// Movement in AR in x and y direction

using System.Collections;

using System.Collections.Generic;

using UnityEngine;

public class Movement : MonoBehaviour

{

//Initialize Variables

GameObject getTarget;

bool isMouseDragging;

Vector3 offsetValue;

Vector3 positionOfScreen;

// Use this for initialization

void Start()

{

}

void Update()

{

//Mouse Button Press Down

if (Input.GetMouseButtonDown(0))

{

RaycastHit hitInfo;

getTarget = ReturnClickedObject(out hitInfo);

if (getTarget != null)

{

isMouseDragging = true;

//Converting world position to screen position.

positionOfScreen = Camera.main.WorldToScreenPoint(getTarget.transform.position);

offsetValue = getTarget.transform.position - Camera.main.ScreenToWorldPoint(new Vector3(Input.mousePosition.x, Input.mousePosition.y, positionOfScreen.z));

}

}

//Mouse Button Up

if (Input.GetMouseButtonUp(0))

{

isMouseDragging = false;

}

//Is mouse Moving

if (isMouseDragging)

{

//tracking mouse position.

Vector3 currentScreenSpace = new Vector3(Input.mousePosition.x, Input.mousePosition.y, positionOfScreen.z);

//converting screen position to world position with offset changes.

Vector3 currentPosition = Camera.main.ScreenToWorldPoint(currentScreenSpace) + offsetValue;

//It will update target gameobject's current postion.

getTarget.transform.position = currentPosition;

}

}

//Method to Return Clicked Object

GameObject ReturnClickedObject(out RaycastHit hit)

{

GameObject target = null;

var ray = Camera.main.ScreenPointToRay(Input.mousePosition);

if (Physics.Raycast(ray.origin, ray.direction \* 10, out hit))

{

target = hit.collider.gameObject;

}

return target;

}

}