

Code the Vaccination Game Layouts – Part II

Hello Everyone! Hope you are doing good!

In our last video, we finished coding our Home Screen. In this video, we will start coding the Game screen. So, let's start off without delay....

Before we proceed to code the game screen, let's first add an 8-direction behaviour to the Injection sprite present on the Game screen. To do this, go to the Game Screen layout and select the Injection sprite. Once it is selected, you will see 'Behaviours' option in the Properties window. Click on Behaviours option and click on the '+' at the top bar to open 'Add Behaviour' window. Scroll down to select '8 Direction' option from the Movement section and click on 'Add' button. Close the window. A new behaviour gets added to the injection sprite.

Always make sure that Injection appears black on the screen to indicate its inactive state and all unhealthy humans have a red border around them. To check the animation of humans, double-click on any human to open the Image Editor. The Animations window will appear on the right side of the Image Editor. See to it that the Unhealthy animation is listed above the Healthy animation. It is important to check the animation for all the humans. Always prefer to keep the initial position of the object or sprite in the animation window as it simplifies tasks during programming.

Now, to go to the 'Game Screen Code' event sheet, click on it in the Projects section. A blank Game screen code sheet will open. Let's start coding the Game screen now. We already know that our game is largely dependent on the humans, Injection Counts and Gameplay Timer sprites that are added in this screen. So, we will assign global variables to all of them.

To do this, go to the Game screen event sheet and right click on the coding area and select 'Add global variable'. Name the first variable as 'CurlyHairGirl' and set the Initial value as 0. Similarly, we have to declare all humans as global variables.

For OldMan:

Right-click on coding area > Select "Add global variable" from sub-menu > Name variable as 'OldMan'; Initial value = 0 > Click on 'OK'

For BeardBoy:

Right-click on coding area > Select "Add global variable" from sub-menu > Name variable as 'BeardBoy'; Initial value = 0 > Click on 'OK'

For BrownHairBoy:

**Right-click on coding area > Select “Add global variable” from sub-menu > Name variable as ‘BrownHairBoy’;
Initial value = 0 > Click on ‘OK’**

For SpectacledBoy:

**Right-click on coding area > Select “Add global variable” from sub-menu > Name variable as ‘SpectacledBoy’;
Initial value = 0 > Click on ‘OK’**

For SpectacledGirl:

**Right-click on coding area > Select “Add global variable” from sub-menu > Name variable as ‘SpectacledGirl’;
Initial value = 0 > Click on ‘OK’**

For GoateeBoy:

**Right-click on coding area > Select “Add global variable” from sub-menu > Name variable as ‘GoateeBoy’;
Initial value = 0 > Click on ‘OK’**

For GreyHairGirl:

**Right-click on coding area > Select “Add global variable” from sub-menu > Name variable as ‘GreyHairGirl’;
Initial value = 0 > Click on ‘OK’**

For LongHairGirl:

**Right-click on coding area > Select “Add global variable” from sub-menu > Name variable as ‘LongHairGirl’;
Initial value = 0 > Click on ‘OK’**

For OrangeHairGirl:

**Right-click on coding area > Select “Add global variable” from sub-menu > Name variable as ‘OrangeHairGirl’;
Initial value = 0 > Click on ‘OK’**

For PinkHairGirl:

**Right-click on coding area > Select “Add global variable” from sub-menu > Name variable as ‘PinkHairGirl’;
Initial value = 0 > Click on ‘OK’**

For ManWithTurban:

**Right-click on coding area > Select “Add global variable” from sub-menu > Name variable as
‘ManWithTurban’; Initial value = 0 > Click on ‘OK’**

Next, let’s set the Injection Counts & Gameplay Timer as global variables.

To do that, right click on the coding area again and select 'Add global variable'. Click on it to open a new global variable window. Name the variable as 'RemainingInjections' and set the Initial value as 6 so that we allow the player only six chances to use the injection serums. Similarly, add the Gameplay Timer as a global variable. Right click on the coding area again and select 'Add global variable'. Click on it to open a new global variable window. Name the variable as 'Timer' and while you set the Initial value as 0, remember that any player will only be allowed 90 seconds to play the game. These variables will act as storage spaces for values which gets updated while the game is in progress.

Let's make the Injection Selection Button functional and make it look more realistic by adding 'Button Effect'.

For adding Touch feature to Injection Selection Button:

Left-click on 'Add event' > Select 'Touch' – Next > Select 'On tap object' option from Gesture section – Done > Click on 'click to choose' to select the object > Choose 'InjectionSelectionButton' as an object – Done

For adding Button Effect to Injection Selection Button:

Left-click on 'Add Action' > Select 'InjectionSelectionButton' sprite – Next > Select "Set Scale" from size and position section – Next > Set scale as per your choice (We are setting it to 0.09 as our button size is (200,100)) – Done

Again left-click on 'Add Action' > Select 'System' option – Next > Select "Wait" from Time section - Next > Set time as 0.1 seconds

Again left-click on 'Add Action' > Select 'InjectionSelectionButton' sprite – Next > Select "Set Scale" from size and position section – Next > Set scale as per your choice (We are setting it to 0.07) – Done

Again left-click on 'Add Action' > Select 'System' option – Next > Select "Wait" from Time section - Next > Set time as 0.1 seconds

Again left-click on 'Add Action' > Select 'InjectionSelectionButton' sprite – Next > Select "Set Scale" from size and position section – Next > Set scale to original size (We are setting it back to 0.09) – Done

If you can recall, we have provision in our game for only a limited count of injection serum i.e. it cannot be used more than 6 times. So, let's program it in such a way that the Injection count gets reduced every time the injection is activated using the Injection button. To do this, left click on "Add Action", select "System" option and click on 'Next'. Select "Subtract from" from Global & local variables section and click on 'Next'. From the dropdown, select "RemainingInjections" and let the value remain 1, click on 'Done'.

Next, it is time to make changes to the animation of the injection so that it changes its colour from black to green as soon as it is brought to its active state. Additionally, the player should also be able to move it using the arrow keys the moment it turns green. To do this, first left click on "Add Action", select "Injection" option and click on



'Next'. Select "Set animation" from Animations section and click on 'Done'. In the Animation field, name the animation as "Active" and it should run from the beginning only. Again left click on "Add Action", select "Injection" option and click on 'Next'. Select "Set enabled" option from 8 Direction section and click on 'Done'. From the drop-down, change the state from 'Disabled' to 'Enabled'. Click on 'Done'.

Now, we should try to show the change in count in the form of text on the Game screen against the Injection Count. To do this, click on 'Add Action' and select 'InjectionCount' and click next. An action window opens. Scroll down to select 'Set text' option and click next. Type "**Injection Count: "&RemainingInjections**" in the box and click on 'Done'. This code is like an equation which will show the remaining injection count on the screen.

Great! We have successfully assigned global variables for the sprites of Game screen and coded the injection sprite successfully. In our next video, we will continue coding the sprites present in our Game Screen layout of our game.

Bye Bye. See you in the next video!