

## ENGLISH VERSION

### 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!

### HINDI VERSION

## Code the Vaccination Game Layouts – Part II

Hello Everyone! उम्मीद करती हूँ आप सब अच्छे हैं!

अपने last video में, हमने अपनी home screen को code करना पूरा कर दिया था। इस video में, हम game screen को code करना शुरू करेंगे। तो, चलिए बिना देर किए शुरू करते हैं...।

इससे पहले कि हम game screen को code करें, चलो पहले game screen पर present injection sprite में एक "8-direction" behaviour add करें। ऐसा करने के लिए, game screen layout पर जाएं और injection sprite को चुनें। इसको चुनने के बाद, आपको Properties window में 'behaviour' option दिखाई देगा। behaviour option पर click करें और "add behavior" window open करने के लिए top bar पर '+' पर click करें। Movement section से '8 direction' option चुनने के लिए नीचे scroll करें

और 'Add' button पर click करें। window close कर दें। एक new behavior injection sprite में add हो गया है।

हमेशा पक्का करें कि injection screen पर black दिखाई दे ताकि इसकी inactive state indicate हो सके और सभी unhealthy humans के चारों ओर red border हो। humans के animation को test करने के लिए, किसी भी human पर image editor open करने के लिए double-click करें। animation window image editor के right side की ओर देख सकते हैं। यह देखें कि Unhealthy animation list में Healthy animation के ऊपर हो। सभी humans के लिए animation की test करना important है। हमेशा object की और animation window में sprite की initial position रखें क्योंकि यह programming में tasks को simplify करता है।

अब, 'Game Screen Code' event sheet पर जाने के लिए, Projects section में उस पर click करें। एक blank Game screen code sheet open हो जाएगी। चलिए अब game screen को code करना शुरू करते हैं। हम पहले से ही जानते हैं कि हमारा game काफी हद तक humans , Injection Counts और Gameplay Timer sprites पर depend है जो इस screen में add किया गया है। इसलिए, हम उन सभी को global variable assign करेंगे।

ऐसा करने के लिए, game screen event sheet पर जाएं और coding area पर right click करें और 'Add global variable' select करें। पहले variable को 'CurlyHairGirl' का नाम दें और Initial value को 0 set करें। इसी तरह, हमें सभी humans को global variables declare करना होगा।

**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 ‘Beard Boy’; 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’***

अब, Injection Counts और Gameplay Timer को global variable के form में set करते हैं।

और coding area पर right click करें और ‘Add global variable’ select करें। पहले variable को ‘Remaining Injections’ का नाम दें और Initial value को 6 set करें। ताकि हम player को injection serums का use करने के

लिय केवल six chances दें। इसी तरह Gameplay Timer को एक global variable की तरह add करें। coding area पर right click करें और ‘Add global variable’ select करें। एक new global variable window open करने के लिय इस पर click करें। variable को ‘Timer’ का नाम दें और Initial value को 0 set करें। तो याद रखें कि किसी भी player को केवल 90 सेकंड का time दिया जायगा game खेलने के लिय। जब game चल रहा होगा ये variable उन values के लिए storage spaces के रूप में काम करेंगे जो update होंगे।

चलो Injection Selection Button को functional बनाते हैं और इसे ‘Button Effect’ add करके और real बनाते हैं।

**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***

अगर आपको याद है, तो हमारे पास हमारे game में केवल एक limited count में injection serums के लिय provision है, इसका use 6 times से ज्यादा नहीं किया जा सकता है। तो, आइए इसे इस तरह से program करें कि Injection button के use से injection activate होने पर हर बार injection की count कम हो जाती है। ऐसा करने के लिए, "Add Action" पर left-click करें, "System" option चुनें और 'next' पर click करें। Global & local variables section से "Subtract from" चुनें और next पर click करें। drop-down से, "Remaining Injections" चुनें और value को 1 रहने दें, done पर click करें।

अब , injection के animation में change करने का time है ताकि यह अपने active state में आते ही अपने colour को black से green colour में बदल दे। इसके अलावा moment यह green हो जाता है तब player arrow keys का use करके इसे move कर सके, ऐसा करने के लिए, पहले "Add Action" पर left-click करें, "injection" option चुनें और 'next' पर click करें और animaton section से "set animation" चुनें और done पर click करें। Animation field में, animation को "Active" नाम दें और



इसे शुरूआत से ही run करना चाहिए। फिर से "Add Action" पर click करें, "Injection" option चुनें और 'Next' पर click करें। 8 direction section से "Set enabled" option चुनें और 'done' पर click करें। drop down से, स्थिति को 'Disabled' से 'Enabled' में बदल दें। 'Done' पर click करें।

अब, हमें Injection Count में change को Game screen पर text की form में दिखाने की कोशिश करनी चाहिए। ऐसा करने के लिए, 'Add Action' पर click करें और 'InjectionCount' चुनें और next पर click करें। एक action window दिखाई देगी। 'Set text' option चुनने के लिए नीचे scroll करें और next पर click करें। box में **"Injection Count: "&RemainingInjections** type करें और 'Done' पर click करें। यह code एक equation की तरह है जो screen पर remaining injection count दिखाएगा।

Great! हमने game screen के sprites के लिए successfully global variable assign कर दिया है और injection sprite को successfully code किया है। हमारे अगले video में, हम अपने game के screen game layout में present sprites को code करना continue करेंगे।

bye। मिलते हैं अगले video में!