



ENGLISH VERSION

Design the Vaccination Game Layouts – Part I

Hi Everyone! Welcome to the intermediary course on game development.

Are you excited to be a part of this? Let's get started on yet another mission of saving humans.

Right from birth, we are exposed to many different microbes like bacteria, virus, etc. Many are beneficial but some can cause diseases.

The body's immune system helps protect us against infections. When we are exposed to infection, the immune system triggers a series of responses to neutralize the microbes and limit their harmful effects. Often exposure to many infectious diseases give us lifelong protection which we call immunity. And this prevents us from contracting the same disease again as our immune system "remembers" the microbe.

However, some diseases may lead to serious complications and sometimes death. Vaccination (or immunization) is a way to build the body's natural immunity to a disease before one gets sick. This keeps us from getting and spreading the disease. The aim of vaccination is to obtain this immunity without any of the risks of having the disease.

When there is an epidemic the disease spreads rapidly and affects a significant amount of population. The rate of spread is called R_0 (pronounced as R naught), and indicates how contagious an infectious disease is. It's also referred to as the reproduction number. As an infection spreads to new people, the microbes reproduces itself.

When we vaccinate, we activate the immune system's "memory." During vaccination, a weakened microbe, a fragment, or something that resembles it, is added to the body. The immune system is then activated without us becoming sick. Some dangerous infectious diseases can be prevented in a simple and effective way. When a majority of the population has been vaccinated against a disease, there will be few people left to whom the infection can spread. This protects the few who have not been vaccinated.

So let's get started with our next project. In this game, the population gets infected by a deadly virus which has a high reproduction rate or R_0 . The game is about how each person is connected and will affect others in the form of a web. To begin with, everyone is infected with the disease and are unhealthy that is represented by a "red box". The user has to generate a vaccine by pressing the injection button, which turns from black to green showing that it is ready to use for one time. To disinfect humans, you need to control the injection and vaccinate the infected people. Use the arrow keys to move the injection up, down, left & right, and the moment you make contact with one person, he / she also disinfects the others who are directly connected to him / her. But remember the person remains disinfected only for 5 seconds and due to the proximity with others in the web

he / she could again become infected. Therefore, you have the challenge to disinfect as many people as you can within the stipulated time of 90 seconds and for which you will get a chance to use only 6 vaccines at a time. The shortest time taken to disinfect all the humans will be the high score of the game.

I am sure you are ready for this challenge. Let's get started.

We will begin by opening the Construct software. Once it is opened, click on "File" present in the top-menu bar and click on 'New'. Select 'New empty project' option and click on 'Open'. Just like our last project, a new game project opens and you can see Layout 1 & Event Sheet 1 on the screen.

Similar to our last game, we need 5 screens here as well. So, let us first begin by creating these 5 layouts for the game.

- Home Screen
- Game Screen
- Rule Screen
- Restart Screen
- Game Won Screen

Just like we did in our last project, we will create 5 layouts and rename them and their event sheets accordingly. As the process is the same as previous project, we will fast track it. We would recommend you to download the video description to follow the step by step process, if forgotten.

To create the layouts:

Right-click on 'Layout 1' > Select 'Rename' > Rename it 'Home Screen'

Go to right window pane > Right click on the 'Layouts' in Project window > Select 'Add layout' option > Click on 'Add event sheet' > 'Layout 2' is created > Rename it 'Game Screen'

Go to right window pane > Right click on the 'Layouts' in Project window > Select 'Add layout' option > Click on 'Add event sheet' > 'Layout 3' is created > Rename it 'Rule Screen'

Go to right window pane > Right click on the 'Layouts' in Project window > Select 'Add layout' option > Click on 'Add event sheet' > 'Layout 4' is created > Rename it 'Restart Screen'

Go to right window pane > Right click on the 'Layouts' in Project window > Select 'Add layout' option > Click on 'Add event sheet' > 'Layout 5' is created > Rename it 'Game Won Screen'

To create the layouts:

Right-click on 'Event sheet 1' > Select 'Rename' > Rename it 'Home Screen Code'

Right-click on 'Event sheet 2' > Select 'Rename' > Rename it 'Game Screen Code'

Right-click on 'Event sheet 3' > Select 'Rename' > Rename it 'Rule Screen Code'

Right-click on 'Event sheet 4' > Select 'Rename' > Rename it 'Restart Screen Code'

Right-click on 'Event sheet 5' > Select 'Rename' > Rename it 'Game Won Screen Code'

Before proceeding further, let's save our project. To save the project, click on the file tab again and select 'Save' option. A new window will pop-up. Type File name 'Vaccination Game', browse for suitable location where you want to save your project and click on 'Save'. Remember, if you close and reopen this project again, you will see that the Layouts automatically arranged themselves in alphabetical order.

Next, let us download a custom images package that has been created especially for you all to use during the game creation. Copy the link from the description below and paste the link on your preferred browser. Click on download to start downloading the package. Also, you can use images downloaded from the internet as per your choice.

Now, we'll get down to designing our screens.... Let's start with the 'Home Screen' first...

Click on the Home screen layout tab present in the top bar. Once you select the Home screen layout, you will see the layout properties on the left window pane. In the properties section, change the layout size by changing the values to 854, 480 as this is the standard screen size for most of the systems.

Just like last time, we'll need the background screen and the Play & Rule button on this layout. To do that, follow the same steps as done in the last game after creating 2 layers.

Add Background Screen:

Double-click on the screen > Select 'Sprite' option – Name it 'HomeImage' > Click on 'Insert' > X sign appears – Left click on the screen > Click on 'Load an image from file' option > Select HomeImage from the system – Close the window – Resize and reposition on the screen using anchor points

Add 2 Layers:

Go to the layer section in projects window > Right-click on the Layer 0 > Click the 'Add layer at top' option > Layer 1 is appeared

Right-click on 'Layer 0' > Select 'Rename' option > Rename it 'Home Background Layer' > Click on the 'Lock' to lock the layer

Select 'Layer 1' > Right-click on 'Layer 1' > Select 'Rename' option > Rename it 'Home Button Layer' – Let this layer be selected

Add Play Button:

Go to the 'Home Screen' layout > Double-click on the screen > Select 'Sprite' option – Name it 'PlayButton' > Click on 'Insert' > X sign appears – Left click on the screen > Click on 'Load an image from file' option > Select HomeImage from the system – Close the window – Resize and reposition on the screen using anchor points

Add Rule Button:

Double-click on the screen > Select 'OK' button from Controls section – Name it 'RuleButton' > Click on 'Insert'

Go to 'Properties' on the left pane > Go to Text option > Click on 'OK' - Change the text to 'RULES' > Resize and reposition on the screen using anchor points

So, now you see we are done with the Home screen. In our next video, we will continue making changes to the other layouts of our game.

Till then, Bye-Bye! See you in the next video!

HINDI VERSION

Design the Vaccination Game Layouts – Part I

Hi Everyone! Game development पर intermediary course में आपका स्वागत है।

क्या आप इसका part बनने के लिए excited हैं? चलिए humans को save करने के एक और mission को शुरू करते हैं।

जन्म से ही, हम कई अलग-अलग microbes जैसे bacteria, virus etc.के contact में होते हैं। कई beneficial होते हैं लेकिन कुछ बीमारियों का कारण बन सकते हैं। body की immune system हमें infections से save करने में help करती है। जब हम infection के contact में होते हैं, तो immune system microbes को बेअसर करने और उनके harmful effects को कम करने के लिए series of responses को trigger करती है। अक्सर कई infectious diseases के contact में आने से हमें lifelong protection

मिलती है जिसे हम immunity कहते हैं। और यह हमें same disease फिर से होने से रोकता है, क्योंकि हमारा immune system microbes को याद रखती है।

but , कुछ diseases serious complications और कभी-कभी death का कारण बन सकते हैं। Vaccination (या immunization) एक disease होने से पहले body की natural immunity को बनाने का एक तरीका है। यह हमें disease के होने और फैलने से बचाता है। Vaccination का aim इस immunity को disease होने के riskके बिना achieve करना है।

जब एक epidemic होती है तो disease तेजी से फैलता है और populationकी एक significant amount को affect करता है। rate of spread को RO कहा जाता है (इसे R naught pronounce किया जाता है), और ये बताता है कि infectious disease कितना contagious है। इसे reproduction number भी बोला जाता है। जैसे कि एक infection नए लोगों में फैलता है, microbes खुद reproduce करता है।

जब हम Vaccination करते हैं, तो हम immune system की “memory”को active करते हैं। Vaccination के दौरान, एक weak microbe, a fragment, या ऐसा कुछ जो इससे मिलता जुलता हो, body में जोड़ा जाता है। तब बिना बीमार हुए immune system active हो जाती है कुछ dangerous infectious diseases को simple और effective तरीके से रोका जा सकता है। जब ज्यादातर populationको एक disease के against vaccine लगाया गया है, तो कुछ ही लोग बचे होते हैं, जिनसे infection फैल सकता है। यह उन लोगों की protection करता है जिन्हें vaccine नहीं लगाया गया है।

तो चलिए अपना next project शुरू करते हैं। इस game में, population एक घातक virus से infected हो जाती है जिसमें reproduction rate या Ro होता है। game इस बारे में है कि हर person कैसे आपस में जुड़ा हुआ है और कैसे web के form में दूसरों को affect करेगा। starting में , सभी disease से infected होता है और unhealthy होता है जिसे “red box” द्वारा दिखाया जाता है। user को injection button

press करके एक vaccine generate करना है, जो black से green colour में बदल जाता है यह दिखाता है कि यह एक बार use करने के लिए ready है। humans को disinfect करने के लिए, आपको

injection को control करने और infected लोगों को vaccine लगाने की जरूरत है। injection को ऊपर, नीचे, left और right ले जाने के लिए arrow keys का use करें, और जिस moment आप एक person के साथ contact बनाते हैं, वह / वह दूसरों को भी disinfects कर देता है जो सीधे उसके / उसके साथ जुड़े हुए हैं। लेकिन याद रखें कि person केवल 5 second के लिए disinfects रहता है और web में दूसरों के साथ जुड़े होने के कारण वह फिर से infected हो सकता है। इसलिए, आपके पास 90 second के fix time के अन्दर जितने लोग हैं, उन्हें disinfects करने का challenge है, और इसके लिए आपको एक बार में केवल 6 vaccines का use करने का मौका मिलेगा। सभी humans को disinfects करने का सबसे time game का highscore होगा।

मुझे भरोसा है कि आप इस challenge के लिए ready हैं। आइए शुरू करें।

हम Construct software open करके शुरू करेंगे। इसे open करने के बाद, top-menu बार में present "file" पर click करें और 'new' पर click करें। 'New empty project' option चुनें और 'open' पर click करें। हमारी last project की तरह, एक नया game project open होगा और आप screen पर layout1 और event sheet1 देख सकते हैं।

हमारे पिछले game के जैसे, हमें यहां भी 5 screen की जरूरत है। तो, चलिए सबसे पहले game के लिए ये 5 layout बनाकर शुरू करते हैं।

- Home screen
- Game screen
- Rule screen
- Restart Screen

- Game Won Screen

जैसे हमने अपने पिछले project में किया था, हम 5 layout बनाएंगे और उनके according और उनके event sheet का नाम बदलेंगे। जैसा कि process पिछले project जैसा ही same है, हम इसे fast track करेंगे। अगर आप भूल गए हैं, तो हम आपको step by step process को follow करने के लिए video description download करने की सलाह देंगे।

To create the layouts:

Right-click on 'Layout 1' > Select 'Rename' > Rename it 'Home Screen'

Go to right window pane > Right click on the 'Layouts' in Project window > Select 'Add layout' option > Click on 'Add event sheet' > 'Layout 2' is created > Rename it 'Game Screen'

Go to right window pane > Right click on the 'Layouts' in Project window > Select 'Add layout' option > Click on 'Add event sheet' > 'Layout 3' is created > Rename it 'Rule Screen'

Go to right window pane > Right click on the 'Layouts' in Project window > Select 'Add layout' option > Click on 'Add event sheet' > 'Layout 4' is created > Rename it 'Restart Screen'

Go to right window pane > Right click on the 'Layouts' in Project window > Select 'Add layout' option > Click on 'Add event sheet' > 'Layout 5' is created > Rename it 'Game Won Screen'

To create the layouts:

Right-click on 'Event sheet 1' > Select 'Rename' > Rename it 'Home Screen Code'

Right-click on 'Event sheet 2' > Select 'Rename' > Rename it 'Game Screen Code'

Right-click on 'Event sheet 3' > Select 'Rename' > Rename it 'Rule Screen Code'

Right-click on 'Event sheet 4' > Select 'Rename' > Rename it 'Restart Screen Code'

Right-click on 'Event sheet 5' > Select 'Rename' > Rename it 'Game Won Screen Code'

आगे बढ़ने से पहले, आइए अपना project सेव करें। project को save करने के लिए, file tab पर फिर से click करें और 'save' option चुनें। एक new window दिखाई देगी। file नाम 'Vaccination game' type करें, suitable location पर browse करें जहाँ आप अपनी project को save करना चाहते हैं और 'save' पर click करें। याद रखें, अगर आप इस project को फिर से close करते हैं और फिर से open करते हैं, तो आप देखेंगे कि layout automatically alphabetical order में arrange हो गया है

इसके बाद, हम एक custom image package download करते हैं जिसे especially आपके लिये game creation में use करने के

लिये बनाया गया है। नीचे दिए गए description से link copy करें और अपने पसंद के browser पर link paste करें। package download करना शुरू करने के लिए download पर click करें। इसके अलावा, आप अपनी पसंद के according इंटरनेट से download की गई images का use कर सकते हैं।

अब, हम अपनी screen design करेंगे ... पहले 'home screen' के साथ शुरू करते हैं ...

top bar में present home screen layout tab पर click करें। एक बार जब आप home screen layout चुन लेते हैं, तो आप left window panel पर layout properties देखेंगे। properties section, values को 854, 480 में बदलकर layout size बदलें क्योंकि यह most of the systems के लिए standard screen size है।

पिछली बार की तरह, हमें इस layout पर background screen और play Rule button की जरूरत होगी। ऐसा करने के लिए, दो layers को बनाने के बाद last game में किए गए steps को follow करें।

Add Background Screen:

Double-click on the screen > Select 'Sprite' option – Name it 'HomeImage' > Click on 'Insert' > X sign appears – Left click on the screen > Click on 'Load an image from file' option > Select

HomeImage from the system – Close the window – Resize and reposition on the screen using anchor points

Add 2 Layers:

Go to the layer section in projects window > Right-click on the Layer 0 > Click the ‘Add layer at top’ option > Layer 1 is appeared

Right-click on ‘Layer 0’ > Select ‘Rename’ option > Rename it ‘Home Background Layer’ > Click on the ‘Lock’ to lock the layer

Select ‘Layer 1’ > Right-click on ‘Layer 1’ > Select ‘Rename’ option > Rename it ‘Home Button Layer’ – Let this layer be selected

Add Play Button:

Go to the ‘Home Screen’ layout > Double-click on the screen > Select ‘Sprite’ option – Name it ‘PlayButton’ > Click on ‘Insert’ > X sign appears – Left click on the screen > Click on ‘Load an image from file’ option > Select HomeImage from the system – Close the window – Resize and reposition on the screen using anchor points

Add Rule Button:

Double-click on the screen > Select ‘OK’ button from Controls section – Name it ‘RuleButton’ > Click on ‘Insert’

Go to ‘Properties’ on the left pane > Go to Text option > Click on ‘OK’ - Change the text to ‘RULES’ > Resize and reposition on the screen using anchor points

तो, अब हमने home screen का काम पूरा कर लिया है। हमारे next video में, हम अपने game के बाकी layout में changes करते रहेंगे।

तब तक के लिए bye! मिलते हैं next video में!