

```

1 using System.Collections;
2 using System.Collections.Generic;
3 using UnityEngine;
4 /* Handles camera movement
5  *
6  * NOTE: zoomSpeed - affects how fast we can zoom in and out
7  *       zoomOutMin - affects how close we can zoom in
8  *       zoomOutMax - affects how far out we can zoom
9  *
10 * Also we may want to rework our inputs(GetMouseButtonDown) if it becomes a
11 * problem.
12 * Add a slide to our camera if a player swipes ~~~~
13 */
14 public class CameraController : MonoBehaviour
15 {
16     Vector3 touchStart;
17
18     const float zoomSpeed = 0.01f;
19     public float zoomOutMin = 1;
20     public float zoomOutMax = 8;
21
22     void Update()
23     {
24         if (Input.GetMouseButtonDown(0))
25         {
26             touchStart = Camera.main.ScreenToWorldPoint
27                 (Input.mousePosition); // Stores our first touch.
28         }
29         if(Input.touchCount ==
30             2) // Handles
31             condition for zoom
32         {
33             Touch touchZero = Input.GetTouch(0);
34             Touch touchOne = Input.GetTouch(1);
35
36             Vector2 touchZeroPrevPos = touchZero.position -
37                 touchZero.deltaPosition; // Stores position of previous touch
38                 locations.
39             Vector2 touchOnePrevPos = touchOne.position - touchOne.deltaPosition;
40
41             float prevMagnitude = (touchZeroPrevPos -
42                 touchOnePrevPos).magnitude; // Converts our coordinates into a
43                 magnitude.
44             float currentMagnitude = (touchZero.position -
45                 touchOne.position).magnitude;
46
47             float difference = currentMagnitude -
48                 prevMagnitude; // Takes the difference of our
49                 two magnitudes.
50
51             zoom(difference *
52                 zoomSpeed); // Zoom in

```

```
        or out depending on our magnitude.
41     }
42     else if (Input.GetMouseButton           // Handles condition
               (0))                          ↗
        for moving camera.
43     {
44
45         // Finds the difference of previous touchPos to current touchPos.
46         Vector3 direction = touchStart - Camera.main.ScreenToWorldPoint
               (Input.mousePosition);
47         direction.z =
               0;                               //
               Removes z from our vector.
48         Camera.main.transform.position +=
               direction;                       // We move our camera
               accordingly.
49     }
50     zoom(Input.GetAxis("Mouse ScrollWheel"));
51     void zoom(float increment)
52     {
53         // Allows us to change camera size while as long as we are within our limits
54
55         // (zoomOutMin and zoomOutMax).
56         Camera.main.orthographicSize = Mathf.Clamp(Camera.main.orthographicSize -
               increment, zoomOutMin, zoomOutMax);
57     }
58 }
59
```