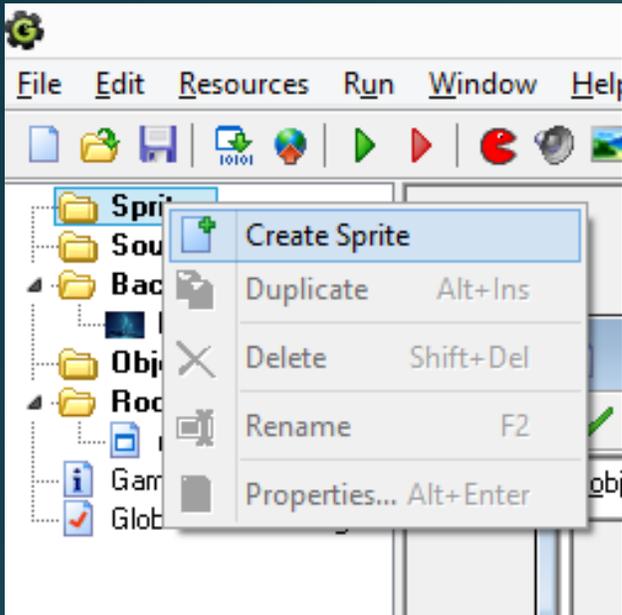


Game Maker

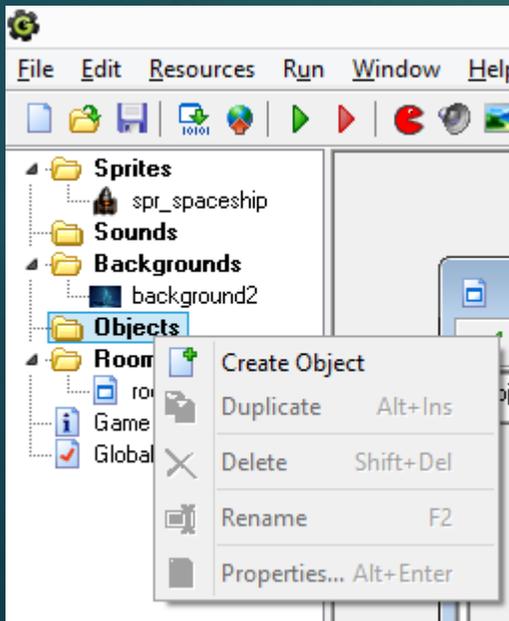
Lesson 2





Right-click on *Sprites* and choose *Create Sprite*

Load up one of the “monster” sprites and call the sprite something like *spr_monster*.



Now create an object for the sprite. Call it *obj_monster* and set its sprite to be *spr_monster*. This will be our baddie object.

Object to add with left mouse:

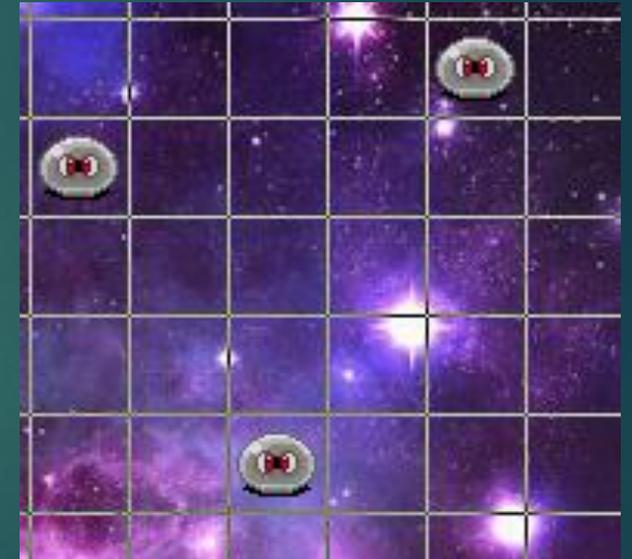
obj_monster

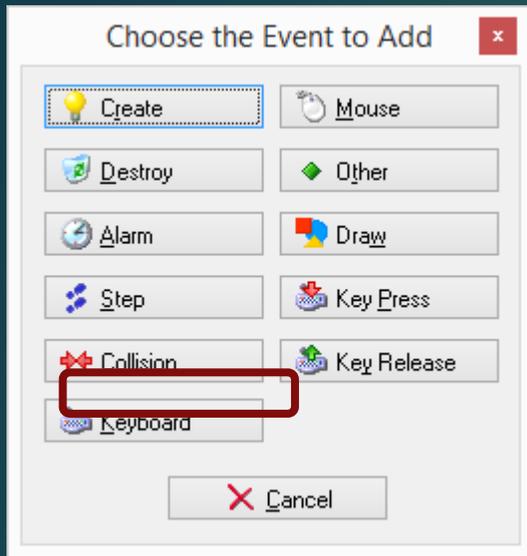


Left mouse button = add

In the room screen, select the monster object to be the one added with a mouse click and put some baddies on the screen in random places.

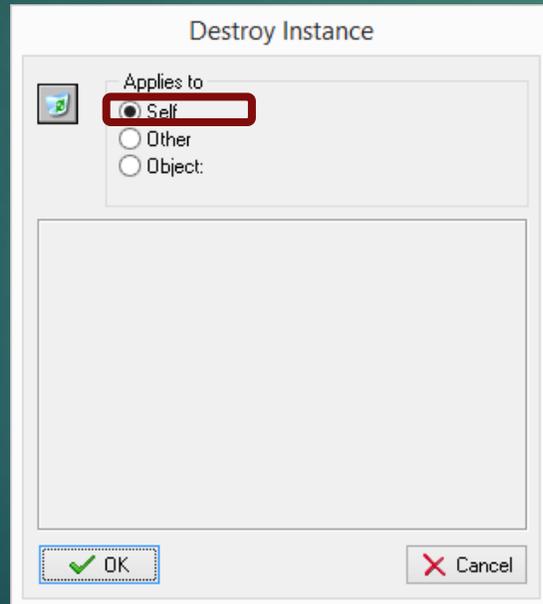
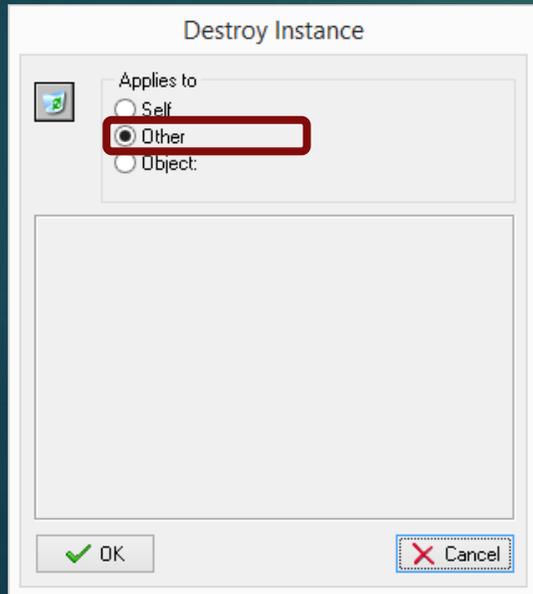
The next thing we want to do is make them disappear when they are shot. To do this we have to detect when the bullet hits them. This is called *collision detection*.



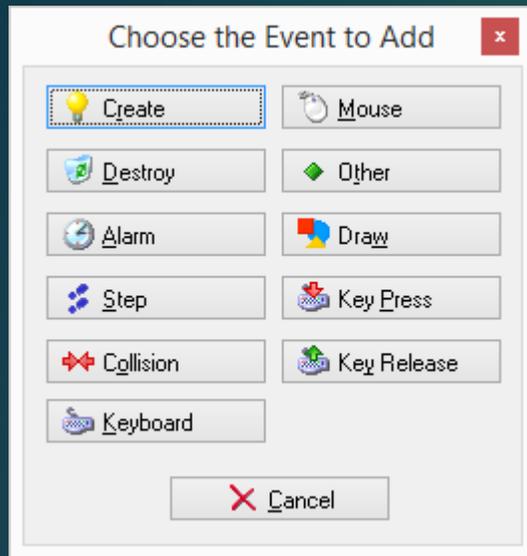


Select the *obj_monster*, click on *Add Event* and select a *Collision* event.

This will tell the game what to do when the bullet collides with the monster.



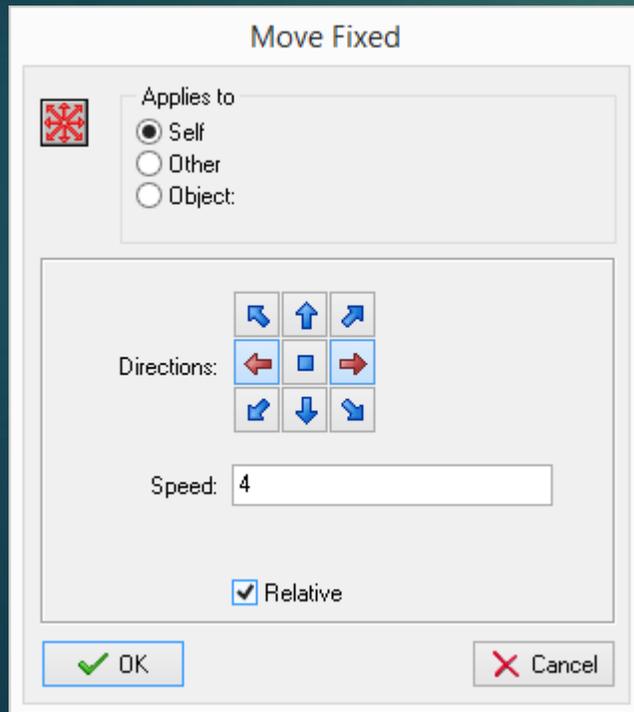
Now we need to add two *destroy instance* actions – one for the monster and one for the bullet which we also want to disappear. *Destroy Instance* is in the *main1* menu and looks like a wastepaper basket.



We now need to make our baddie move.

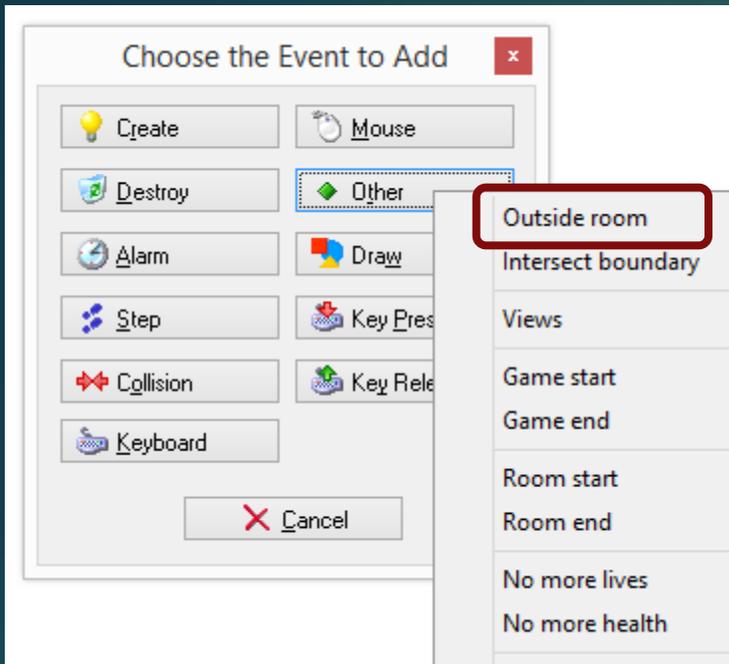
Click on *Add Event* and select a *Create* event.

This will tell the game what to do when we create one of these objects.



Now drag a *Move Fixed* action in for that event.

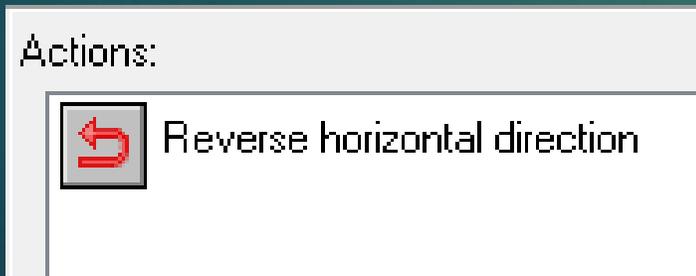
Note that we tell it to move left *and* right. The program will pick one of these directions randomly for each instance of the baddie object.

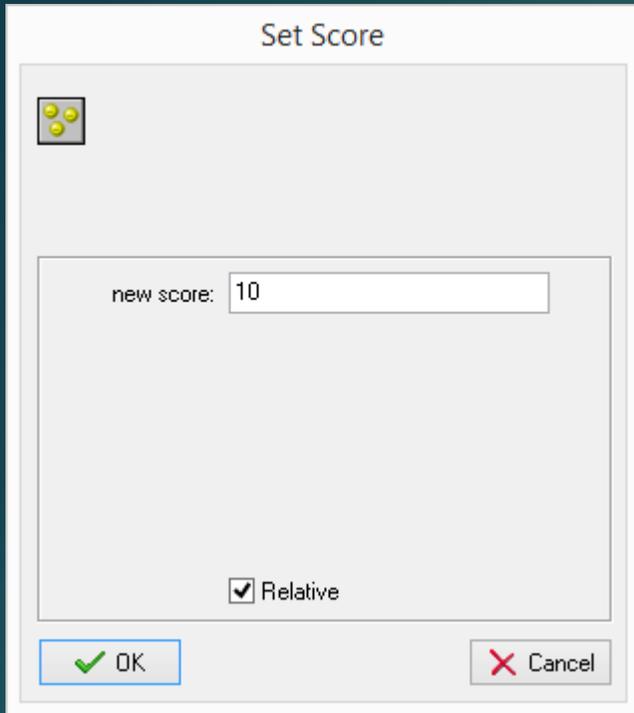


However, the baddie will keep moving off the screen unless we tell it not to so we need to stop it at the edge of the screen. Create an *Outside Room* event from the *Other* menu.

To this event we should add a *Reverse horizontal direction* action which will make the baddie move back to where it came from.

Now try out your game and see if it works.



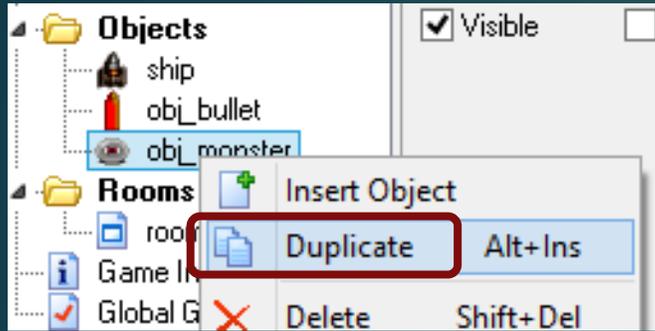


Now we can add some scoring.
In the *obj_monster* object, add another action to the collision event – a *Set score* action.

In this example, I'm adding ten points for each baddie killed.

Make sure you tick the *Relative* box.

Run the game again and check the score appears in the top bar of the window.

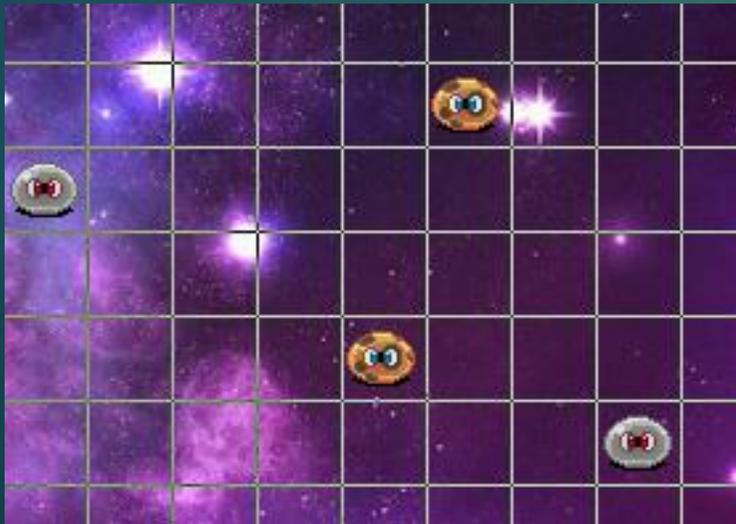


Now let's add another type of baddie that's harder to kill.

Load up the other monster sprite and call it *spr_monster2*.

Duplicate the *obj_monster* sprite and call it *obj_monster2*.

Set this object's sprite to be *spr_monster2*.

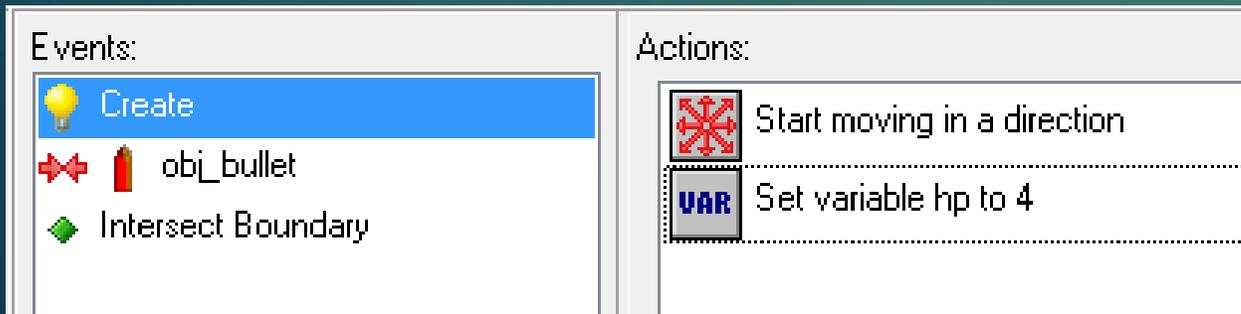
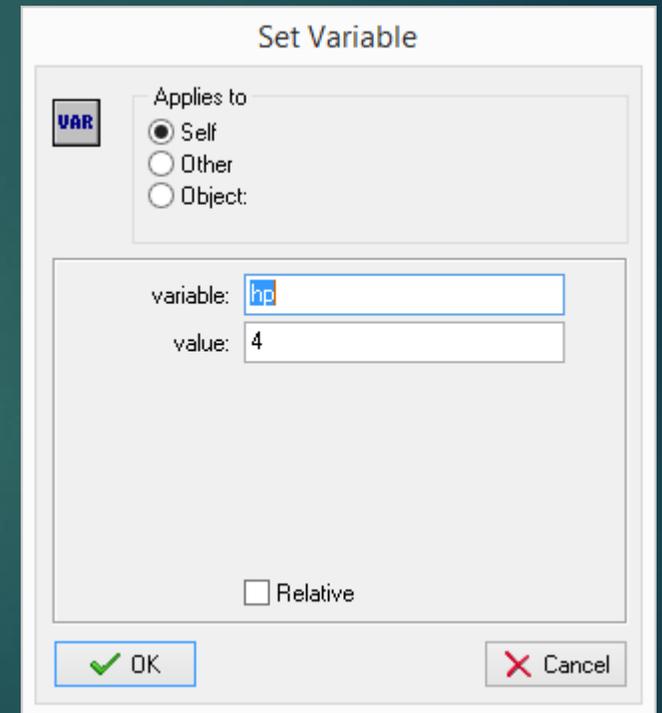
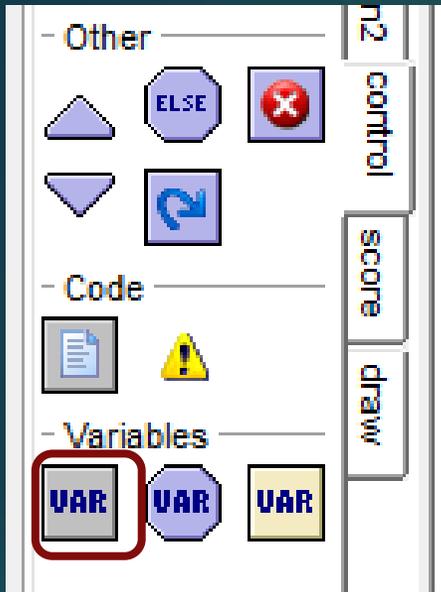


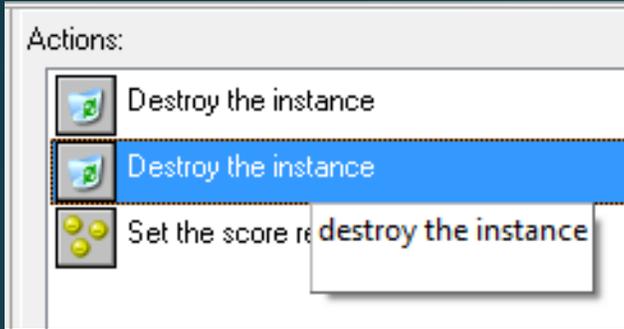
Add some of them to your room.

Right now, they'll behave in the same way as the other monster because we duplicated its behaviour but we're going to change that.

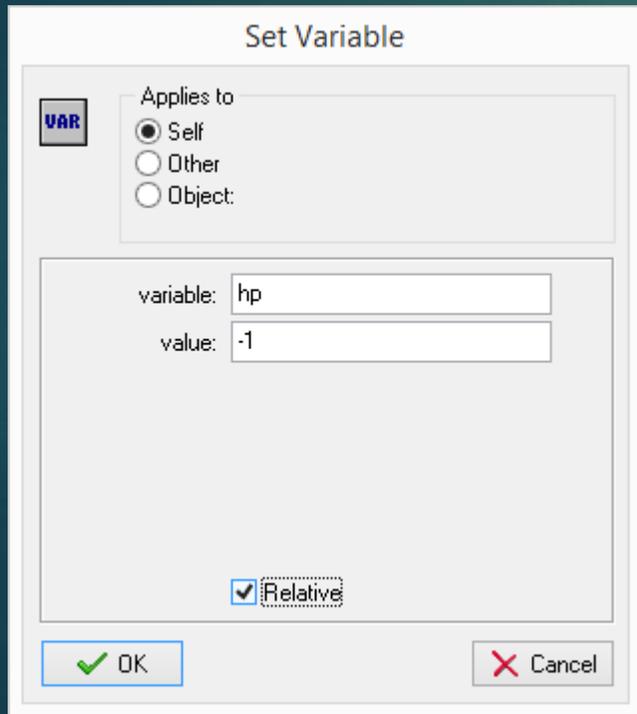
To the create event for *obj_monster2*, add a variable to represent the hit points of the baddie. This action is in the *control* tab. A variable is like a place where we can hold a value – think of a cell in a spreadsheet.

Call the variable *hp* for “hit points” and set its value to 4. We will have to shoot these baddies four times before they die.



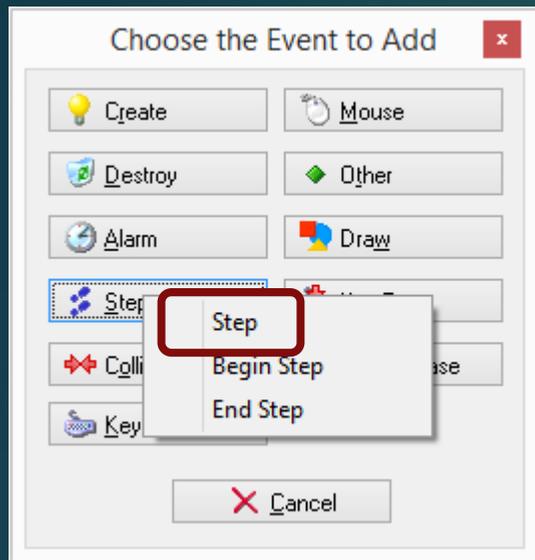


Now we delete the *destroy the instance* action that applies to *self* because we only want the monster to die after four hits, not one. Leave the *destroy instance* for the bullet though.

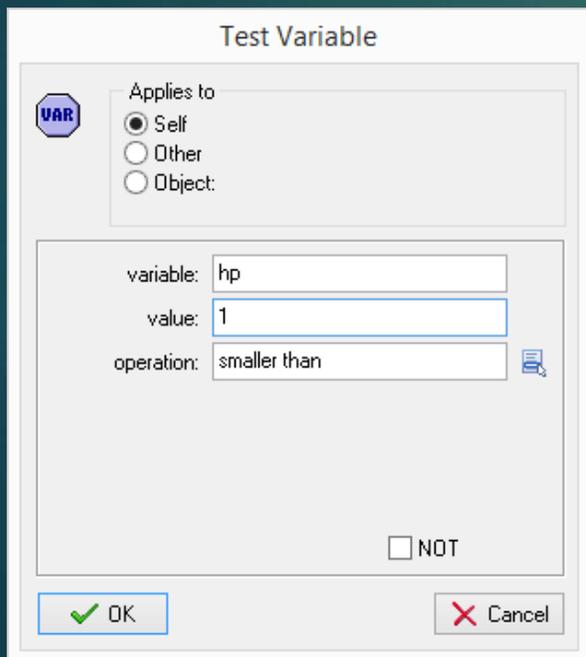


We're going to replace this with a *Set Variable* action where we reduce the value of the hp variable by -1 every time the monster is hit by a bullet.

Make sure you tick *relative* – we want to reduce it by one, not set it to -1.

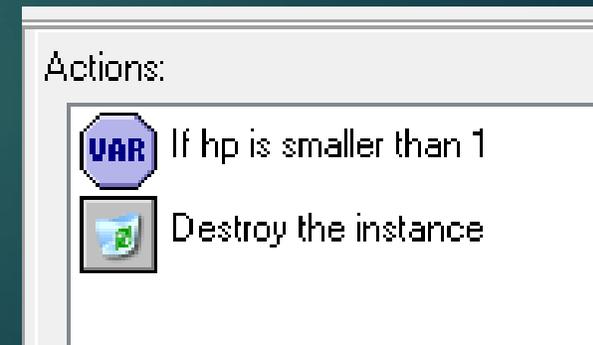


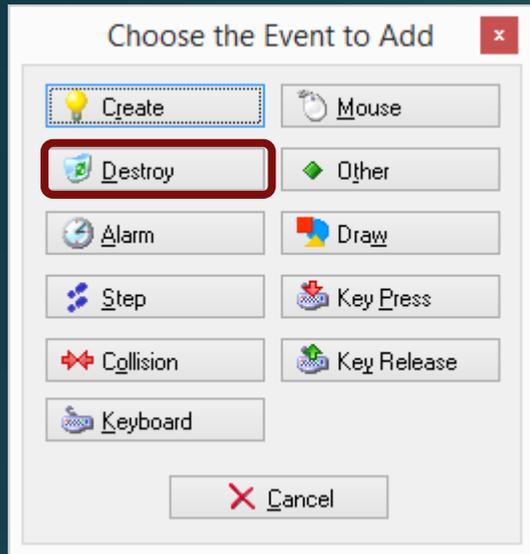
Now we add a *Step* event to check if the *hp* variable has gone to zero. *Step* events happen 30 times a second so Game Maker will look to see if the monster has lost life 30 times every second.



Add a *Test Variable* action to the step event so that we test to see whether the variable *hp* has become less than one.

If it has, we will destroy the instance. Drag in a *Destroy Instance* event.





We are going to add a *Destroy* event now to our new baddie where we will give points for killing it.

Add an action to set the score and make it increase by more than 10 as this baddie is harder to kill.

Remember to tick *Relative*

Now test your game and make sure it works as you'd expect.

