

# Digital Game Based Learning am Beispiel der Programmierung in der Unity Engine

Entwicklung eines Simulationsspiels für das Erlernen der Unity-spezifischen Programmierparadigmen

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```
1 //> This script is assigned at 'Game/PlayerPrefab'
2 using UnityEngine;
3 using System.Collections;
4
5 public class Player : PlayerController
6 {
7     void Start() => StartCoroutine(AddMoves());
8
9     IEnumerator AddMoves()
10 {
11     yield return new WaitForEndOfFrame();
12
13     for (int x = 0; x < 2; x++)
14         TurnLeft();
15
16     for (int x = 0; x < 7; x++)
17     {
18         yield return new WaitUntil(() => !Moving());
19         yield return new WaitUntil(() => !Blocked());
20
21         MoveForward();
22     }
23
24 }
25
26 }
27
28 bool Blocked()
29 {
30     Vector3 rayOrigin = new Vector3(transform.position.x, 0.15F, transform.position.z);
31
32     return Physics.Raycast(rayOrigin, transform.forward, 1);
33 }
34
35
36 }
37 }
```

1 Blocked MoveForward Moving new new TurnLeft WaitUntil WaitUntil yield yield forward Physics Raycast rayOrigin

∞ a - z 0 - 9 Punctuation print void bool int float if else for return true false null

[09:28:18] OOPS! Player.cs could not be compiled. Check alert below!

COMPILER ERROR in Player.cs at Line 22!
; expected



Code Editor

Player.cs GateController.cs File.cs PlayerController.cs Enemy.cs EnemyShip.cs LevelStart.cs

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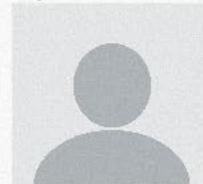
    MoveForward()
}

return Physics.Raycast(rayOrigin, transform.forward, 1);
```

# INSTANT HELP FORUM

## Coroutines in Unity

### Player X



Joined: Jan 22, 2051  
Level: 4  
Posts: 3

Hello everybody,

What can I do with Coroutines (IEnumerator) in Unity?

*Best wishes  
Player X*

### Vincent Schiller



Joined: Okt 15, 2019  
Level: 9001  
Posts: 153

Howdy Player X,

A coroutine is like a function that has the ability to pause execution and return control to Unity but then to continue where it left off on the following frame.

To pause the execution you can use something like WaitUntil() as shown in the following example.

```
void Start()
{
    StartCoroutine(Example());
}

IEnumerator Example()
{
    //do stuff before pausing the execution
    yield return new WaitUntil(() => bool);
    //do stuff after bool is finally true
}
```

*Best wishes  
Vincent Schiller*

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