Visionaire Basics for beginners

Video 4 - Graphical elements

Introduction

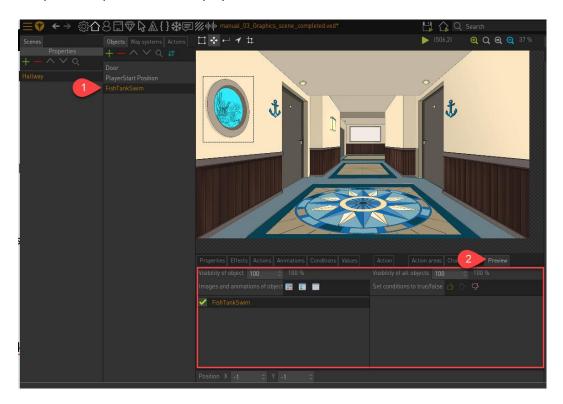
In this section we will discuss various graphical related topics, ranging from how items are drawn in front of and behind other objects and how to set that.

Previewing area

In many instances you may need to adjust how items are aligned with your background scene or you may want to toggle objects to be displayed or not. This is all done in the PREVIEW area of an object.

To access the preview area, do the following;

- 1. Select the relevant object in the object area list.
- 2. Click on the PREVIEW tab
- 3. The preview options will be displayed in the area shown below.



NOTE! This area only affects the canvas area and has no effect on the game itself.

Aligning objects

In certain instances we might want to align objects properly. To do this we need to set the items visibility and then move it to the correct spot.

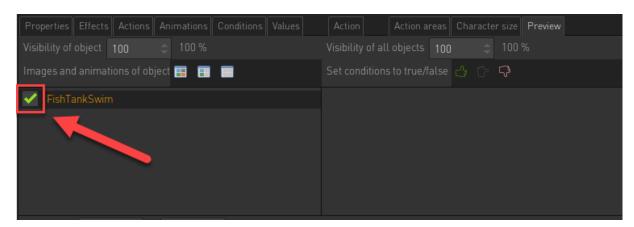
In the below example I have object **FishTankSwim** which is an animation of a fish swimming across the screen when I use the 'Use' icon on the object. For more detail see tutorial exercise **manual_02_animations**

The problem we have is that there is a slight offset between my animated object versus the actual background image. To see this in action play the scene and then right click the mouse until you get to the 'USE' icon. Click on the **FishTankSwim** and you'll notice that the animation is slightly offset.



To fix this we need to align it properly

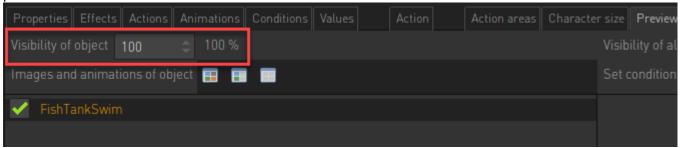
- 1. Select the **FishTankSwim** object
- 2. Ensure that the object is ticked to be displayed as visible



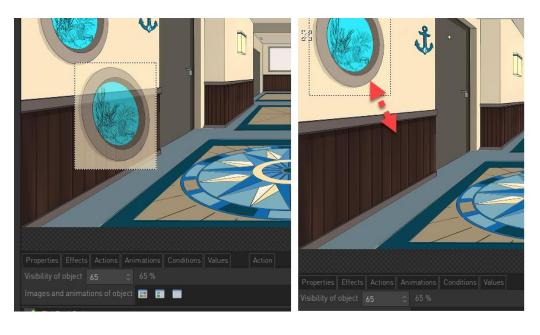
3. You'll note that the object is now selectable and can be moved using the MOVE tool.



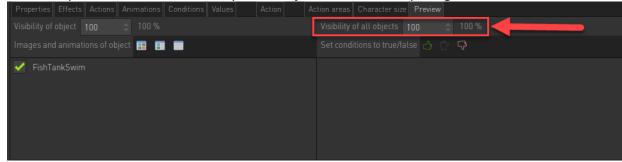
- 4. Notice that if you try and align the objects it's quite difficult as you cannot see the background image.
- 5. To address this you can set the visibility of the object you are trying to align using the Visibility of Object parameter.



6. As you lower the value the actual selected object's visibility will decrease which allows you to properly align the item with whatever is needed. You will then be able to properly align the objects.



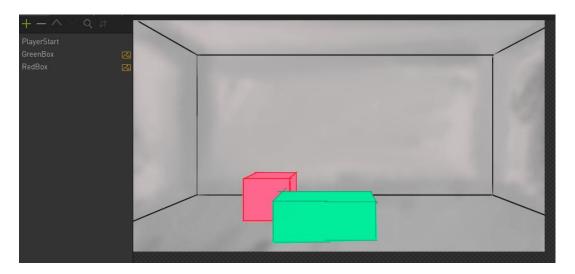
7. Note that you can also set the visibility of ALL objects in the scene by using the area shown below.



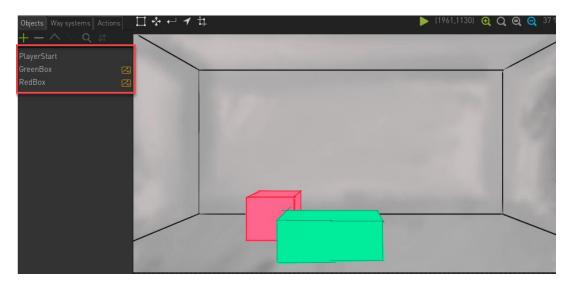
Drawing Order

Object are drawn onto your screen in a specific order. This defines what appears in front or behind your character and the order of how objects are drawn as the scene appears.

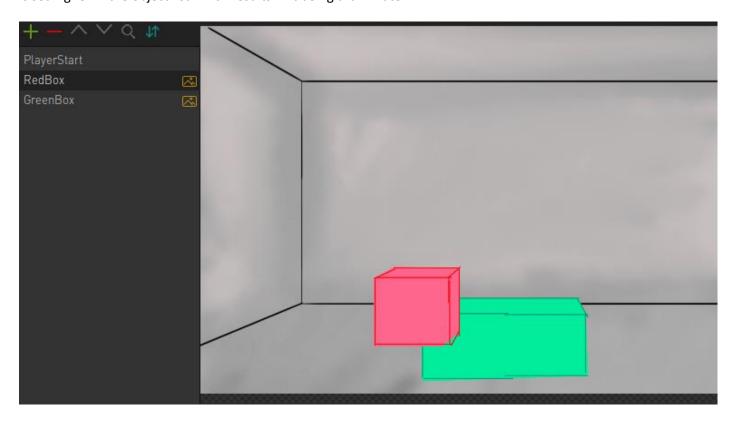
In the example below on the scene called DrawExample we have a room with two box objects, one red box and one green box. The green box is drawn in front of the red box at this point in time.



The draw order is defined in the object list. The Redbox is drawn first and then the GreenBox object after this which defines the order they are displayed on screen.



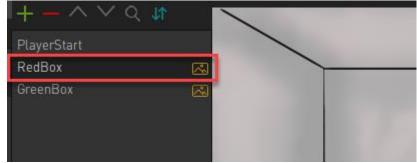
We can set the red box to be drawn last but this will appear incorrect when the scene is played. Not that the RedBox is set higher in the object list which results in it being drawn later.



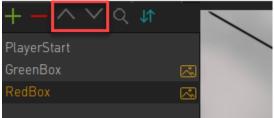
Changing the drawing order

To change the drawing order, do the following;

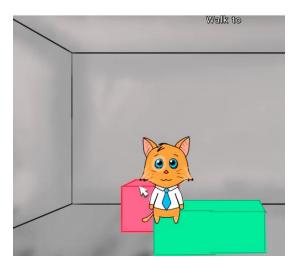
1. Select the object in the object list that relates to the draw order you wish to change.



2. Use the UP and DOWN arrows to affect it's placement in the drawing list. Note how the canvas area updates as the draw order is changed.



3. If you play your scene you'll note the character is not properly drawn as expected. We discuss why and how to fix this in the next section.

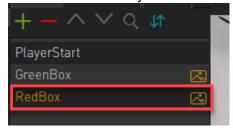


Object Center

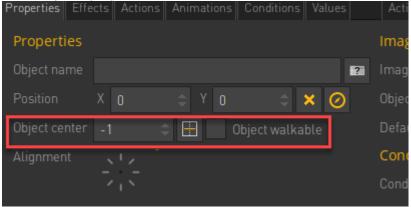
How do we know when a character is in front or behind an object? In my example above the draw order in relation to the character is incorrect.

The character is drawn based on an objects' centre. Take note of where this is found.

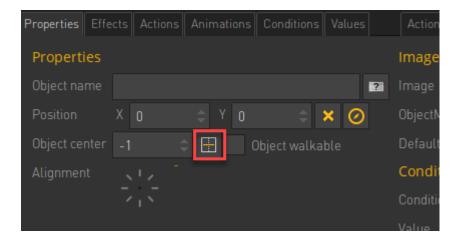
1. Select the relevant object



2. In the object's properties area we have the value called OBJECT CENTER.

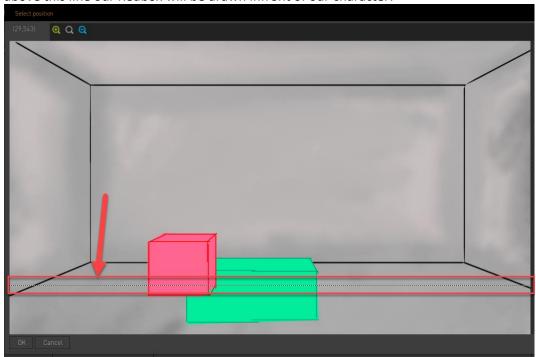


- 3. Right now we have this set to -1 which means our character is not drawn correctly. Let's set this.
- 4. Click on the SET OBJECT CENTER icon.



5. This will bring up a new screen where we then need to set a line by left clicking. This line sets how our character will be drawn in relation to the object.

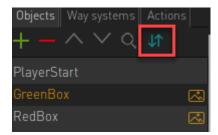
If the character is below this line the RedBox will be drawn behind our character and if our character is above this line our Redbox will be drawn infront of our character.



6. Now play your scene and all should draw correctly.

Sort Objects by Object Center

Available to us is a button called SORT OBJECTS BY OBJECT CENTER. This can be found in the object draw order list.

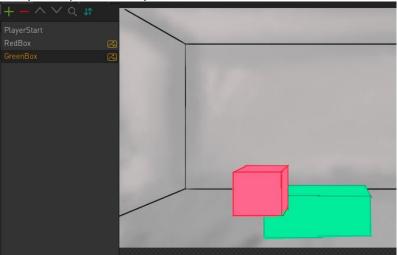


This automatically sorts your object by their Object Center settings. If you ever find that objects are not drawn as they are supposed to check the following;

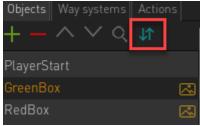
1. That your objects have a Object Center set in their properties area

2. That the draw order matches the Object Center values. To set this automatically click the button shown in the image above.

3. In my example below my sort order is not correct.



4. If I now click the button below my items are automatically ordered to be displayed correctly.



5. When clicked my items are now sorted according to their respective Object Center values. Note! You might need to refresh the scene for the new sort order to appear.

