

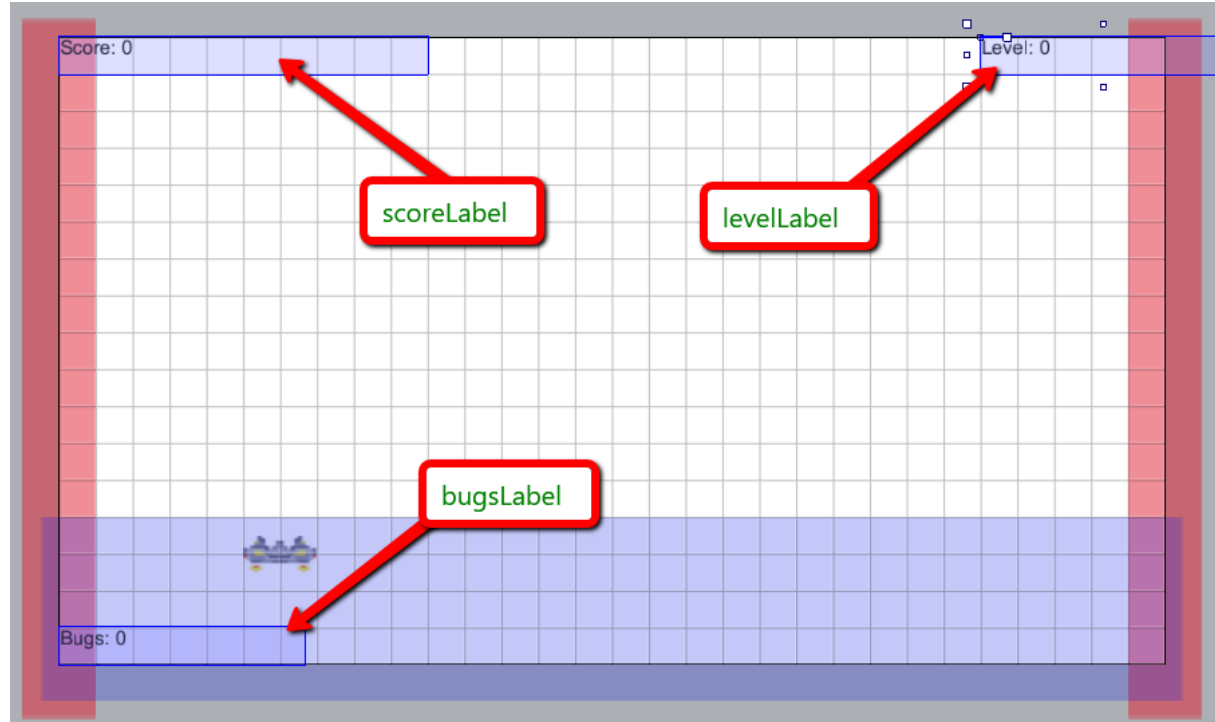
Centipede

Part 2 - Polishing Our Game

Play the game we are building:
Click

Create 3 Text Fields

- Name: **scoreLabel**
 - Text: **Score: 0**
- Name: **levelLabel**
 - Text: **Level: 0**
- Name: **bugsLabel**
 - Text: **Bugs: 0**



Create a “Points Text”

- This will display when you get points and then fade away.
- Place outside of the layout
- Set the text to Green color
- Name: **points**
- Text: **-100**
- Behavior: **Fade**

The screenshot displays the configuration for a 'points' text object in an animation software. The interface is divided into a grid workspace and a left-hand configuration panel.

Object type properties:

Name	points
Plugin	Text
UID	12
Global	No

Common:

Layer	Layer 0
Angle	0
Opacity	100
Position	300, 570
Size	60, 30

Instance variables:

Add / edit [Instance variables](#)

Behaviors:

- Fade**

Active at start	Yes
Fade in time	0
Wait time	0
Fade out time	1
Destroy	After fade out

Add / edit [Behaviors](#)

Effects:

Blend mode	Normal
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Add / edit [Effects](#)

Container:

No container [Create](#)

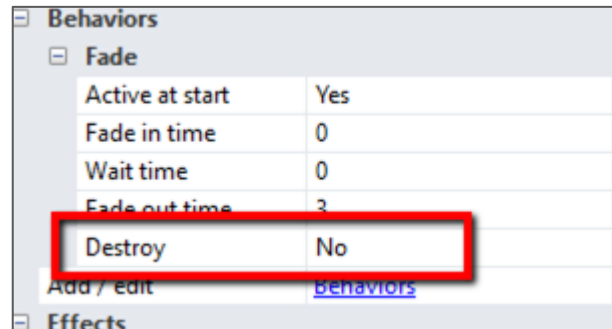
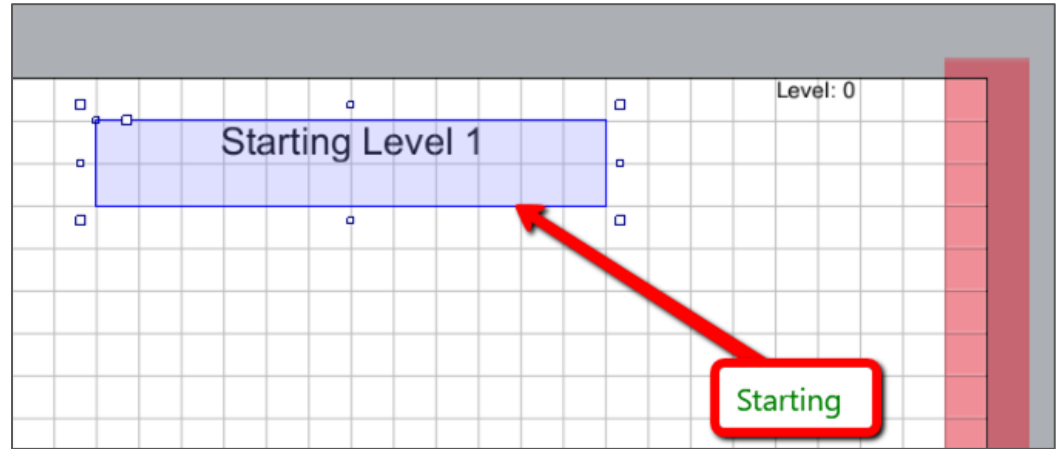
Properties:

Text	-100
Initial visibility	Visible
Font	Arial(12)
Color	0, 255, 0
Horizontal alignment	Left
Vertical alignment	Top
Hotspot	Top-left

The workspace shows a blue water area with a boat icon and a grey land area. A text box containing '-100' is positioned on the land area. The text box is highlighted with a red border, and its configuration is shown in the 'Properties' section of the left panel.

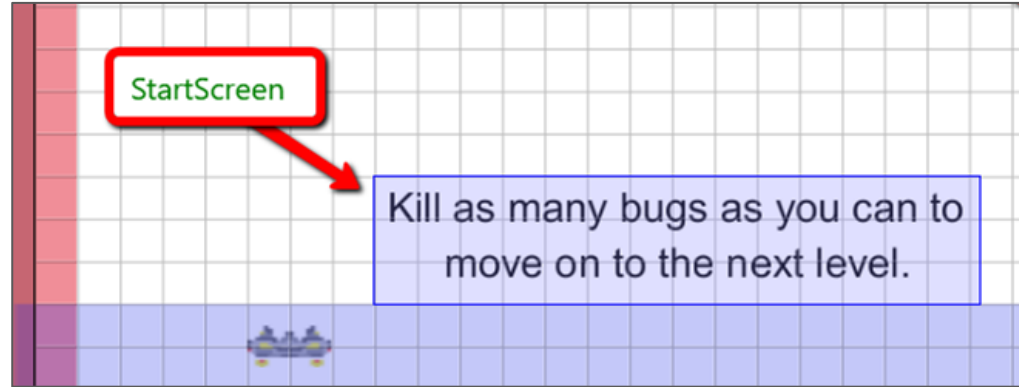
Add a Startup Text

- Name: **Starting**
- Add Behavior:
 - **“Fade”**
- Set Fade’s **“Destroy”** to **“No”** on **Starting** only
- Adjust font size



Add Instructions Text

- Name: **StartScreen**
- Add Behavior:
 - **“Fade”**
- Set: **“Initial visibility”** to **“invisible”**
- Adjust font size



Properties	
Text	Kill as many bugs as you ...
Initial visibility	Invisible
Font	Arial(22)
Color	■ 0, 0, 0
Horizontal alignment	Center
Vertical alignment	Center
Hotspot	Top-left
Wrapping	Word
Line height	0
More information	Help

Display Start Message

- Add to “On start of layout”

The screenshot shows an animation software interface with a timeline on the left and a central workspace. The timeline has several tracks:

- Track 8: A green arrow icon, a 'bullet' icon, and the text 'On collision with' followed by a 'rock' icon.
- Track 9: A 'rock' icon and the text 'Animation frame > 0'.
- Track 10: A gear icon and the text 'Else'.
- Track 11: A 'rock' icon and the text 'Is overlapping' followed by a blue square icon and the text 'playerArea'.
- Track 2: A green arrow icon, a gear icon, and the text 'On start of layout'.

A dialog box titled 'Parameters for Starting: Set text' is open in the center. It contains the following text:

Enter the text to set the object's content to.

Text: "Starting Level " & level

Buttons: Cancel, [Help on expressions](#), Back, Done

The dialog box is positioned over the timeline, and the 'On start of layout' track is highlighted in yellow. The text 'Starting Level " & level' is entered into the text field.

Add Instructions

Add another sub-event to “On start of layout”

12	System	On start of layout	Starting	Set text to "Starting Level " & level
			Add action	
13	System	For "create" from 1 to 25	System	Create object rocks on layer 0 at $(\text{floor}(\text{random}(3,27)) * \text{blockSize}, \text{floor}(\text{random}(3,10)) * \text{blockSize})$
			rocks	Set animation frame to 3
			Add action	
14	System	level = 1	StartScreen	Set Visible
			StartScreen	Move to top of layer
			Add action	

Update Text Fields

- Every tick, update the 3 text fields with their global variables

15	 System	Every tick	 bugsLabel	Set text to "Bugs: " & <i>bugCount</i>
			 levelLabel	Set text to "Level: " & <i>level</i>
			 scoreLabel	Set text to "Score: " & <i>score</i>
			Add action	

Spawn a Score Counter

- Add a new image point to **bugs**, **rocks**, and **player**
- Add it just to the top-right
- “Apply to all animations”

The screenshot shows a software interface for creating animations. A character sprite is being edited in a window titled 'Edit image: player (Default, frame 0)'. The character has a grey body and yellow accents. A red arrow points to a small square icon in the top-right corner of the image, indicating where to add a new image point. Below the main image, there are two panels: 'Image points' and 'Image points' (a table). The 'Image points' panel shows a list of points with columns for 'Name' and 'Number'. The table below shows the following data:

Name	Number
Origin	0
Imagepoint 1	1
Imagepoint 2	2

At the bottom, there is an 'Animation frames (25)' panel showing a sequence of frames from 0 to 11. A red arrow points to the 'Apply to all animations' option in a context menu that appears over the frames. A second red arrow points to the 'Imagepoint 2' row in the table.

1. Add new image point

2. Right-click & "Apply to all animations"

Spawn Points for Bugs

- Add to Row 6
- Points text is: "+" & 100*bugs.AnimationFrame

6 → • bullet On collision with bugs

bugs	Destroy
• bullet	Destroy
bugs	Spawn rocks on layer 0 (image point 0)
rocks	Set animation frame to random(0,4)
System	Add 100*bugs.AnimationFrame to score
bugs	Spawn points on layer 0 (image point 1)
points	Set text to "+" & 100*bugs.AnimationFrame

Spawn Points for Rocks

- Add to Row 8
- Points text is: "+10"

The screenshot shows an animation timeline with three rows (8, 9, 10) and two columns. Row 8 is the focus, showing an event triggered by a 'bullet' on collision with a 'rocks' object. The actions for this event are:








- bullet: Destroy
- System: Add 10 to score
- rocks: Spawn **points** on layer 0 (*image point 1*)
- points: Set text to "+10"

Row 9 shows an event triggered by 'rocks' when 'Animation frame > 0', with the action: rocks: Set animation frame to **rocks.AnimationFrame-1**.

Row 10 shows an 'Else' event triggered by 'System', with the action: rocks: Destroy.

Lose Points for Bugs Hitting Player

- Lose 1,000 points if a bug his the player
- Set the color to **Red**

16	 player	On collision with  bugs	 System	Subtract <i>1000</i> from score
			 player	Spawn  points on layer 0 (<i>image point 2</i>)
			 points	Set text to "-1000"
			 points	Set font color to <i>rgb(255, 0, 0)</i>
			Add action	



Complete a Level

- After 25 bugs have been spawned & killed (or left the screen), go to the next level.
- Next level will increase the bug's speed

17	System	bugCount ≥ 25	System	Wait 1 seconds
	System	bugs.Count = 0	System	Restart layout
			System	Add 50 to bugSpeed
			System	Add 1 to level
			System	Set bugCount to 0
				Add action

Add A Game Pause (optional)

- Set the “**Time Scale**” to value “**timescale = 0 ? 1 : 0**”

18	 Keybo...	On P pressed	 System	Set time scale to <i>timescale = 0 ? 1 : 0</i>
			Add action	