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using System.Collections;
using System.Collections.Generic;
using UnityEngine;
using System;

public class CharacterController : MonoBehaviour
{
    // variables pour le déplacement
    public float speed = 100.0f;
    public float rotateSpeed = 90.0f;
    public float gravity = 100.0f;

    // variables
    private Vector3 moveDirection = Vector3.zero;
    private bool isGrounded = false;
    private CharacterController controller;
    private Animator anim;

    // Start is called before the first frame update
    void Start()
    {
        controller = GetComponent<CharacterController>();
        anim = GetComponent<Animator>();
    }

    // Update is called once per frame
    void Update()
    {
        BaseMovement();
    }

    public void BaseMovement()
    {
        if (isGrounded)
        {
            moveDirection = new Vector3(Input.GetAxis("Horizontal"), 0,
Input.GetAxis("Vertical"));
            anim.SetFloat("Walking", (float)Math.Sqrt((double)moveDirection.x *
(double)moveDirection.x + (double)moveDirection.y * (double)moveDirection.y +
(double)moveDirection.z * (double)moveDirection.z));
            moveDirection = transform.TransformDirection(moveDirection);
            moveDirection *= speed;
        }

        // on applique la gravité
        moveDirection.y -= gravity * Time.deltaTime;
        Physics.SyncTransforms();
        var flags = controller.Move(moveDirection * Time.deltaTime);
    }
}

```

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// Gestion de la rotation du personnage
transform.Rotate(0, Input.GetAxis("Mouse X") * rotateSpeed * Time.deltaTime,
0);
// Détection du sol
isGrounded = CollisionFlags.CollidedBelow != 0;
}
}
```