



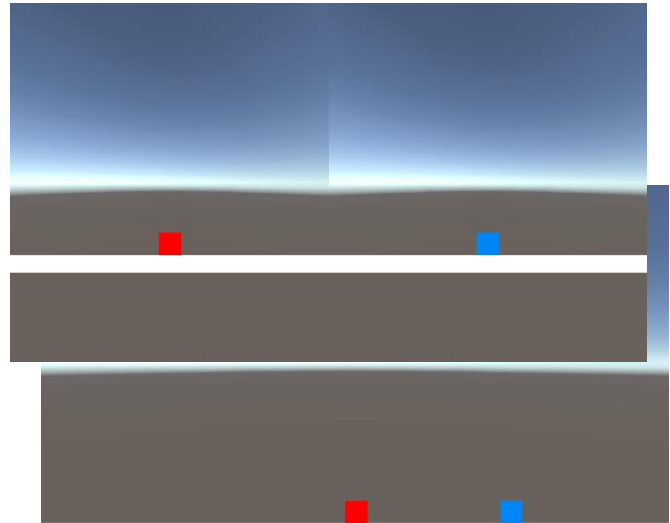
Split Screen 2D – Simple

Thank you for purchasing Split Screen 2D – Simple.

Do you remember the invention of the split screen, back when online multiplayer wasn't a thing. This is a great feature for offline multiplayer games whenever they are co-op or competitive.

The package is made for 2D games and it includes:

- ✓ Vertical Split Screen
- ✓ Horizontal Split Screen
- ✓ Dynamic split screen
- ✓ Using only one script
- ✓ Bonus scene with a 4P setup
- ✓ Explanation of the setup

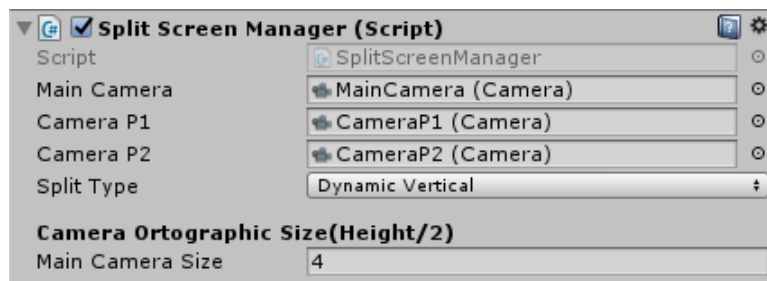


Explanation

Everything is manageable with only one script called “SplitScreenManager.cs” which has to be placed on the second Player as he is the trigger for the Dynamic Split Screen(will be explained later on).

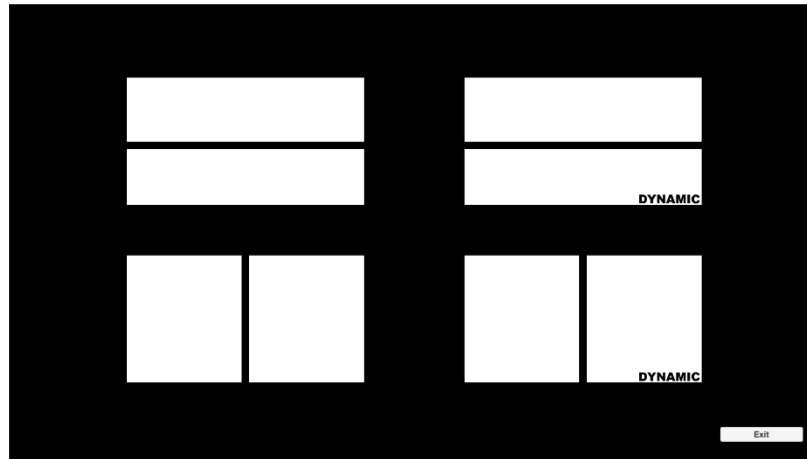
As input it requires:

- Main Camera(the whole screen camera which is preferably to follow Player1)
- Camera P1 (Player1's camera used in the split screen)
- CameraP2 (Player2's camera used in the split screen)
- Split Type
 - Dynamic Vertical
 - Vertical
 - Dynamic Horizontal
 - Horizontal





- Camera Orthographic Size (This is the half height size of the camera expressed in units)
 - If you set it to 4, the height of the camera will be 8
 - Horizontal's split screen cameras have their height divided by 2 because they don't show the full height



How it works (Dynamic Split Screen)

Enough with all the math now let's get to how this works.

“Dynamic” - characterized by constant change, activity, or progress.

We have a constant change between full screen and split screen. But how does this actually work?

Well it's quite simple the “SplitScreenManager.cs” needs to be placed on the Player2 GameObject and that object needs to be able to detect collision.

Split Screen activates when Player2 becomes invisible to the Main Camera

```
117 private void OnBecameInvisible()
118 {
119     if(isDynamic)
120         EnableSplitScreen(true);
121 }
122
123
124
```

Split Screen deactivates when Player1 and Player2 collide with each other

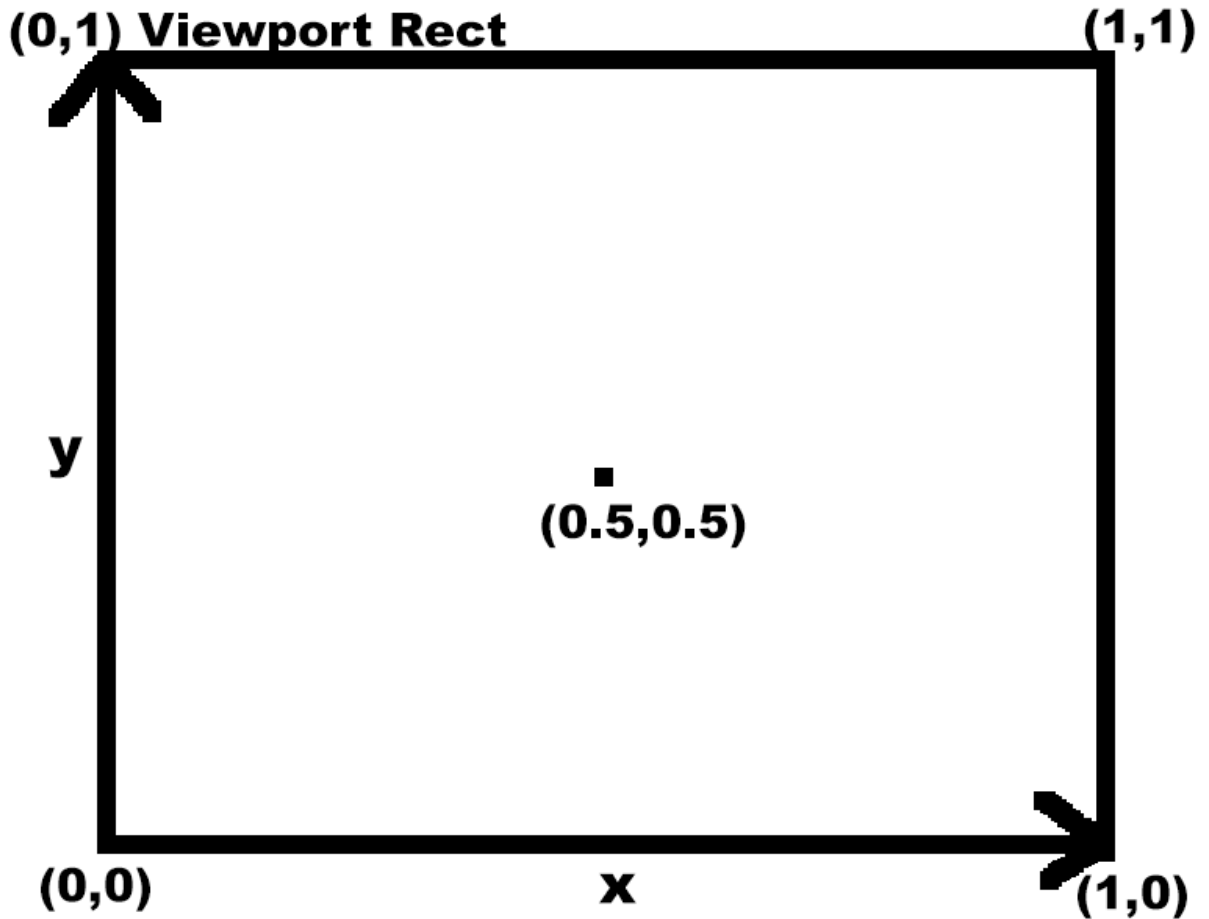
```
109 private void OnCollisionStay2D(Collision2D collision)
110 {
111     if (collision.gameObject.CompareTag("Player") && isDynamic)
112     {
113         EnableSplitScreen(false);
114     }
115 }
116
```



Camera Setup

Legend:

- x – x position on the screen
- y – y position on the screen
- W – width of the screen
- H – height of the screen



Horizontal Split Screen

x	y	W	H
0	0.5	1	0.5
0	0	1	0.5

Vertical Split Screen

x	y	W	H
0	0	0.5	1
0.5	0	0.5	1