

```

using UnityEngine;
using System.Collections;
/*
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 */

public class FollowCamera : MonoBehaviour
{
    //object to follow
    public GameObject target;

    //camera follow parameters
    public float followSpeed;
    public float horizontalOffset;
    public float verticalOffset;
    public float minSpeed;
    private Vector3 normalizedVelocity;
    private Vector3 newCameraPosition;
    private float trackingSpeed;

    //LateUpdate() made for a jerky camera so this code was
    moved to FixedUpdate()
    void FixedUpdate ()
    {
        //calculate desired new position of the
        camera based on the ball's velocity (direction) and offsets
        normalizedVelocity = Vector3.Normalize
        (target.rigidbody.velocity);
        newCameraPosition =
        target.transform.position - (normalizedVelocity * horizontalOffset) +
        verticalOffset * Vector3.up;

        //use the magnitude of the ball's
        velocity to smooth camera transitions,
        //but we don't want the camera to be too
        slow
        trackingSpeed =
        target.rigidbody.velocity.magnitude;
        if (trackingSpeed <= minSpeed)
            trackingSpeed =
        minSpeed;

        //move camera to new position smoothly
        via lerp and keep the camera pointed at the ball
        transform.position = Vector3.Lerp
        (transform.position, newCameraPosition, Time.deltaTime * trackingSpeed *
        followSpeed);
        transform.LookAt (target.transform);
    }
}

```