



Automatically move toward a target using its tag 2D (Homing Missile)

https://youtu.be/Xe-hJM9U_6k

Place an object as target give it the tag name Enemy. Give the game object that needs to move to this enemy this script :

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

public class HomingMissile : MonoBehaviour
{
    //Moving automatically toward any target by using its tag 2D. (Homing Missile)//
    //by René Pol for the Script Library -2021- RP-Interactive.nl@//

    private GameObject target;
    public float speed = 5f;
    public float rotatingSpeed = 200f;

    private Rigidbody2D rb;
    private GameObject target;

    void Start()
    {
        target = GameObject.FindGameObjectWithTag("Enemy");
        rb = GetComponent<Rigidbody2D>();
    }

    void FixedUpdate()
    {
        Vector2 point2Target = (Vector2)transform.position -
        (Vector2)target.transform.position;
        point2Target.Normalize();
        float value = Vector3.Cross(point2Target, transform.up).z;
        rb.angularVelocity = rotatingSpeed * value;
        rb.velocity = transform.up * speed;
    }
    void OnCollisionEnter2D()
    {
        Destroy(gameObject);
    }
}
```

You can change the settings of Rotation speed and movement speed in the inspector's view. The rocket has a box collider 2D and a Rigidbody2D while the target has only a box collider 2D. The rocket will always go to the given game object with the right tag name.