# DIGITAL CREATIVES: EXQUISITE CORPSE

# WRITE THE CODE

## INTRODUCTION

After looking at the Make A Creature game we are going to have a look inside the game and build the script from the ground up.

Open <u>Exquisite Corpse: Make A Creature (completed)</u> project in Scratch and play the game a few times, to gain an understanding of what we will make in this project.

Key Coding Skills:

- Timing
- Levels
- Costumes

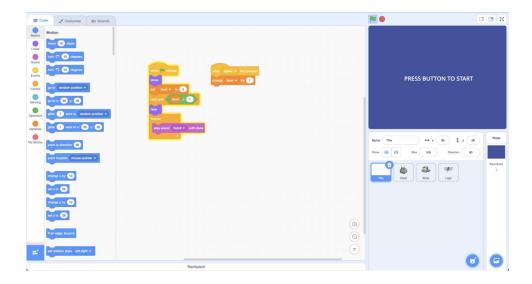
#### STEP 1

Open the Exquisite Corpse: Make A Creature (Incomplete) project in Scratch.

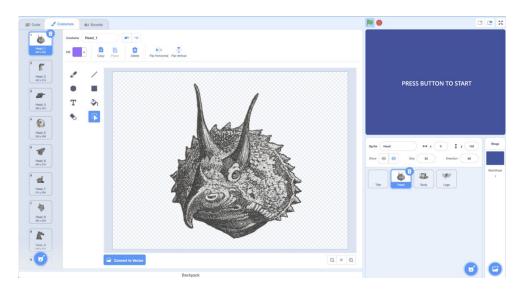
Let's take a look inside the program. We can see there are four sprites: one for the Title, and three more for the Head, Body and Legs of our creature.



If we click on the Title sprite, we can see a block of code. This code tells the program what to do once the green flag has been clicked. It's similar to the new code we will create in this activity.



If we click on the Head sprite, and navigate to the Costumes tab, we can see its costumes. The Head, Body, and Legs sprites each have 15 different costumes. Every time you play, you will end up with a new combination of body parts to create your creature.



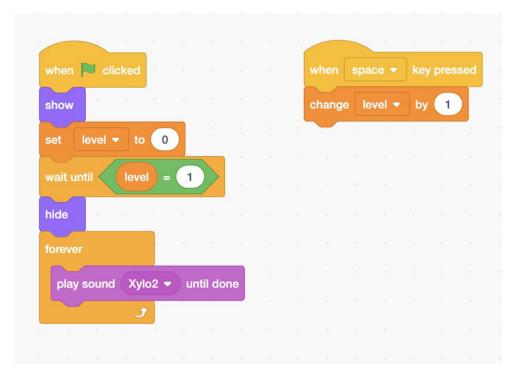
#### STEP 2

Now that we've become familiar with the layout of Scratch, let's begin coding.

Start by selecting the **Title** sprite, and navigating to the Code tab.

We can see some code here already. This is used to begin the game, so we'll leave this as it is.

Click on the *Events* button in the left-hand side menu, and drag the *When Space Key Pressed* block onto the script area. Now, let's click on the *Variable* button, and drag the *Change Level by* block to the script area adding it under underneath the *When Space Key Pressed* block. Your code should look like this;



Adding this code means that every time we press the Spacebar on our keyboard, the game will increase the level we're on by 1. We can use this feature later to show and hide certain sprites during our game.

STEP 3

Click on the **Head** sprite, and then click on the Code tab. You'll see a small block of code. This gives instructions for the size and position of our sprite, so we'll leave that as it is.

We want this sequence to begin when the game starts, so let's drag the *When Green Flag is Clicked* block onto our script area from the Events button. We don't want this sprite to be visible until we start the game, so let's drag the *Hide* tile underneath the last block. You can find the *Hide* block in the *Looks* menu.

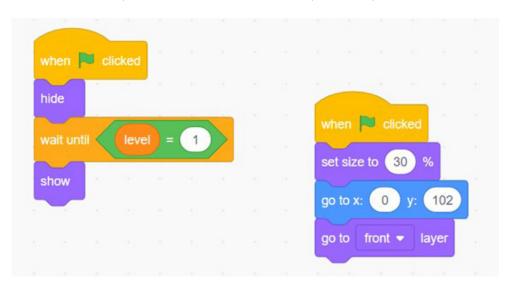
For this next step, you'll need a few components. It might be easier for you to find them and drag them all separately onto the script area before adding them to the code block.

In the *Control* tab, find the Wait Until block and drag it underneath the *Hide* block. Then, In the *Operators* menu, find the X=X tile and drag it inside of the *Wait Until* block.

Then, In the *Variables* menu, find the *Level* block, and drag it inside the first space in the X=X block, and change the value of the second space to 1.

In the Looks tab, find the Show block, and drag it underneath the previous code.

With this code, the sprite will now be invisible until the spacebar is pressed for the first time.

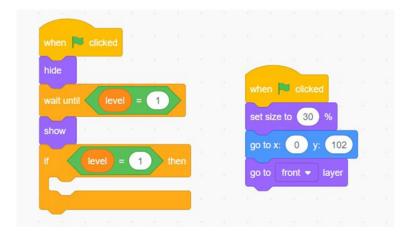


STEP 4

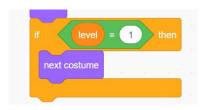
Now that we've programmed our sprite to show when we press the spacebar (level up), we can ask it to cycle through the costumes and create the randomising effect.

Navigate to the *Control* menu, and drag the *lf Then* block underneath the code. Similarly, to the previous step, we want to change the appearance of the sprite at a certain level. So, let's go to the *Operators* menu, find the X=X block and drag it inside of the *lf Then* block. In the Variables menu, find the Level block, and drag it inside the first space in the X=X block, and change the value in the second space to 1.

Your code should now look like this;



In the Looks menu, drag the Next Costume block inside of the If Then block, like this;



In the *Control* menu, find and drag the *Wait* block underneath the *Next Costume* block, and change the 1 to 0.1. It should look like this;

```
when clicked

hide

wait until level = 1

show

for level = 1

then

next costume

wait 0.1 seconds

when clicked

set size to 30 %

go to x: 0 y: 102

go to front layer
```

Now when we start the game, a head will appear (a different random head will appear each time we start the game). We want the head to automatically cycle through all the different possible head sprites and stop when we press the space bar.

### STEP 6

To make our sprite cycle through the various possible heads and stop on a costume, we're going to add a repeating code.

In the *Control* tab, find and drag the *Repeat Until* block inside the *If Then* block. Using the same blocks as in the previous step, we're going to set the Level = 2 within the *Repeat* block, like this;

```
when  clicked

hide

wait until level = 1

show

if level = 1 then

repeat until level = 2

next costume

wait 0.1 seconds
```

Let's do one more thing to our Head sprite. We're going to add a sound effect, so that when we select our head, we get a little sound to confirm. Follow the instructions from Step 6 and create another *If Then* block, but this time set the level to 2.

Once you have done that, navigate to the sound tab, and drag in a *Play Sound* block. Click on the sound block and select the Whiz sound effect. Your code should now look like this:

```
when clicked

hide

set size to 30 %

wait until level = 1

show

fevel = 1 then

repeat until level = 2

next costume

wait 0.1 seconds

if level = 2 then

play sound Whiz ventil done
```

Congratulations, we now have a working head for our creature! Let's save our work before we continue.

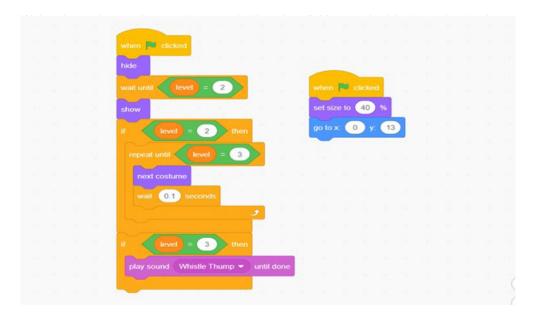
We can use the code we have just created for the Body and the Legs of our creature, too! Select the whole block of code by clicking on the top block and pressing control or command + C on your keyboard to copy.

Navigate to the Body sprite. Click on the Code tab, and press control or command + V on your keyboard to paste the code we just copied.

The code for each part of the body (the Head, Body and Leg sprites) is very similar, but we need to adjust the level number for each one, so the next section will only show once the previous section has been completed. (Head – Level 1, Body – Level 2, Legs – Level 3)

Let's do this by increasing all of the level numbers by 1. For example, where it says  $Wait\ Until\ Level = 1$ , let's change that to  $Wait\ Until\ Level = 2$ , and so on.

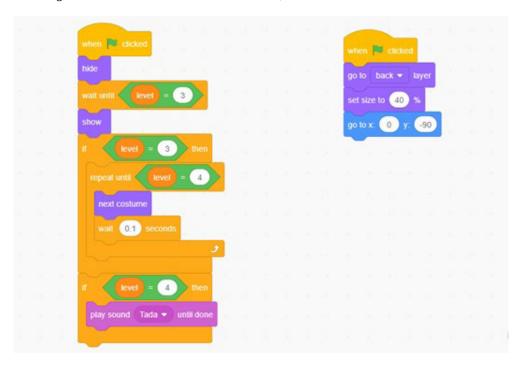
We're also going to change the sound effect, by clicking on the block, and selecting the *Whistle Thump* sound. Your code for the Body Sprite, should now look like this;



Let's copy this code block again. Click on the top of our code block and copy it by pressing control or command + C on your keyboard.

Select the Legs sprite, and navigate to the Code tab. Let's press control or command + V on your keyboard to paste the code block we just copied. Again, we'll increase all of the Level numbers by 1. For example, where it says *Wait Until Level* = 2, let's change that to *Wait Until Level* = 3, and so on.

We're also going to change the sound effect, by clicking on the block, and selecting the *Tada* sound effect. Before we finish, let's save our work!



Congratulations, you should now have a completed Exquisite Corpse game. Click the green flag to begin and use the spacebar as your button!

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