove playerPos and merge it with the player entirely
7  */
8
9
10 public class FloorDetection : MonoBehaviour
11 {
12     static public int CurrentLevelNumber()
13     {
14         LayerMask playerMask = LayerMask.GetMask("Room"); // Grabs layermask to ↗
15         // filter all but our rooms.
16         GameObject player = GameObject.Find("PlayerPos"); // Grabs player ↗
17         // position.
18         Vector2 playerPos2D = new Vector2(player.transform.position.x, ↗
19         player.transform.position.y); // Convert playerPos to ↗
20         // vector.
21         RaycastHit2D playerCollider = Physics2D.Raycast(playerPos2D, ↗
22         Vector2.zero, Mathf.Infinity, playerMask); // Cast a ray from player to ↗
23         // detect which floor we
24
25         // are on.
26         string currentFloorString =
27         playerCollider.collider.gameObject.name;
28         // Convert collider name to string for translation.
29
30         if (currentFloorString == "Level ↗
31         1") ↗
32         // Translates levels into ints.
33         {
34             return 1;
35         }
36         else if (currentFloorString == "Level 2")
37         {
38             return 2;
39         }
40         else if (currentFloorString == "Level 3")
41         {
42             return 3;
43         }
44         else if (currentFloorString == "Level 4")
45         {
46             return 4;
47         }
48         else if (currentFloorString == "Level 5")
49         {
50             return 5;
51         }
52         else if (currentFloorString == "Level 6")
```

```
42     {
43         return 6;
44     }
45     else if(currentFloorString == "Level 7")
46     {
47         return 7;
48     }
49     else if(currentFloorString == "Level 8")
50     {
51         return 8;
52     }
53
54     return 0; // 0 ↗
55     if no floor detected
56 }
57 static public int TargetLevelNumber(Touch touch)
58 {
59     LayerMask playerMask = LayerMask.GetMask("Room"); // ↗
60     Filters all layers but Room.
61
62     Vector3 touchPos = Camera.main.ScreenToWorldPoint(touch.position); // ↗
63     Convert touchPos into Vector2
64     Vector2 touchPos2D = new Vector2(touchPos.x, touchPos.y);
65     RaycastHit2D touchCollider = Physics2D.Raycast(touchPos2D, Vector2.zero, // ↗
66     Mathf.Infinity, playerMask); // Cast ray from touch.
67
68     string targetFloorString = // ↗
69     touchCollider.collider.gameObject.name; // ↗
70     // Convert collider name to string for translation.
71
72     if (targetFloorString == "Level // ↗
73     1") // ↗
74     // Translates levels into ints.
75     {
76         return 1;
77     }
78     else if (targetFloorString == "Level 2")
79     {
80         return 2;
81     }
82     else if (targetFloorString == "Level 3")
83     {
84         return 3;
85     }
86     else if (targetFloorString == "Level 4")
87     {
88         return 4;
89     }
90     else if (targetFloorString == "Level 5")
91     {
92         return 5;
93     }
94 }
```

```
86     else if (targetFloorString == "Level 6")
87     {
88         return 6;
89     }
90     else if (targetFloorString == "Level 7")
91     {
92         return 7;
93     }
94     else if (targetFloorString == "Level 8")
95     {
96         return 8;
97     }
98     return 0;
99     if no floor detected
100 }
101 }
102
```