

Bunny Hop Adventure

Part 2...Boars & Bears

Play the game we are building:
[click](#)

Today's Game

Challenge: Build a platform game complete with hero, enemies, rewards, and multiple levels.

Goal: Impress our guests

Features:

- A hero with multiple animations
- An enemy that you need to jump on or shoot
- Gems to collect
- More!

Adding Layout 2

The image illustrates the process of adding a new layout in Construct 2 through three sequential steps:

- Step 1:** In the **Projects** panel, a right-click context menu is shown over the **New project** folder. The **Add layout** option is highlighted with a red arrow.
- Step 2:** The **Construct 2 - Add layout** dialog box appears. It asks, "Do you want to add an event sheet for this layout as well?" and provides three choices:
 - Add event sheet**: The new layout will use the new event sheet.
 - Don't add event sheet**: The new layout will not initially use an event sheet.
 - Cancel**: Don't add anything.
 A red arrow points to the **Add event sheet** option.
- Step 3:** The **Properties** panel for the newly created **Layout 2** is shown. Key settings are highlighted with red boxes and red arrows:
 - Event sheet**: Set to **Event sheet 1**.
 - Layout Size**: Set to **5000, 2500**.

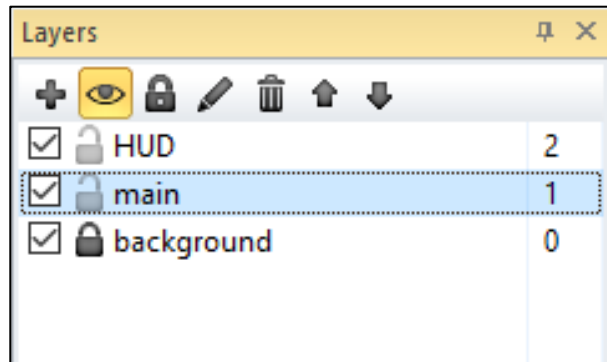
Background Templates

- Create ***TiledBackground*** and load “level_02_background.png”
 - Set ***Position*** to 0,0 & ***Size*** to 5000,2500
 - Set ***Name*** to background

- Create another ***TiledBackground*** and load “level_02_template.png”
 - Set ***Position*** to 0,0 & ***Size*** to 5000,2500
 - Set ***Name*** to backgroundtemplate
 - Set ***Opacity*** to 50
 - Set ***Initial visibility*** to invisible

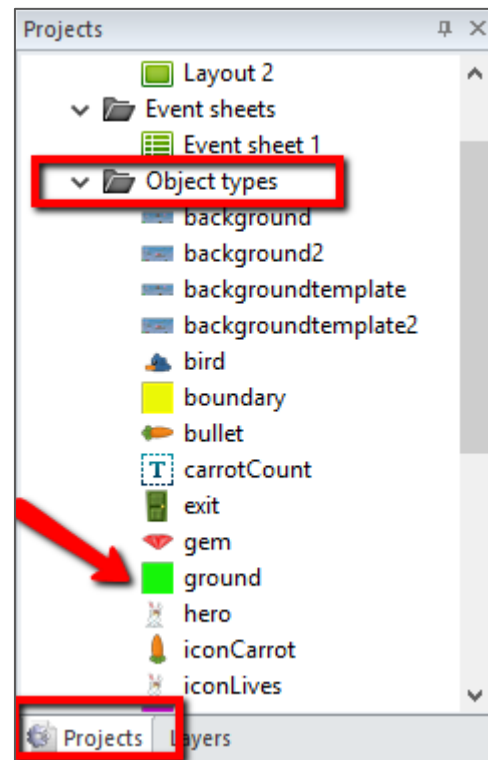
Setup Layers

- Rename current layer to **background**
- Click “+” to add another layer
 - Name new layer **main**
- Click “+” to add another layer
 - Name new layer **HUD**
- Lock **background** layer (Press the ‘lock’ icon)
- Click **main** layer to make it the active layer

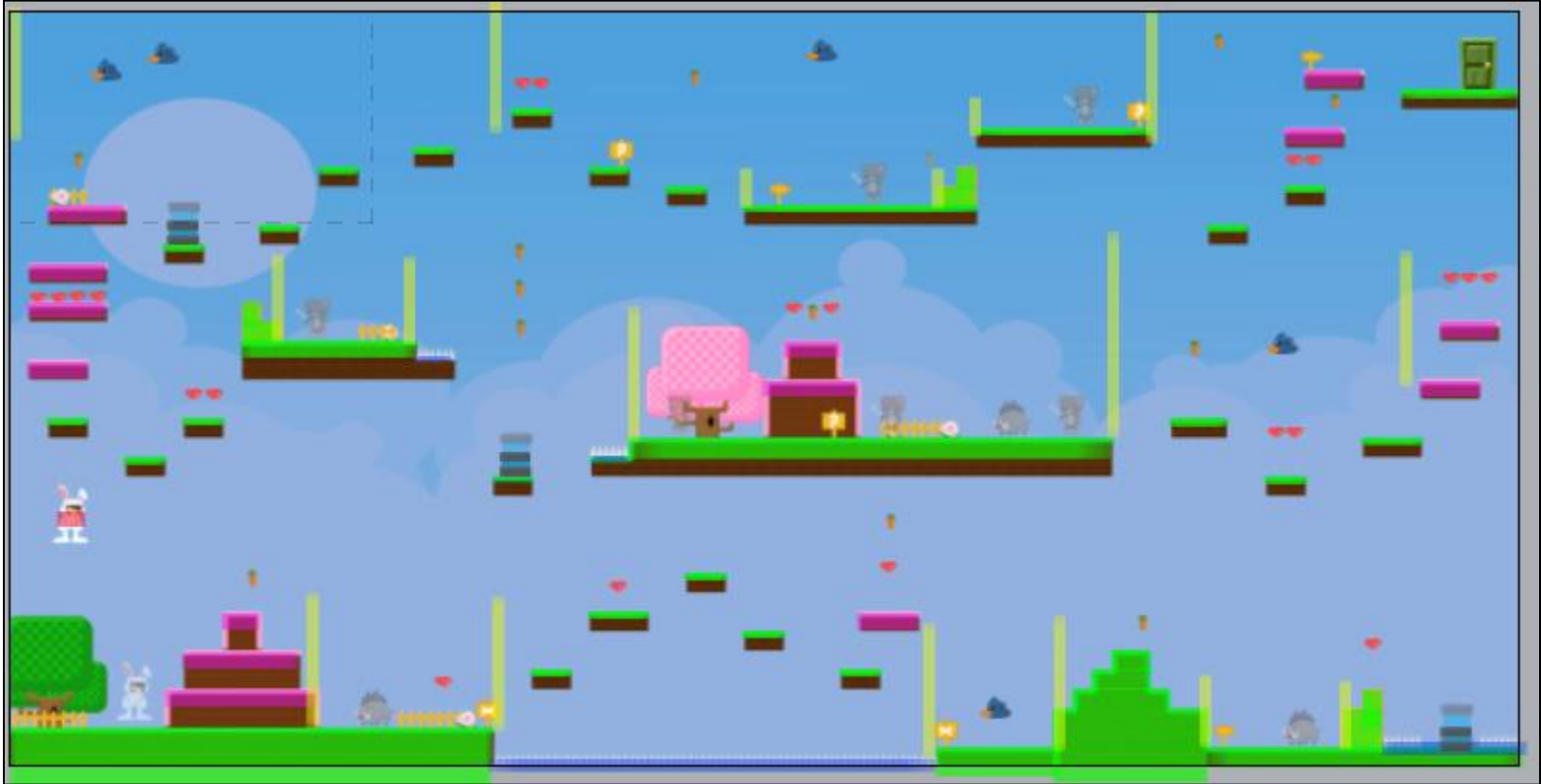


Load Images FROM Level 1

- **IMPORTANT:** Do Not Create New Images
- Locate in the “Object Types” tree
 - **Drag** them onto Layout 2
 - **Copy** as needed
- Re-use these:
 - Bird, boundary, exit, gem, ground, hero, jumpthru, respawn, spikes, spring, bullet
 - **(Skip HUD objects for now)**

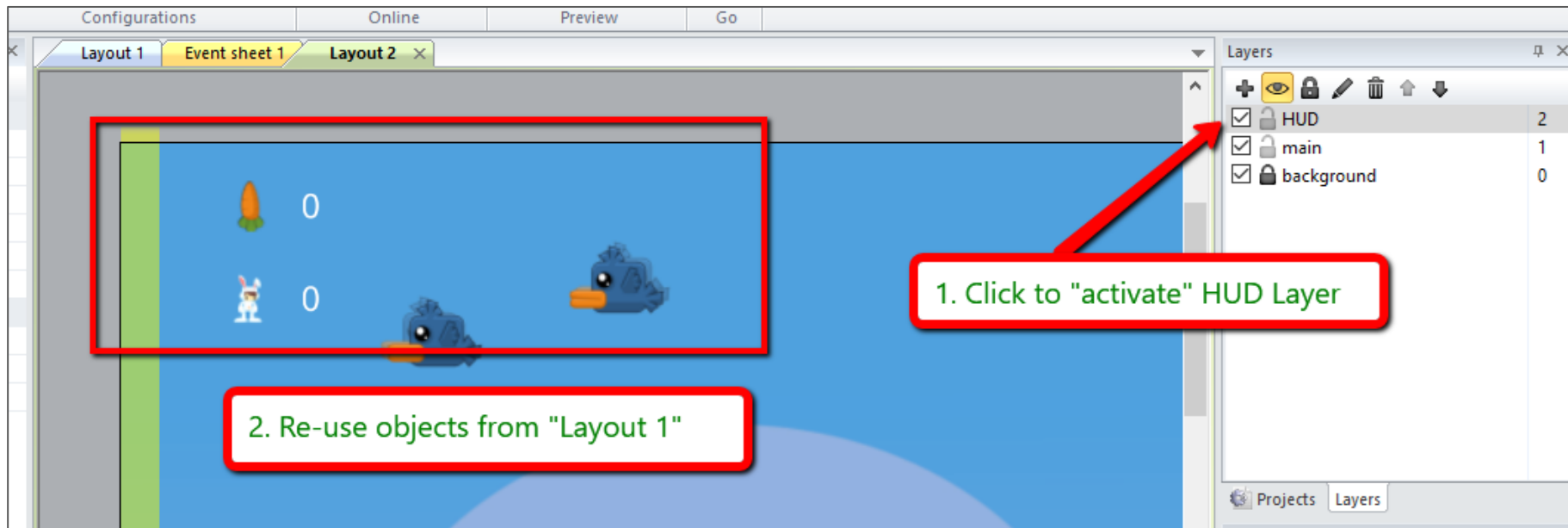


Adding All Objects



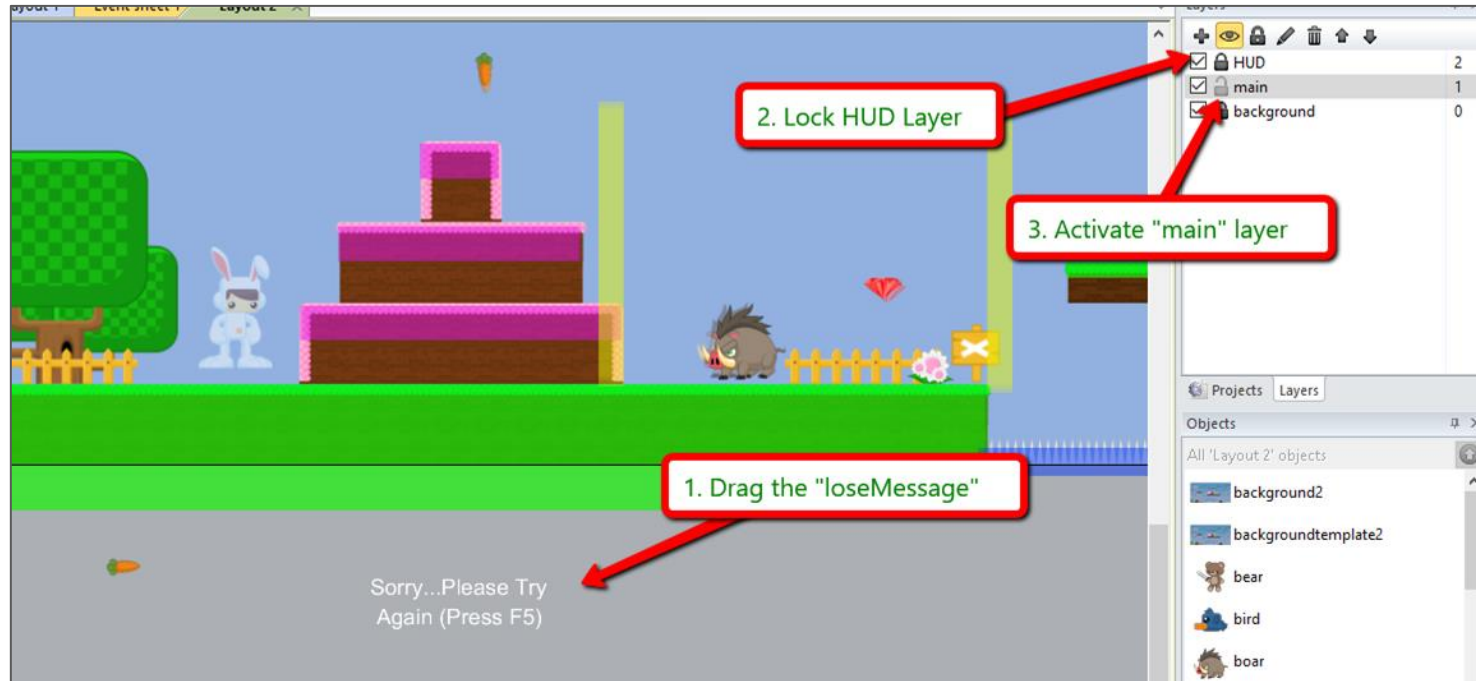
Add HUD Objects

- Select the HUD as the active display
 - Click on it
- Drag over the icons & text, layout accordingly



Adding HUD Message

- Drag the “loseMessage” onto Layout 2
- Lock the HUD
- Set “main” as active



Adding the Boar enemy

The screenshot shows the Scirra game engine interface with the following components:

- Properties Panel (Left):**
 - Clipboard, Undo, Select None Selection
 - Animation 'walking' properties:

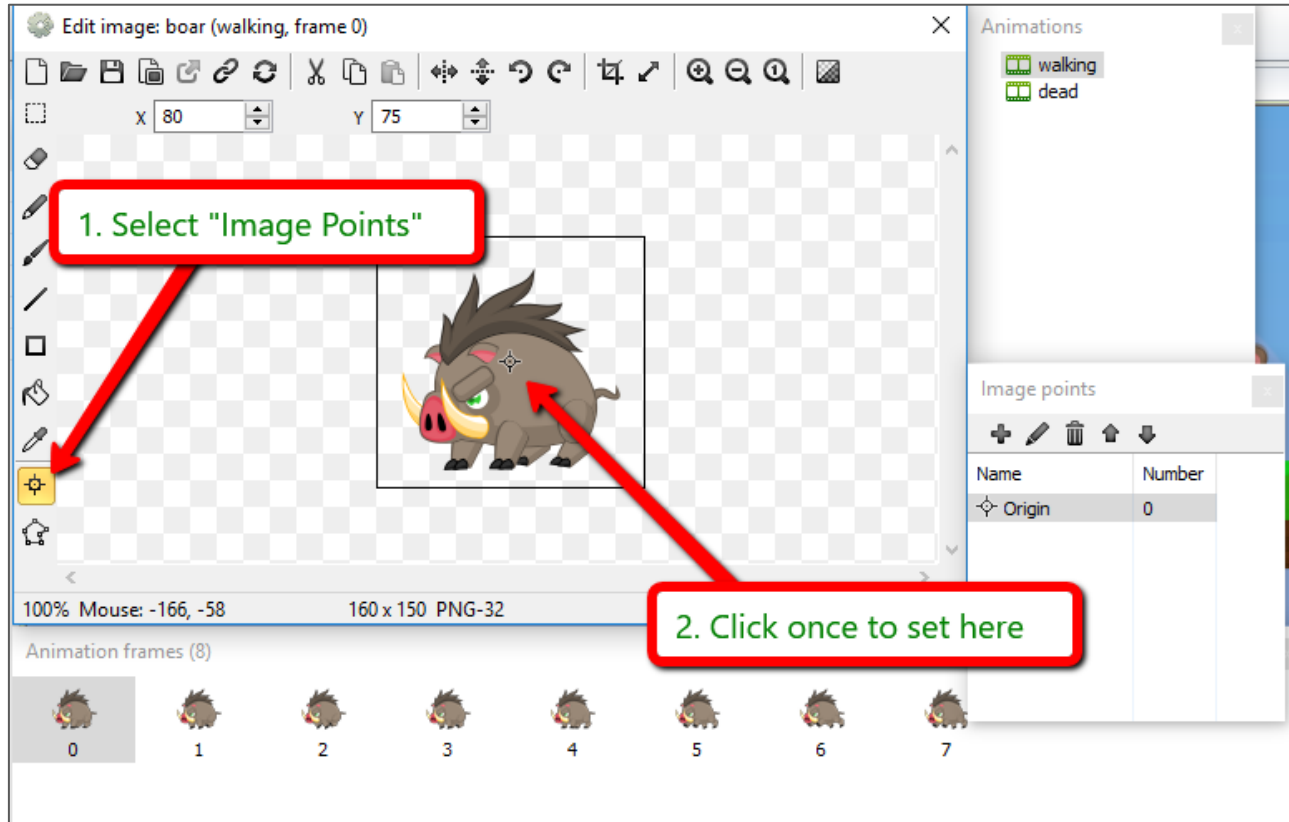
Speed	5
Loop	Yes
Repeat count	1
Repeat to	0
Ping-pong	No
 - More information [Help](#)
- Image Editor (Center):**
 - Title: Edit image: boar (walking, frame 0)
 - Toolbar with various editing tools.
 - Canvas showing a boar image on a checkerboard background.
 - Status bar: 100% Mouse: 11, 180 160 x 150 PNG-32
- Animations Panel (Right):**
 - Title: Animations
 - List of animations: walking, dead
- Animation frames (Bottom):**
 - Strip showing 8 frames of the boar animation, numbered 0 to 7.

Instructions (Red Callouts):

1. Create two animations (points to the Animations panel)
2. Load images for each (points to the animation frame strip)
3. "walking" gets "loop" set to "yes" (points to the Loop property in the Properties panel)

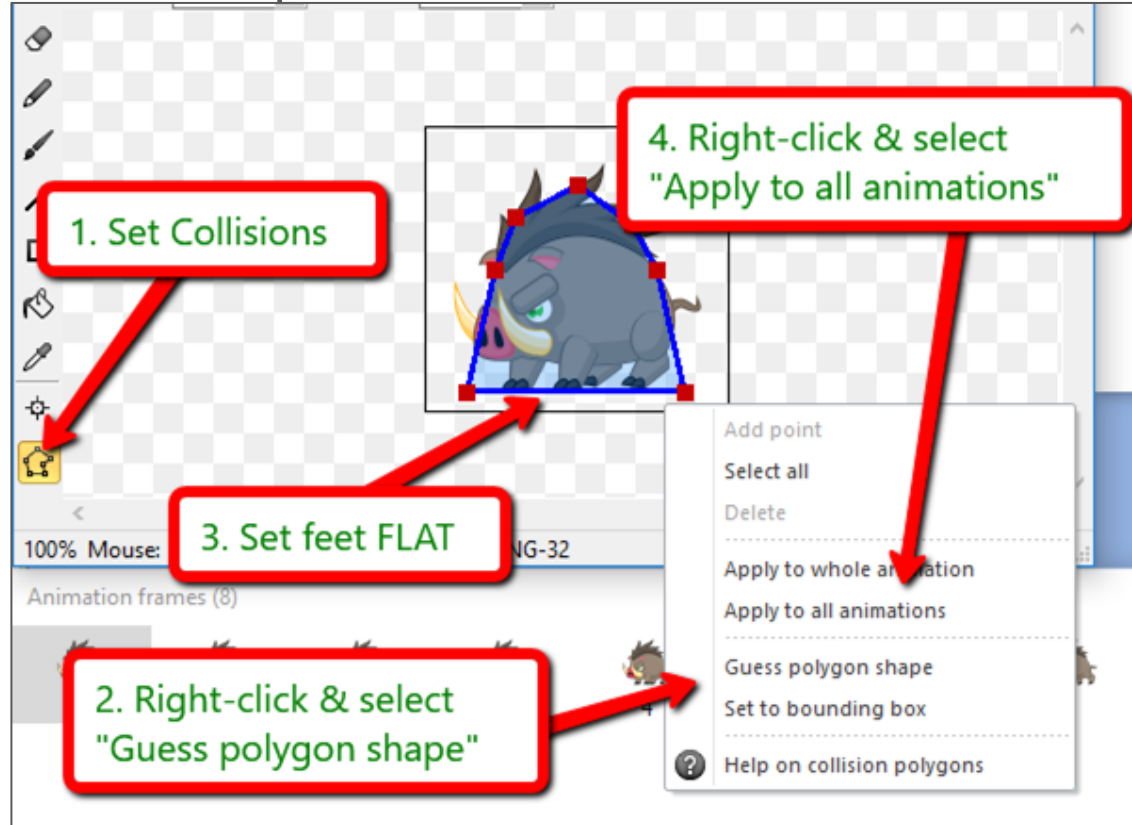
Adding the Boar enemy

- Adjust the "Image Point" so he moves smoothly



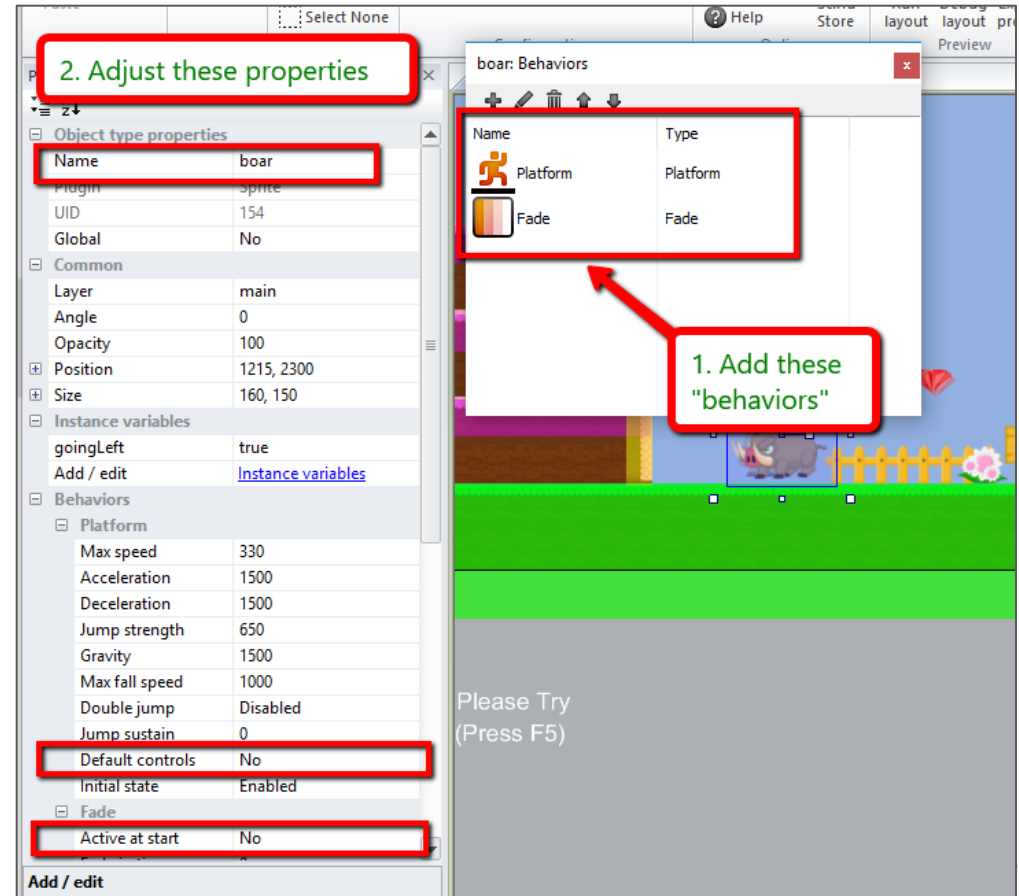
Adding the Boar enemy

- Adjust the “collision points”



Adding the Boar enemy

- Rename to boar
- Behaviors: Fade, and Platform
- Set up boars throughout game



Adding the Boar enemy

- Define a boolean variable to keep track of direction

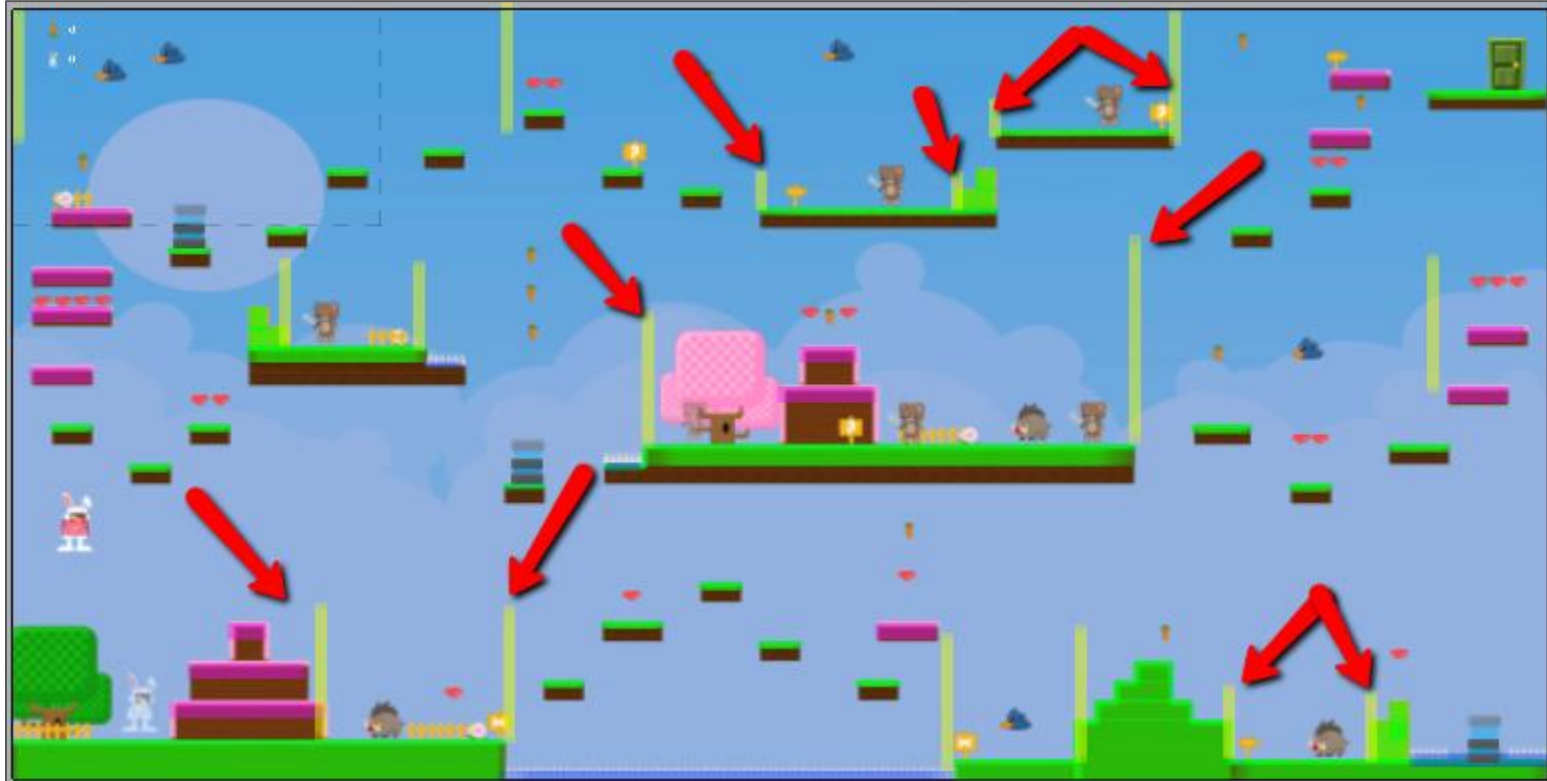
The screenshot shows the Scratch IDE interface with several windows and annotations. The 'Properties' panel on the left shows the 'Instance variable' section with 'goingLeft' listed. The 'Instance variable' dialog box is open, showing the variable name 'goingLeft', type 'Boolean', and initial value 'true'. Red arrows point from numbered text boxes to specific elements in the interface:

- 1. Create instance variable** points to the 'Instance variable' section in the Properties panel.
- 2. Add "new"** points to the '+' button in the 'bird: Instance variables' window.
- 3. Name it "goingLeft"** points to the 'Name' field in the 'Instance variable' dialog.
- 4. Boolean** points to the 'Type' dropdown menu in the 'Instance variable' dialog.
- 5. Type in "true"** points to the 'Initial value' field in the 'Instance variable' dialog.

The 'Instance variable' dialog box contains the following information:














Name	Type	Initial value
goingLeft	Boolean	true

Check the Enemy Boundaries




















Adding the Boar enemy

- Add these events

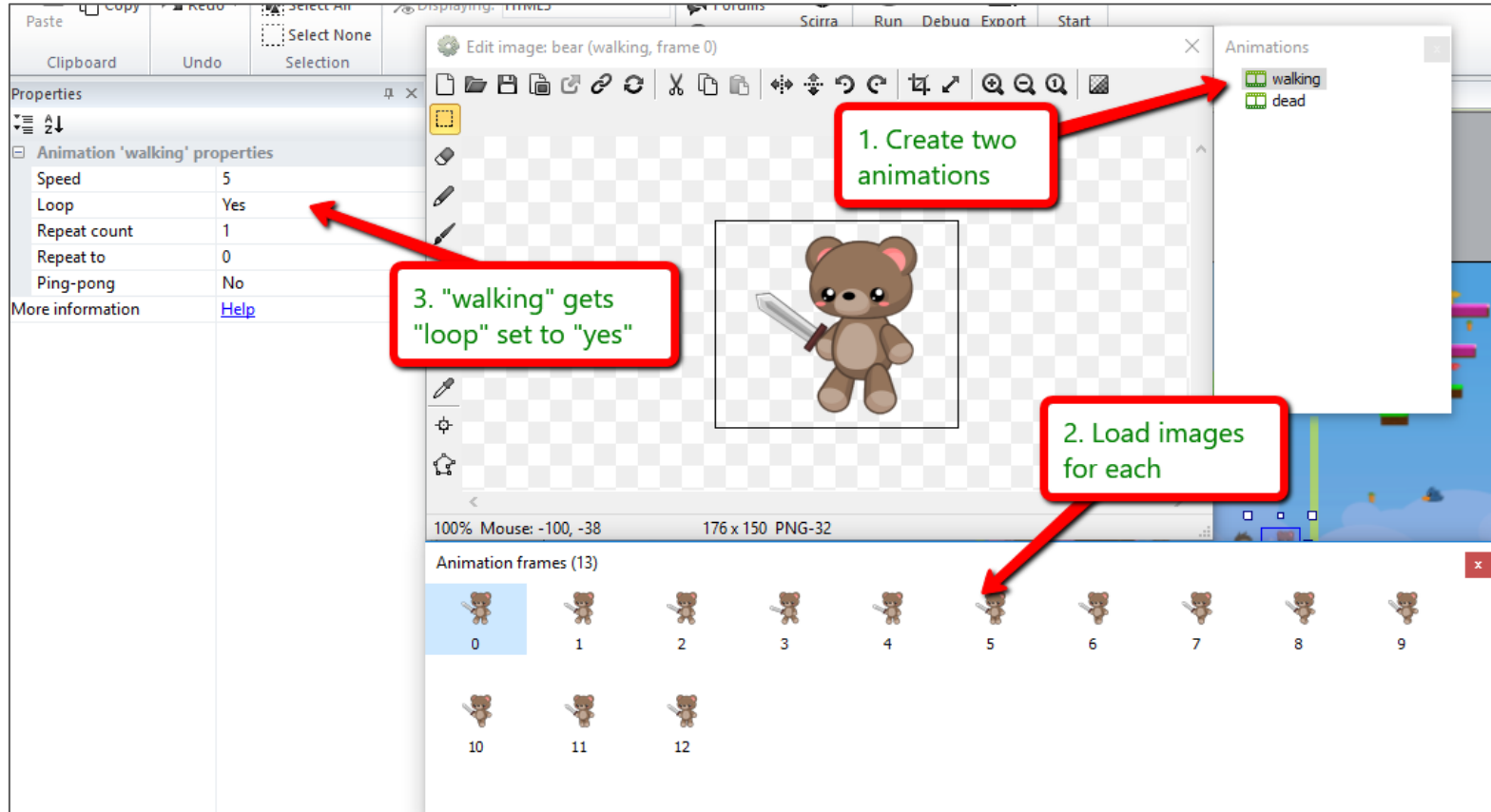
27	 boar	Is goingLeft	 boar	Simulate  Platform pressing Left
			 boar	Set Not mirrored
			Add action	
28	 boar	 Is goingLeft	 boar	Simulate  Platform pressing Right
			 boar	Set Mirrored
			Add action	
29	  boar	On collision with  boundary	 boar	Toggle goingLeft
			Add action	

Killing the Boar Enemy

- Add these events

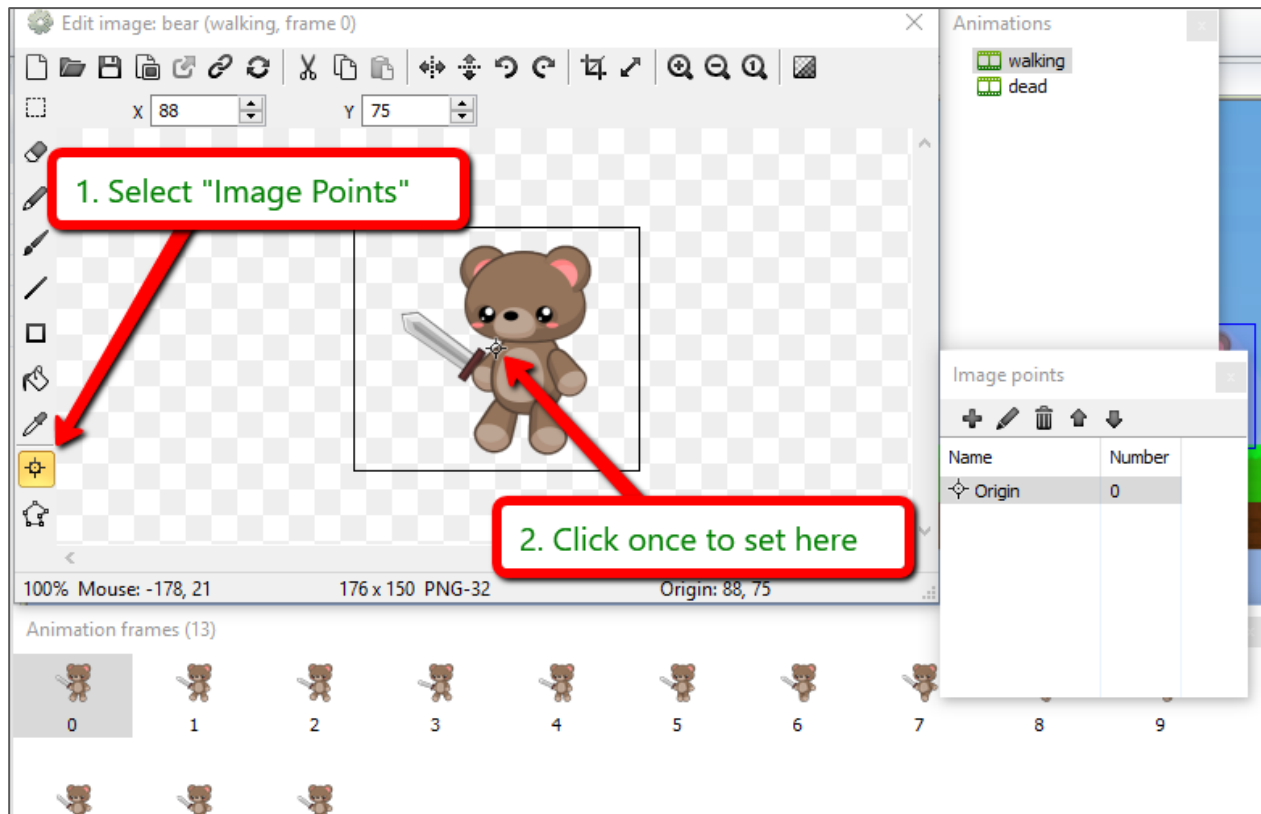
30	 boar	On collision with  hero	 hero	Set  Platform Disabled
			 hero	Set collisions Disabled
			 hero	Set animation to " dead " (play from beginning)
			 System	Wait 2 seconds
			 hero	Destroy
			Add action	
31	 bullet	On collision with  boar	 bullet	Destroy
			 boar	Set  Platform Disabled
			 boar	Set collisions Disabled
			 boar	Set animation to " dead " (play from beginning)
			 boar	 Fade: start fade
			Add action	

Adding the Bear enemy



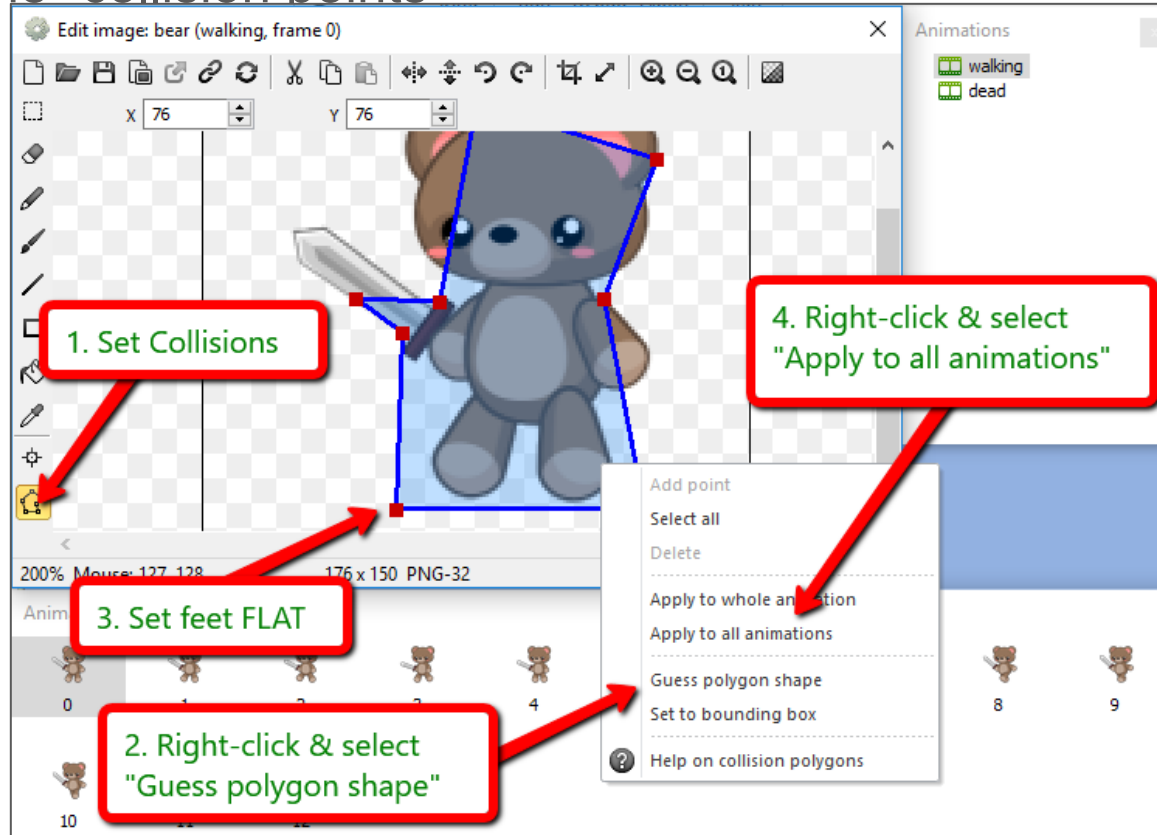
Adding the Bear enemy

- Adjust the "Image Point" so he moves smoothly



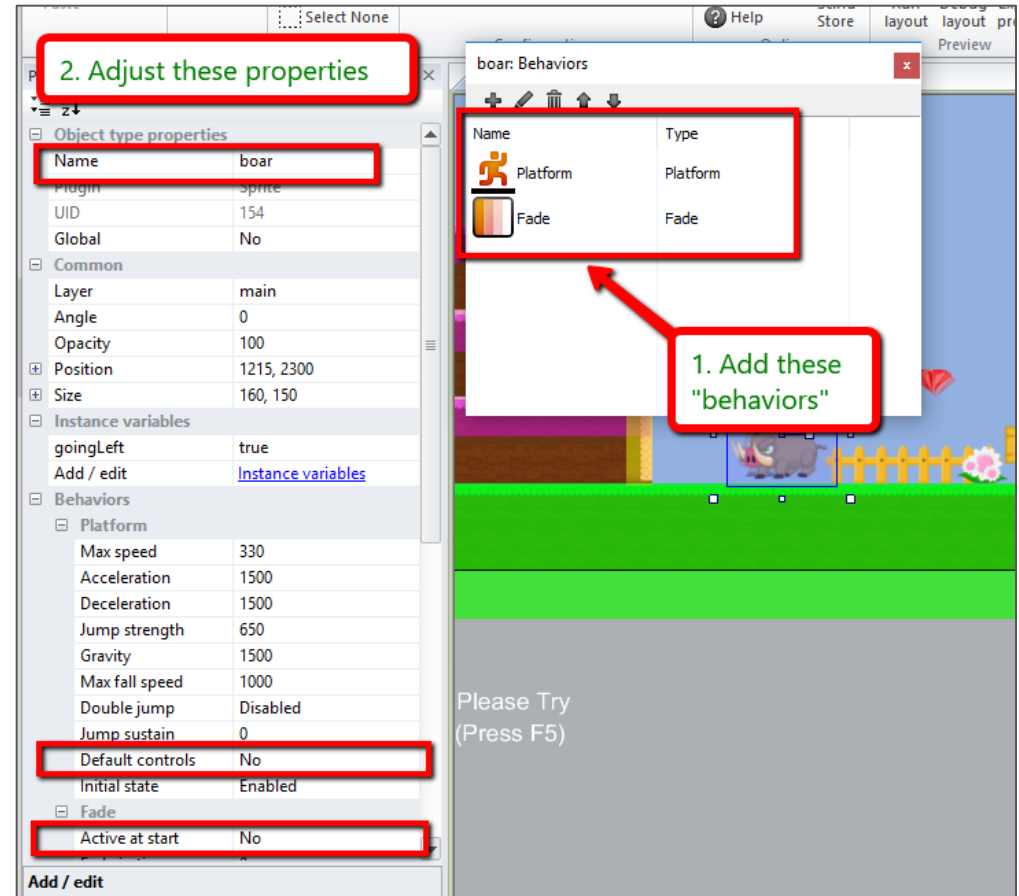
Adding the Bear enemy

- Adjust the “collision points”



Adding the Bear enemy

- Rename to bear
- Behaviors: Fade, and Platform
- Set up bears throughout game



Adding the Bear enemy

- Define a boolean variable to keep track of direction

The screenshot shows the Scratch IDE with the 'Instance variables' panel open for a 'bird' object. The 'goingLeft' variable is listed as a Boolean with an initial value of 'true'. Overlaid on the image are five numbered steps in red boxes with arrows pointing to the corresponding UI elements:














- 1. Create instance variable**: Points to the 'Add / edit' button in the 'Instance variables' panel.
- 2. Add "new"**: Points to the '+' icon in the 'bird: Instance variables' header.
- 3. Name it "goingLeft"**: Points to the text input field where 'goingLeft' is entered.
- 4. Boolean**: Points to the 'Type' dropdown menu set to 'Boolean'.
- 5. Type in "true"**: Points to the 'Initial value' text input field where 'true' is entered.

The 'Instance variables' panel shows the following table:

Name	Type	Initial value
goingLeft	Boolean	true




















Adding the Bear enemy

- Add these events

32	 bear	Is goingLeft	 bear	Simulate  Platform pressing Left
			 bear	Set Not mirrored
			Add action	
33	 bear	 Is goingLeft	 bear	Simulate  Platform pressing Right
			 bear	Set Mirrored
			Add action	
34	  bear	On collision with  boundary	 bear	Toggle goingLeft
			Add action	

Killing the Bear Enemy

- Add these events

35	  bear	On collision with  hero	 hero	Set  Platform Disabled
			 hero	Set collisions Disabled
			 hero	Set animation to "dead" (play from beginning)
			 System	Wait 2 seconds
			 hero	Destroy
			Add action	
36	  bullet	On collision with  bear	 bullet	Destroy
			 bear	Set  Platform Disabled
			 bear	Set collisions Disabled
			 bear	Set animation to "dead" (play from beginning)
			 bear	 Fade: start fade
			Add action	

Adding a Carrot Reward

- Create a new *sprite*
 - Load one of the carrot images
 - Name it “carrot”
- Place throughout layout
- Add events

37	 hero	On collision with  carrot	 System	Add 10 to carrots
			 carrot	Destroy
			Add action	

Next Part

- Add level 3
- Create a BOSS!