ALARMS AND TIMERS: ADDING ALARMS AND TIMERS TO FRUIT CATCHER

ADDING MORE FRUIT

Let us now add some variation to the game by including other types of fruit.

1. We'll start by adding a banana object and calling it **obj_banana**.

Object Properties: obj_bana	na		
Name: bbi_banana Sprite) spr_banana New Edit Visible Solid	Events:	Actions:	Move main1 main2 control score draw
<u>✓ 0</u> K	Add Event Delete Change		

2. Add the **Create** event, add the **Moved Fixed** action, select the diagonal arrows, and give it a speed of 12.

Move Fi	xed	
*	Applies to Self Other Object:	
	Directions:	
	Speed: 12	
	🔲 Relative	
	OK	X Cancel

3. Add a **Collision** event with the wall object and in it add the **Bounce** action, just as we did with the apple object.

Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite Sprite	Object Properties: obj_bana	na		x
Delete Change	Sprite) spr_banana 🛃 New Edit	Create ♦ Image: obj_wall Add Event		main2 control score

4. Next add the **Mouse** event for **Left pressed**. In it add the **Jump** action to let the object jump to a random position. Add the action to set the score (from the score tab) with a value of **100** (this is a more difficult fruit so you should get a higher score), and don't forget to click the **Relative** box to add the value to the score.

Object Properties: obj_bana	na			3
Name: obi_banana	Events: Create Create Create Create Create Def. wall Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Create Cr	Actions: Jump to a random position Set the score relative to 100	- Lives	main1 main2 control score
<u>✓ 0</u> K	Add Event Delete Change			

5. Finally add the action to play a sound (from the **main1** tab) and play the click sound.

Object Properties: obj_bana	na		
Name: obi_banana Sprite) spr_banana New Edit V Visible Solid	Events:	Actions: Jump to a random position Set the score relative to 100 Play sound snd_click	- Objects move main? - Objects move main? - Sprite main? control - Sprite for a score draw - Sounds Source draw
<u>✓ 0</u> K	Add Event Delete Change		

- 6. In the same way add an object for the cherry and for the strawberry. You can give them different speeds and corresponding higher or lower scores. If you find this all a lot of work, you can also right-click on an existing object and select **Duplicate**. This creates a copy of the object. You can now change the name and sprite, and change the values for the different actions (by double clicking on them).
- 7. Now reopen the room and add a few instances of the different fruits. You might need to remove some apples to make room. Remember that you can use the right mouse button to remove instances.

ADDING BOMBS TO THE GAME

Let's now add bombs to the game. If you click on a bomb you will lose and the game will end. Bombs will be static. They won't move, but their number will keep increasing to make the game more and more difficult over time.

The bomb sprite is already present but we still need a sound effect for it.

1. Let's start by adding a sound, naming it **snd_bomb**, and selecting the **explosion.wav** sound file (which you can find on the shared directory).

💿 Sound Pro 🗖 🔳 💌
Name: snd_bomb
🔁 Load Sound 🕨 🔘
Filename: explosion.wav

2. Now create a bomb object, name it **obj_bomb**, and assign it the bomb sprite.

Object Properties: obj_boml	þ		
Name: obi_bomb	Events:	Actions:	Move main1 main2 control score draw
<u>✓ 0</u> K	Add Event Delete Change		

3. We want the bomb to appear in a random place. So add the **Create** event and add the **Jump to Random** action to jump to a random location.

4. When the user clicks on it we want the game to end. So add the **Mouse** event **Left pressed**. As a first action we want to play the explode sound so add the play sound action (from the **main1** tab) and select the explode sound.

Name: obj_bomb Sprite spr_bomb intermediation Visible Solid Visible Solid Actions: Objects Intermediation Visible Solid Intermediation Intermediation Intermediation Intermediation Intermediation Intermediation Intermediation Intermediation Intermediation Intermediation Intermediation <	Object Properties: obj_boml	0	
Add Event	Sprite Spr_bomb New Edit Visible Solid	Create	- Sounds - Rooms - Room

5. Next we want to wait a little while to let players realize they lost. From the **main2** tab, drag the **Sleep** action and place it below the play sound action. The default values are fine, so press **OK**.

Object Properties: obj_boml	b		- • •
Name: obi_bomb	Events: Create Create Left Pressed Add Event Delete Change	Actions: Play sound snd_bomb ZZZ Sleep 1000 milliseconds	- Timing move main1 - Info - main1 main2 - Game -

6. Next we will want to show a highscore list. From the **score** tab, drag the **Show Highscore** action. From the **Show Highscore** properties window, you can set a number of things, such as the background, the border, colours, fonts, etc. Feel free to set whatever values you want.

Show Highscore		
border: new color: other color:	No background show AaBbCcDd	
✓ 0K	X	Cancel

7. Our last action will be to restart the game, which can be found in the **main2** tab.

Object Properties: obj_boml)		_ • •
Name: obi_bomb	Events: Create Create Ceft Pressed	Actions: Play sound snd_bomb ZZZ Sleep 1000 milliseconds Show the highscore table Restart the game	- Timing move main1 move main1 main2 - Info - Game Game Control score draw
√ <u>Ω</u> K	Add Event Delete Change		

Make sure the order of the actions is correct. If they are not in the proper order, drag them to the correct location.

8. That's it for the bomb object. So click **OK** to close the form.

To test the game, place one or two bomb objects in the room. Save the game, run it, catch some fruit and then click on a bomb. An explosion sound should be heard and the highscore list should show. Note that in this list you can add your name if you get a new high score.

ADDING MORE BOMBS USING ALARM CLOCKS

To make the game more difficult, let's create additional bombs while playing the game. We can create a new object to do this but we can also use the music object for this.

- 1. Reopen the music object by double clicking on it.
- 2. To create the bombs we will use alarm clocks. You can set these clocks to a particular value and they will then tick down to 0. Once they reach 0 an Alarm event will happen. To initialize the alarm clock, go to then main2 tab and drag the Set Alarm action to the action list (below the Play Sound action). As number of steps indicate a value of 60. A second is 30 steps so we will add a new bomb every 2 seconds. Make sure Alarm 0 is selected.

Set Alarm	
Applies to Self Other Object	
number of steps:	60
in alarm no:	Alarm 0
	Relative
🗸 ОК	X Cancel

3. Now press Add Event, click on the Alarm events and select in the menu Alarm 0.

Choose the Event to Add		
💡 Create	👏 <u>M</u> ouse	
🕖 <u>D</u> estroy	◆ O <u>t</u> her	
Alarm	Draw	
	Alarm 0	
🔰 <u>S</u> tep	Alarm 1	
↔ C <u>o</u> llision	Alarm 2	
	Alarm 3	
🦢 Keyboard	Alarm 4	
	Alarm 5	
	Alarm 6	
	Alarm 7	
	Alarm 8	
	Alarm 9	
	Alarm 10	
10	Alarm 11	

4. In this event we will create the bomb. Go to the **main1** tab and drag the **Create Instance** action in the action list.

Object Properties: obj_bgmi	usic		
Name: obi_bgmusic	Events: Create Alarm 0	Actions:	- Objects move main1 main1 - Sprite - Sprite - Sounds - Sounds - Rooms - Rooms - Rooms - Rooms - Rooms
<u>✓ Q</u> K	Add Event Delete Change		

5. Click on the menu icon and select the bomb object. There is no need to set a position as the bomb is already set to jump to a random position.

Create Instance	
Applies to Self Other Object:	
object: No object x: 0 y: 0	No object obj_wall obj_apple obj_bgmusic) obj_banana obj_cherry obj_cterry
Relative	obj_bomb

6. Next we must set the alarm clock again. So add the alarm action (from the **main2** tab) and set alarm 0 again to 60. This will repeat the proces.

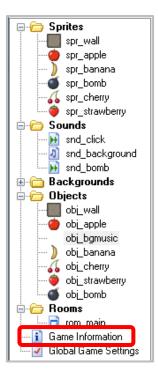
Object Properties: obj_bgmu	usic			
Name: obi_bgmusic Sprite (no sprite) New Visible Solid	Events: Create Alarm 0 Add Event	Actions: Create instance of object obj Set Alarm 0 to 60	- Timing ZZ2 - Info Game Game Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Con	main1 main2 control score
	Delete Change			

7. Close the object form, save the game, and run it. You should see more and more bombs appearing and eventually you will click on one of them and the game will end. If you want to make the game a bit harder, you can also let the bombs move slowly. You should by now know how to achieve that.

CREATING A HELP MENU

Even though you know how to play the game, somebody else might not. So you should provide some help for the player. This is very easy in Game Maker.

1. Double-click on **Game Information** at the bottom of the list at the left.



2. A simple editor will appear. It is here that you can type a little help text. Give your game a name and describe what the goal is. You can choose different fonts, colors, and styles. Once you are ready, press the green checkmark at the top left to close the form.

Game Information			- - >
ile <u>E</u> dit F <u>o</u> rmat			
🖌 🏭 🕉 🐂 🐚 Arial	🕶 12 🍦 B 🖍 🗓 1	r 🍪 🔳 🗄 🗐 🗄	

3. Now when you run the game and press F1, the help text will appear. **Escape** will return you to the game.