

ARHitTestExample.cs

Old Script (In the video)

```
1 using System;
2 using System.Collections.Generic;
3
4 namespace UnityEngine.XR.iOS
5 {
6     public class UnityARHitTestExample : MonoBehaviour
7     {
8         public Transform m_HitTransform;
9
10        bool HitTestWithResultType (ARPoint point, ARHitTestResultType resultTypes)
11        {
12            List<ARHitTestResult> hitResults = UnityARSessionNativeInterface.GetARSessionNativeInterface ().HitTest (point, resultTypes);
13            if (hitResults.Count > 0) {
14                foreach (var hitResult in hitResults) {
15                    Debug.Log ("Got hit!");
16                    m_HitTransform.position = UnityARMatrixOps.GetPosition (hitResult.worldTransform);
17                    m_HitTransform.rotation = UnityARMatrixOps.GetRotation (hitResult.worldTransform);
18                    Debug.Log (string.Format ("x:{0:0.#####} y:{1:0.#####} z:{2:0.#####}", m_HitTransform.position.x, m_HitTransform.position.y, m_HitTransform.position.z));
19                }
20            }
21            return true;
22        }
23        return false;
24    }
25
26    // Update is called once per frame
27    void Update () {
28        if (Input.touchCount > 0 && m_HitTransform != null)
29        {
30            var touch = Input.GetTouch(0);
31            if (touch.phase == TouchPhase.Began || touch.phase == TouchPhase.Moved)
32            {
33                var screenPosition = Camera.main.ScreenToViewportPoint(touch.position);
34                ARPoint point = new ARPoint {
35                    x = screenPosition.x,
36                    y = screenPosition.y
37                };
38
39                // prioritize results types
40                ARHitTestResultType[] resultTypes = {
41                    ARHitTestResultType.ARHitTestResultTypeExistingPlaneUsingExtent,
42                    // if you want to use infinite planes use this:
43                    //ARHitTestResultType.ARHitTestResultTypeExistingPlane,
44                    ARHitTestResultType.ARHitTestResultTypeHorizontalPlane,
45                    ARHitTestResultType.ARHitTestResultTypeFeaturePoint
46                };
47
48                foreach (ARHitTestResultType resultType in resultTypes)
49                {
50                    if (HitTestWithResultType (point, resultType))
51                    {
52                        return;
53                    }
54                }
55            }
56        }
57    }
```

No change

New Script (currently there in your unity project)

```
1 using System;
2 using System.Collections.Generic;
3
4 namespace UnityEngine.XR.iOS
5 {
6     public class UnityARHitTestExample : MonoBehaviour
7     {
8         public Transform m_HitTransform;
9         public float maxRayDistance = 30.0f;
10        public LayerMask collisionLayer = 1 << 10; //ARKitPlane layer
11
12        bool HitTestWithResultType (ARPoint point, ARHitTestResultType resultTypes)
13        {
14            List<ARHitTestResult> hitResults = UnityARSessionNativeInterface.GetARSessionNativeInterface ().HitTest (point, resultTypes);
15            if (hitResults.Count > 0) {
16                foreach (var hitResult in hitResults) {
17                    Debug.Log ("Got hit!");
18                    m_HitTransform.position = UnityARMatrixOps.GetPosition (hitResult.worldTransform);
19                    m_HitTransform.rotation = UnityARMatrixOps.GetRotation (hitResult.worldTransform);
20                    Debug.Log (string.Format ("x:{0:0.#####} y:{1:0.#####} z:{2:0.#####}", m_HitTransform.position.x, m_HitTransform.position.y, m_HitTransform.position.z));
21                }
22            }
23            return false;
24        }
25
26        // Update is called once per frame
27        void Update () {
28            #if UNITY_EDITOR //we will only use this script on the editor side, though there is nothing that would prevent it from working on device
29            if (Input.GetMouseButtonDown (0)) {
30                Ray ray = Camera.main.ScreenPointToRay (Input.mousePosition);
31                RaycastHit hit;
32
33                //we'll try to hit one of the plane collider gameobjects that were generated by the plugin
34                //effectively similar to calling HitTest with ARHitTestResultType.ARHitTestResultTypeExistingPlaneUsingExtent
35                if (Physics.Raycast (ray, out hit, maxRayDistance, collisionLayer)) {
36                    //we're going to get the position from the contact point
37                    m_HitTransform.position = hit.point;
38                    Debug.Log (string.Format ("x:{0:0.#####} y:{1:0.#####} z:{2:0.#####}", m_HitTransform.position.x, m_HitTransform.position.y, m_HitTransform.position.z));
39
40                    //and the rotation from the transform of the plane collider
41                    m_HitTransform.rotation = hit.transform.rotation;
42                }
43            }
44            #else
45            if (Input.touchCount > 0 && m_HitTransform != null)
46            {
47                var touch = Input.GetTouch(0);
48                if (touch.phase == TouchPhase.Began || touch.phase == TouchPhase.Moved)
49                {
50                    var screenPosition = Camera.main.ScreenToViewportPoint(touch.position);
51                    ARPoint point = new ARPoint {
52                        x = screenPosition.x,
53                        y = screenPosition.y
54                    };
55
56                    // prioritize results types
57                    ARHitTestResultType[] resultTypes = {
58                        ARHitTestResultType.ARHitTestResultTypeExistingPlaneUsingExtent,
59                        // if you want to use infinite planes use this:
60                        //ARHitTestResultType.ARHitTestResultTypeExistingPlane,
61                        ARHitTestResultType.ARHitTestResultTypeHorizontalPlane,
62                        ARHitTestResultType.ARHitTestResultTypeFeaturePoint
63                    };
64
65                    foreach (ARHitTestResultType resultType in resultTypes)
66                    {
67                        if (HitTestWithResultType (point, resultType))
68                        {
69                            return;
70                        }
71                    }
72                }
73            }
74        }
75    }
```

Don't worry about this block

No change

There has been a minor update in the “ARHitTestExample” script since the video was recorded.

The update is very minor and does not effect the functionality of the script in any way.

As shown in the image above there are no changes in the parts denoted by red and blue blocks.

Only change in the new script is the addition of a piece of code which is shown inside the black block.

The code inside the black block does not add any extra functionality to the project, it is just used for debugging purpose.