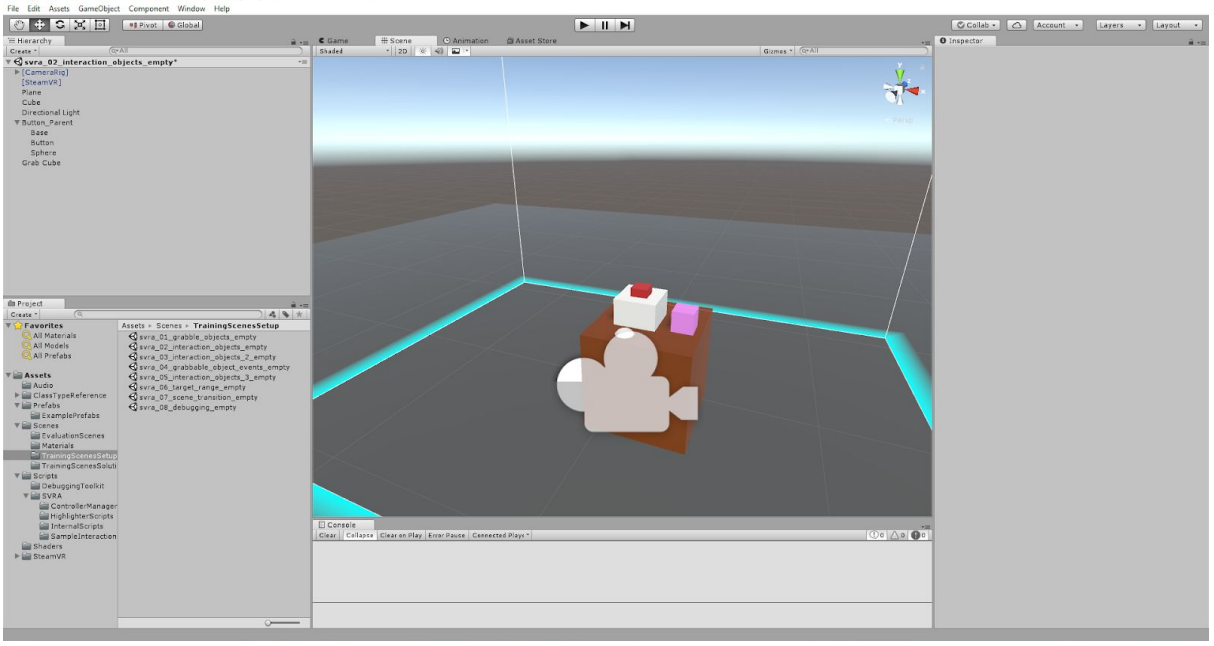
Tutorial 2: SVRA Interaction Objects

This tutorial will introduce the interactive objects and the event bridge system.



First setup the controllers and cube to be grabbable as was done in tutorial 1, except ensure that the button is configured to be “Interact” opposed to “Grab”.

Reminder: “Interact” is used to interact or use interactive objects whereas “Grab” is used to pickup objects.

Next on the sphere object embedded into the table add the SVRA_ChangeMaterial script and using the Inspector window change the size attribute to two [1]. This will allow you to add two materials through which to iterate when you trigger the change material script. Add two materials of your choice by dragging and dropping them into the element attributes.

Next add the SVRA_InteractiveObject and SVRA_InteractButton scripts onto the button object, that is the part of the button user’s must press. The InteractButton script is used to setup the animation of the button to occur when the button is interacted with by the user [2]. Whether a full or half animation cycle, the speed and direction of the animation and whether a vibration pulse should occur when the button is interacted with is configured here using the Inspector window. Make it do some interesting motion upon being pressed.

Next add the SVRA_EventBridge script onto the object. The event bridge is used to trigger one function or event upon another interaction occurring. For example picking up an object or interacting with a button might result in the change of material for another object. In this example we will make it so that interacting with the button will cause the embedded sphere to cycle through a list of materials.

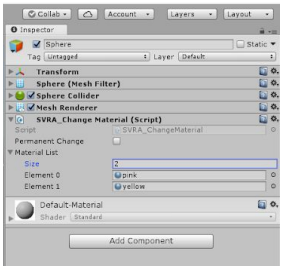
On the EventBridge script the SVRA_Event dropdown menu shows the different types of interaction events which can initiate an attached function or event [3]. Ensure that the “Interaction Start” event is selected. Next we must establish the connection between the event bridge and the

function to trigger. The function to trigger is a script attached to some object. It can be the object itself but in this example it is the embedded sphere.

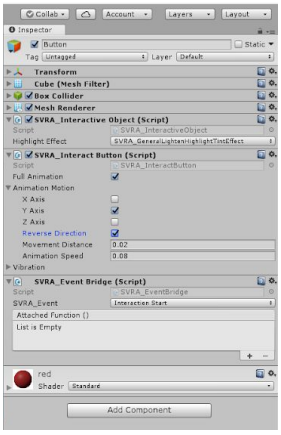
To establish the connection first add a new “Attached Function ()” by pressing the “+” button which will create an empty “attached function” after which we must add the trigger object by either selecting it via a menu or by dragging and dropping it into the “None (Object)” attribute [4]. Do this for the sphere object. Next we must select the function to trigger upon the interaction event occurring. We do this using the “No Function” dropdown menu and selecting the function to trigger on the event [5].

This completes the setup of the event bridge with the trigger function. Playing the scene now you should be able to interact with the button in order to change the material of the embedded sphere.

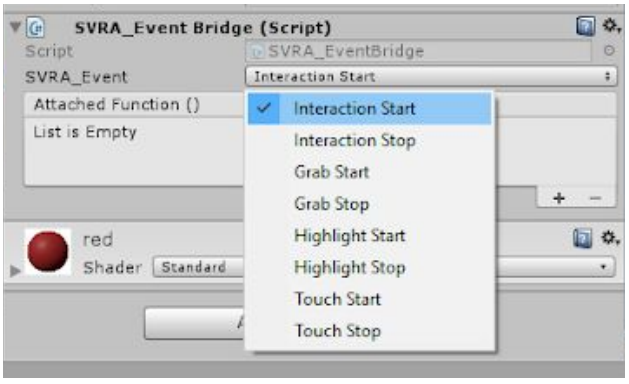
EXTENSION TASK: Make it so that upon picking up the cube the button changes material.



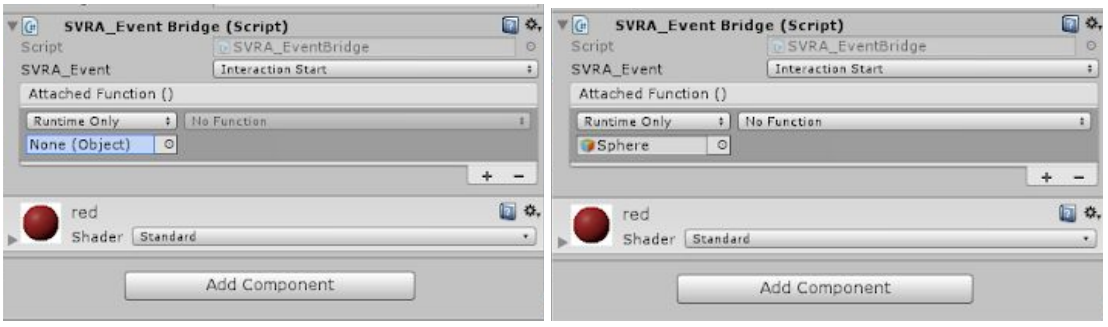
[1] Inspector view for the sphere for which the material will change



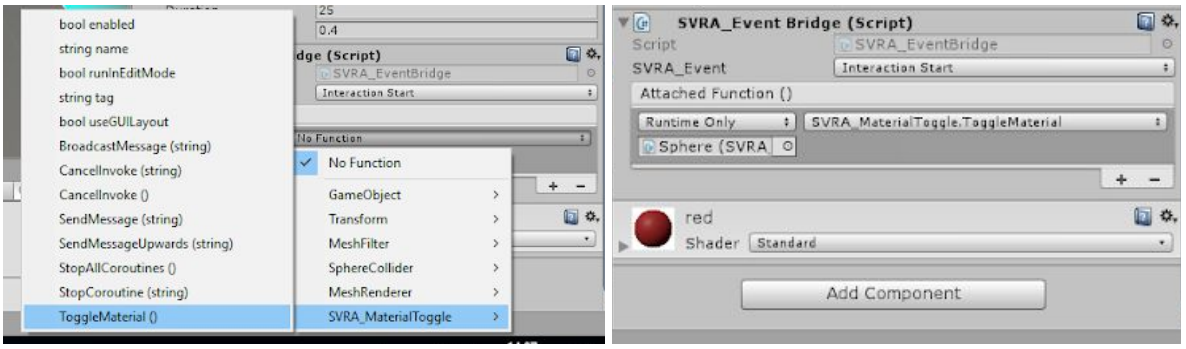
[2] Inspector view for the button



[3] The dropdown menu showing the types of events to trigger the attached function on.



[4] The “Sphere” object on which the function to trigger is attached is setup as the selected object



[5] Select the function to trigger to complete setup