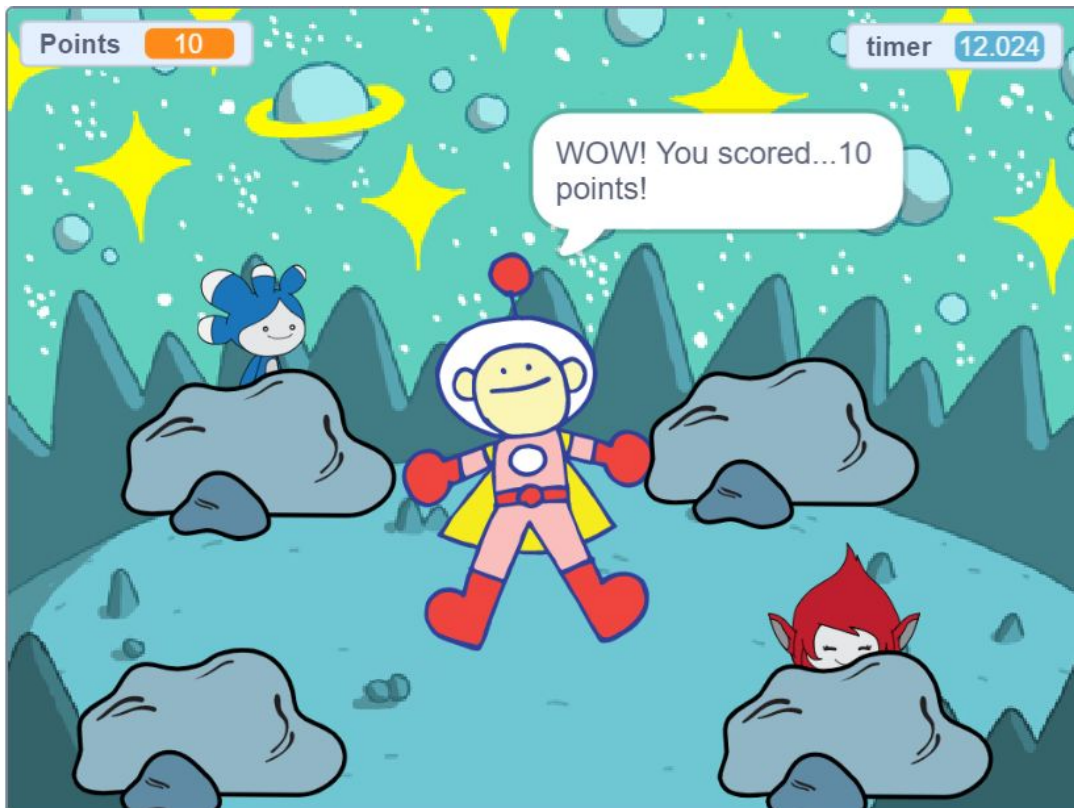


Creature Seeker



Creature Seeker is a game where the main objective is to locate a species of friendly aliens who are hiding behind rocks. In order to score points, the alien must be clicked on while it is visible. Throughout the game, our aliens will be placed behind a rock and sporadically appear for a random amount of time. We will use a timer to check when 30 seconds has passed. Once 30 seconds have passed, an end game signal will be broadcasted to a human sprite to appear on the screen and say how many points the player scored.

1. Our first step is to add all of our game sprites into the game. Navigate to the sprite area, click on choose a sprite, and add the following sprites to our game.



Giga x1



Gobo x1



Nano x1



Tera x1

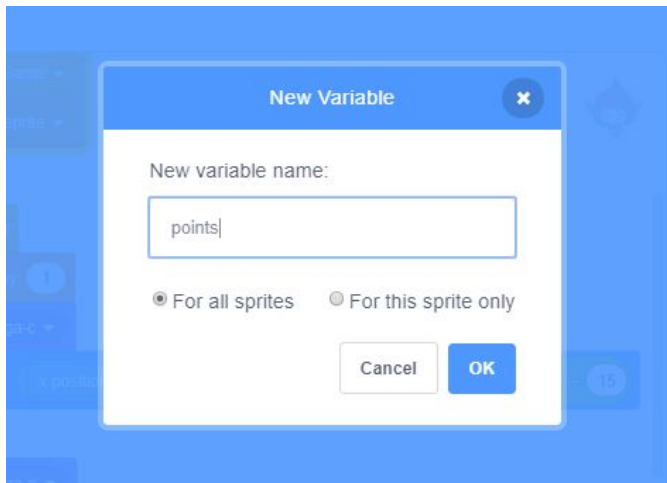


Rocks x4

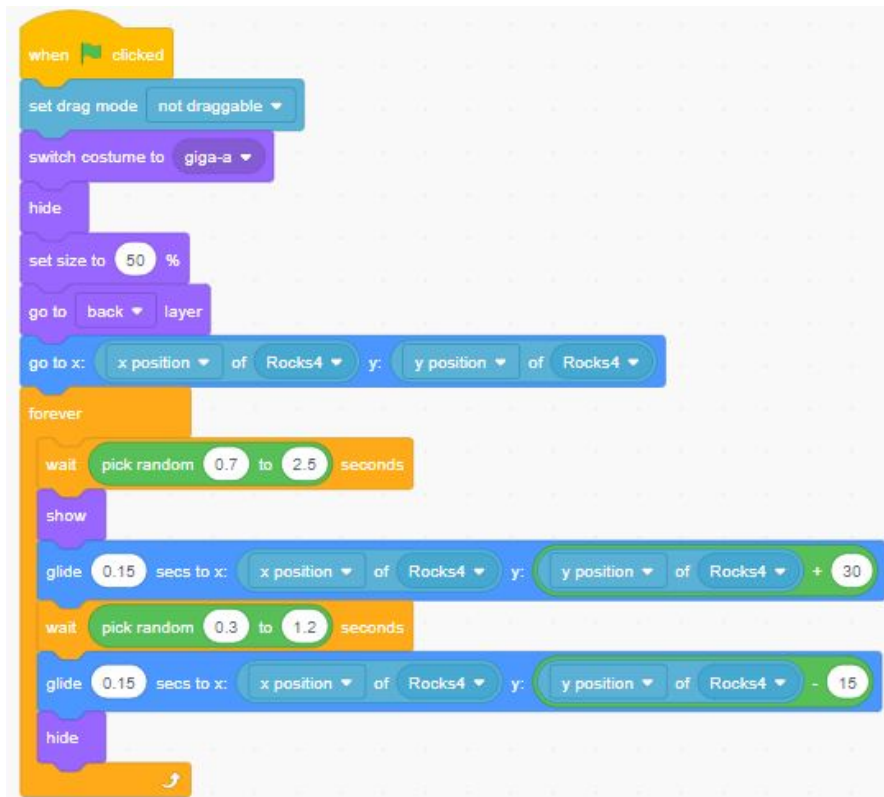


Ripley x1

2. Now it's time for us to create our variables. Go to the variables menu and make a new variable named "points". This variable is increased by 1 every time we click on a visible alien.



3. Once we have added all of our sprites, we can now begin to add code to our game. Let's start by adding the code for our aliens. Select Giga and enter the code below.

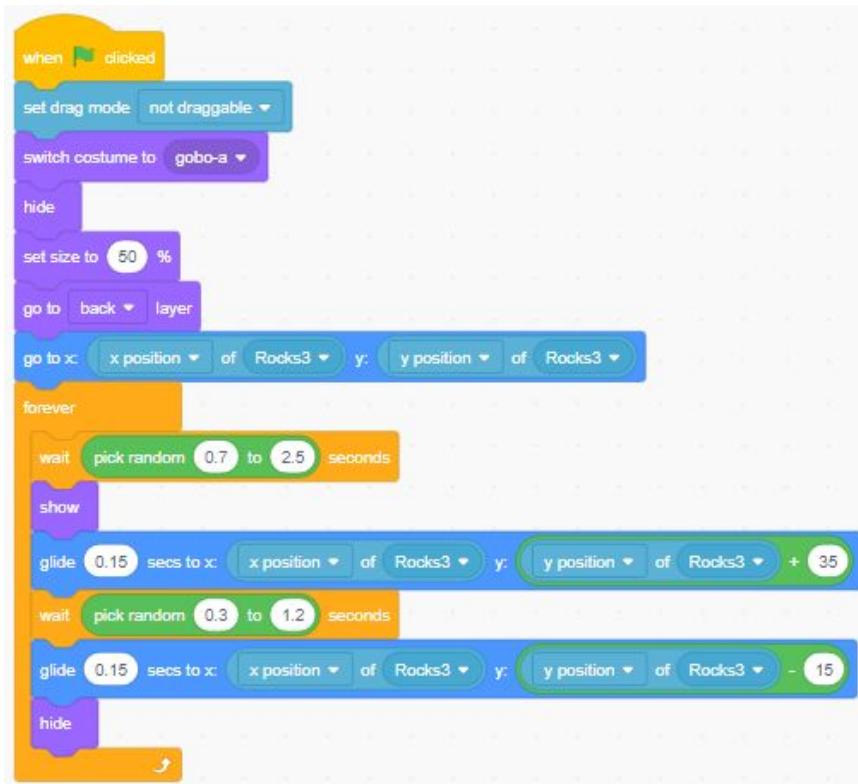


This script begins by setting our default values for Giga. After the “When green flag clicked block”, the first block makes it so our sprite is not draggable. After that we set the default looks for Giga. We want to make sure the sprite’s costume is set to “giga-a”. Later on we will add more code to Giga that switches the costume when the sprite is clicked on. The “hide” block is used to make sure our sprite is hidden when the game starts. After the looks have been set, we use a “go to x: y:” block to position our sprite. We want to set the sprite’s x position using the “x position of Rocks4” block and the y position using the “y position of Rocks 4” block. These blocks can be found in the sensing menu.

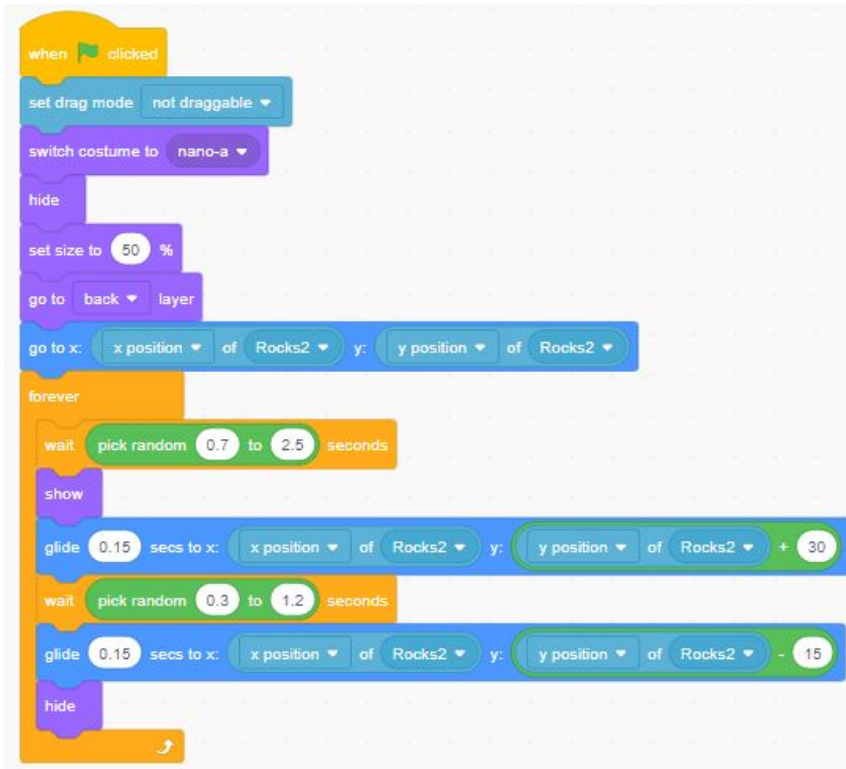
The code used to make our sprite randomly appear is placed inside the forever loop. The first block in our forever loop is “wait pick random 0.7 to 2.5 seconds”. this block creates a pause in between intervals of when our alien makes itself seen. The amount of time it pauses is set to a random number to make the game more interesting. Once the pause has ended, we then show our sprite using a “show” block. The first glide block makes our alien glide straight up above the rock. The second glide block brings our alien back down and we use the “hide” block to make our sprite invisible again.

- The code used for Giga will be very similar for the other 3 alien sprites. Add the code below to each sprite.

Gobo



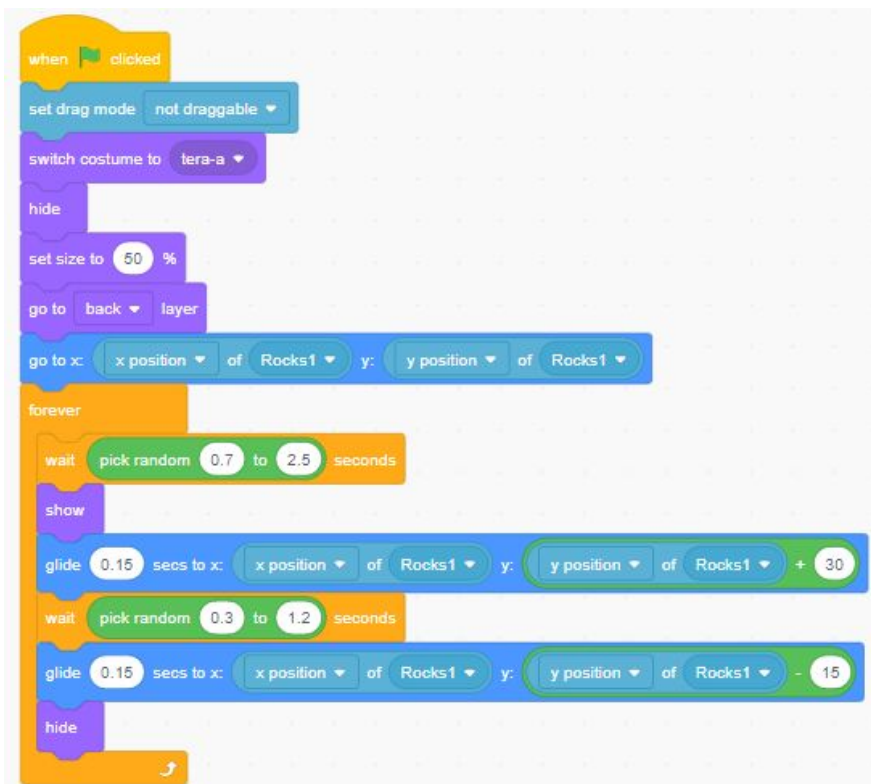
Nano



```
when clicked
  set drag mode to not draggable
  switch costume to nano-a
  hide
  set size to 50%
  go to back layer
  go to x: x position of Rocks2 y: y position of Rocks2
  forever
    wait pick random 0.7 to 2.5 seconds
    show
    glide 0.15 secs to x: x position of Rocks2 y: y position of Rocks2 + 30
    wait pick random 0.3 to 1.2 seconds
    glide 0.15 secs to x: x position of Rocks2 y: y position of Rocks2 - 15
    hide
```

The code for the Nano character starts with a 'when clicked' event. It sets the drag mode to 'not draggable', switches the costume to 'nano-a', and hides the character. The size is set to 50%, and it is moved to the 'back' layer. It then moves to the x and y positions of 'Rocks2'. A 'forever' loop follows, containing a 'wait' block for a random time between 0.7 and 2.5 seconds, a 'show' block, a 'glide' block for 0.15 seconds to the x position of 'Rocks2' and y position of 'Rocks2' + 30, another 'wait' block for a random time between 0.3 and 1.2 seconds, a 'glide' block for 0.15 seconds to the x position of 'Rocks2' and y position of 'Rocks2' - 15, and finally a 'hide' block.

Tera



```
when clicked
  set drag mode to not draggable
  switch costume to tera-a
  hide
  set size to 50%
  go to back layer
  go to x: x position of Rocks1 y: y position of Rocks1
  forever
    wait pick random 0.7 to 2.5 seconds
    show
    glide 0.15 secs to x: x position of Rocks1 y: y position of Rocks1 + 30
    wait pick random 0.3 to 1.2 seconds
    glide 0.15 secs to x: x position of Rocks1 y: y position of Rocks1 - 15
    hide
```

The code for the Tera character starts with a 'when clicked' event. It sets the drag mode to 'not draggable', switches the costume to 'tera-a', and hides the character. The size is set to 50%, and it is moved to the 'back' layer. It then moves to the x and y positions of 'Rocks1'. A 'forever' loop follows, containing a 'wait' block for a random time between 0.7 and 2.5 seconds, a 'show' block, a 'glide' block for 0.15 seconds to the x position of 'Rocks1' and y position of 'Rocks1' + 30, another 'wait' block for a random time between 0.3 and 1.2 seconds, a 'glide' block for 0.15 seconds to the x position of 'Rocks1' and y position of 'Rocks1' - 15, and finally a 'hide' block.

- Now we can add the code that checks to see when our aliens are clicked on. Add the code below to each of our alien sprites.

Giga



```
when this sprite clicked
change Points by 1
switch costume to giga-c
glide 0.3 secs to x: x position of Rocks y: y position of Rocks - 15
hide
switch costume to giga-a
```

Gobo



```
when this sprite clicked
change Points by 1
switch costume to gobo-c
glide 0.3 secs to x: x position of Rocks4 y: y position of Rocks4 - 15
hide
switch costume to gobo-a
```

Nano



```
when this sprite clicked
change Points by 1
switch costume to nano-c
glide 0.3 secs to x: x position of Rocks3 y: y position of Rocks3 - 15
hide
switch costume to nano-a
```

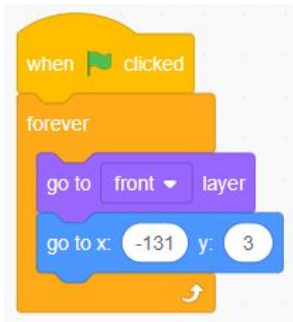
Tera



The code for all 4 sprites is pretty much the same. The event block we need to start off our code is the “when this sprite clicked” block. We then use the “change point by 1” block to increase our points variable. The “switch costume” block is used to make our aliens look like they are reacting when they are clicked. The main difference is in the “glide 0.3 secs” block. We need each of our sprites to glide behind the rock they were originally placed behind. We then use a “hide” block to make sure our alien is hidden and ready to pop up again in the next interval. The last “switch costume” block is used to reset our sprite’s costume before the next interval.

6. Now let's add the code for our rocks. Add the code below to each of our rocks.

Rocks1



Rocks2



Rocks3

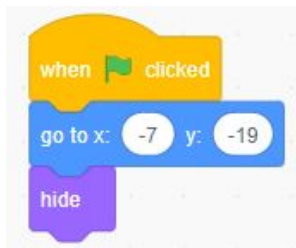


Rocks4



All we are doing with the rock code is using a “go to front layer” block to make our rocks sprites appear in the layer in front of our aliens. This makes it so the aliens are able to be hidden behind the rock. The “go to x: y: ” block positions the rocks exactly where we want them. They are inside of a forever loop in case the rock is moved during our game. Putting these blocks inside a forever block Make the rocks stay in their designated position.

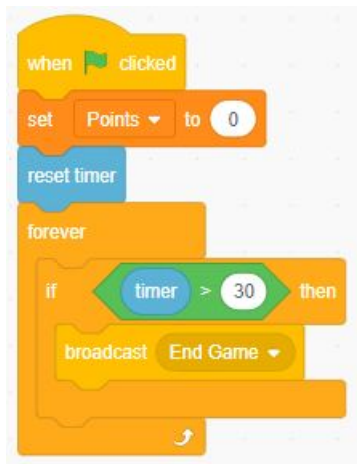
7. Now we can add our code for the Ripley sprite. Select Ripley and add the following blocks of code.



When the game starts and the green flag is clicked we want to make sure our sprite is positioned where we want it using a “go to x: y:” block. To make it invisible we use a “hide” block. This sprite is only visible when the game ends. Later on we will add our code that ends our game.

8. The next step is to add our background. Navigate to the stage area and click on “choose a backdrop”. Feel free to choose whatever backdrop you want to use. The backdrop I chose for this game is called “Space”.

Once our backdrop is chosen, make sure it is selected and add the code below.



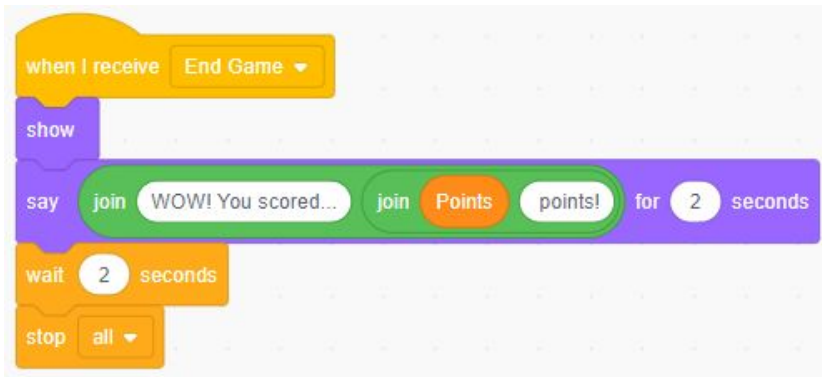
Basically we are using our backdrop to reset the score to 0 whenever a new game starts. This is done by using the “set points to 0” block which is found in the variables menu. The backdrop is also used to create our timer. This is done using the “reset timer” block. This block can be found in the sensing menu. Inside of our forever loop we have one conditional statement. This statement checks when the timer has reached 30 seconds. You can find the IF block in the control menu. The blue “timer” block is found in the sensing menu and the >(greater than) operator can be found in the operators menu. To get the “broadcast end game” block select to the events menu, locate the broadcast block and create a new message called “end game”.

9. Now that we have created our broadcast that ends our game, we can add the code to our sprites that receive the broadcast. Add the following code to ALL 4 of our alien sprites.

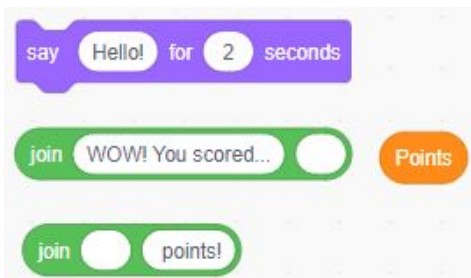


The “when I receive End Game block” can be found in the events menu. The “stop other scripts in sprite” block is found in the control menu. This block will end the code for all of our alien sprites. Basically making our sprites stop showing and hiding.

10. This is our final step. Select the Ripley sprite and add the code below.



Just like the alien sprites, we will also need the “when I receive End Game” block. The “show” block makes our Ripley sprite visible and the “say” block makes our sprite say the amount of points the player scored within 30 seconds. Also, the “say” block is also combined using 3 more blocks. Below is an image of all the blocks that will be needed.



The “say” block is found in the looks menu and the “Points” block can be found in the variables menu.

We get the join block from the operators menu. This block is used to combine text together. It can also be used to combine variables with text. For example, if the player scored 20 points, the Ripley sprite will say “WOW! You scored...20 points!”.

Great Job!

We are now finished coding our game. Give it a try! See how many aliens you can click on before the time runs out. If the game isn't working properly, try going back and check to see if you need to fix any mistakes in your code.