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Question : Pong(ball to change direction)

0

hello I am creating this pong game to train on but I am faced with a problem that I can't solve. I read everywhere but no one really helped a lot. They told me to find the distance but then what?? So here is my problem :

How can i make my ball change direction depending on the place it hits the cube. For example if the ball hits it from down it changes direction accordingly. Here is my code till now

```

var other : Transform;
var dist :int;
function Update ()
{
5.
    if (other) {
        dist = Vector3.Distance(other.position, transform.position);
        print ("Distance to other: " + dist);
    }
10.
}

function OnTriggerEnter(collisionInfo : Collider)
{
15. if(collisionInfo.gameObject.tag == "player1")
    {
        //transform.position.x = 1130.362;
        rigidbody.velocity = Vector3.left * 4000;
20.
    }

    if(collisionInfo.gameObject.tag == "player2")
    {
25. //transform.position.x = -1130.362;
        rigidbody.velocity = Vector3.right * 4000;
30.
    }
}


```

thank you

[change](#) | [direction](#) | [pong](#)

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asked Sep 24 '10 at 11:57 AM


 anthony
 15 ● 3 ● 3 ● 6

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asked: Sep 24 '10 at 11:57 AM

Seen: 4833 times

Last Updated: Sep 11 '12 at 07:13 PM

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There's no Vector3.left. only up, forward, right, one and zero. If you want to go left you two -Vector3.right with a minus

spinaljack Sep 24 '10 at 03:32 PM

Atari is the owner of all rights on Pong. Please be aware of when using this name :-)

efge Sep 24 '10 at 03:59 PM

okay thanks guys but there is just one issue! the ball is slowing down although the bouncyness is 1 and the bounce is set to maximum. I tried adding that when we have collision to give it a force but it didnt work(rigidbody.AddForce)! do you have anyidea guys thanks!

anthony Sep 24 '10 at 05:31 PM

3 answers:

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0

I'm not really sure why your script is trying to do things the hard way, but I'll try to give you the simplest advice that I can to making a "pong" game. You say people told you to find a distance, but I'm not sure why you would need that - what sort of questions did you ask?

Physics = Pong

Unity's physics system can do most of the work for you as you may have noticed since you're using a rigidbody. If the paddles and the walls have colliders and your ball has a rigidbody, then your Pong game is almost done. Create a physic material with bounciness set to 1 and no friction and apply it to everything. Write a script to position and start your ball moving with AddForce or by setting velocity once when the player in possession of the ball fires it (and when you first start if a player doesn't start in possession of the ball). Add triggers to the ends of your play area with scripts to manage scoring and who has control of the ball when someone scores). You have Pong.

Pong la mode

Not using physics to do the work, you would actually have to think and do some setup, but Pong's rather easy.

Assuming everything is the same as above, except you have no rigidbody or Physic material and you are moving the ball yourself, all you would need different is the ball's movement/trigger script and to make some assumptions about your setup.

```
var velocity : Vector3;
```

```
function Update() {
    transform.Translate(velocity * Time.deltaTime, Space.World);
}
```

```
function OnTriggerEnter(other : Collider) {
    //ALL collision objects must be oriented to face the play area
    velocity = Vector3.Reflect(-velocity, other.transform.forward);
}
```

That's kind of boring though, as the speed of the paddles at the time of impact isn't really taken into account, so let's add that.

```
var velocity : Vector3;
```

```
function Update() {
    transform.Translate(velocity * Time.deltaTime, Space.World);
}
```

```
function OnTriggerEnter(other : Collider) {
    //ALL collision objects must be oriented to face the play area
    velocity = Vector3.Reflect(-velocity, other.transform.forward);

    //paddles are tagged player, but named differently
    if(other.gameObject.tag == "player") {
        //Paddles have a script called PlayerControl which contains their veloc
        var script : PlayerControl = other.GetComponent(PlayerControl);
        velocity += script.velocity;
    }
}
```

more ▼

answered Sep 24 '10 at 03:31 PM



skovacs1

9.8k • 11 • 23 • 90

okay thanks guys but there is just one issue! the ball is slowing down although the bouncyness is 1 and the bounce is set to maximum. I tried adding that when we have collision to give it a force but it didnt work(rigidbody.AddForce)! do you have anyidea guys thanks! anthony 0 secs ago

anthony Sep 24 '10 at 05:32 PM

Did you apply the Physic material to everything?

skovacs1 Sep 27 '10 at 02:00 PM

yeah i did! anwavim still try to see what the problem is but i guess its the only way i learn!

paddle

Can I customize the resolution window that appears at the start of my executable?

Is it possible to change Resolution Dialog

Change Material of an Object.

Making all instances of an object glow, and not get affected by post-processing

How to switch the texture being used by the material of the mesh renderer

your code. Anyway, in our case, to see what the problem is, but guess it's the only way to learn.

anthony Sep 27 '10 at 07:45 PM

Is drag turned off? If not, your object will slow down as it moves.

skovacs1 Sep 28 '10 at 02:02 PM

As a test, I've a simple scene. 1. Create a sphere and two cubes, one above the sphere and one below. 2. Add a bounciness=1 material to all three. 3. Add a rigidbody to the sphere and turn off gravity. 4. Add the script 'function Start() {rigidbody.AddForce(Vector3.up*1000);}function FixedUpdate(){Debug.Log(rigidbody.velocity);}' to the sphere. The ball bounces perpetually without losing velocity (as noted in the log). Your Pong is just an extension of this simple setup, so I imagine that your problem stems from something simple like missing the physic material on something.

skovacs1 Sep 28 '10 at 02:16 PM

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How do i put that in here like where would i put it in this script and is that all i have to do ?

0

using UnityEngine; using System.Collections;

public class BallMovement : MonoBehaviour {

// Use this for initialization void Start () {} // Update is called once per frame void Update () {} }

more ▼

answered Sep 11 '12 at 07:13 PM



JaredRollo

1 • 1

You can easily make the game using physics and rigid bodies so long as the ball doesn't move too fast the the walls aren't too thin.

0

You can set the movement to a single plane by constantly setting z velocity to 0 on the ball and set the rigid body to have 0 drag and no gravity and freeze rotation to be on the safe side.

Then you set all the bounce properties of every material to maximum bounce and 1 bounciness to make sure the ball doesn't slow down with each hit.

more ▼

answered Sep 24 '10 at 03:37 PM



spinaljack

9k • 18 • 31 • 90

what skovacs1 said :)

spinaljack Sep 24 '10 at 03:38 PM

Your answer

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