Introduction

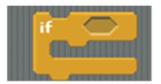




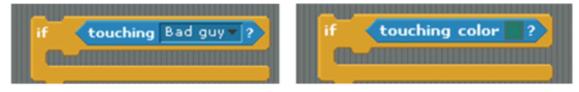
Sensing Blocks

Sensing gives us a true or false response. We can then create scripts which do different things if the answer is true or false.

- Write some code to make both sprites move around the screen.
- Click on the Good Guy script.
- Add the following blocks to your code.
 This block give you space to put in a condition.



- Click on the sensing palette and select touching.
- Using the drop down arrow select bad guy. Alternatively you could select "when touching colour".

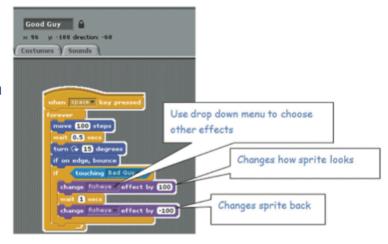


- These scripts will give us a true or false response i.e. Good Guy is touching Bad Guy (True) or it is not touching (False).
- Now we can decide what will happen when the sprites touch. You can insert sound or looks.

In the example we will change how the sprite looks for 1 second and then return it to

normal.

 We used a forever loop in this script. The forever loop means that Good Guy will ALWAYS react when he touches Bad Guy, the script will keep running while the program is active.



Challenge Time 1!

- 1. Choose two sprites and name them.
- 2. Add movement to each sprite.
- 3. Input the code from the image above to one sprite.
- 4. Alter the code to create your own effects.

Variables

Using the game we just created we will add lives to our Good Guy. We will start with 5 lives. Each time the Bad guy touches the good guy he will lose a life.

- Click on the Good Guy sprite.
- · Click on the variables palette.
- Click Make a variable.
- Call it "Lives". This will appear on the stage.
- You will now see additional options in the variables palette.
- Drag out "set lives to" and type 5 into the box.
- · Add this to the start of your script.

```
SORATOH ## | File Edit Share Help
                Control
                                            Good Guy
  Looks
                Sensing
                                            xx 113 yx -40 directionx 120
                Operators
                                  Scripts
                                           Costumes
                                                     V Sounds
                Variables
Make a variable
Delete a variable
                                                  when space key pressed
                                                 set Lives to 5
Lives
set Lives to 0
                                                  move 100 steps
change Lives by 1
                                                   wait 0.5 secs
                                                   turn (* 15 degrees
show variable Lives*
                                                   if on edge, bounce
  de variable Lives
                                                       touching Bad Guy ?
                                                    change fisheye effect by 100
Hake a list
                                                     wait 1 secs
                                                     change fisheye effect by -100
```

```
when space key pressed

set Lives to 5

forever

move 100 steps

wait 0.5 secs

turn 15 degrees

if on edge, bounce

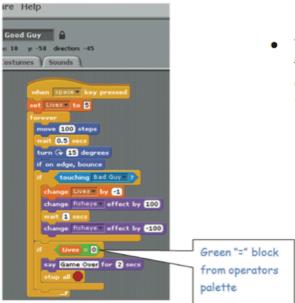
if touching Bad Guy ?

change Lives by 100

wait 1 secs

change fisheye effect by 100
```

 Within the "if loop" we will change the lives by minus one each time the Bad Guy touches the Good Guy.



 You will note that the lives will decrease by one each time. However, we need the game to end when the Good Guy has 0 lives left. This will require another "if" statement, immediately after our first "if" loop.

Challenge Time 2!

- 1. Choose a sprite and name him Good Guy. If you wish to use your own names do!
- 2. Use the up, down, left and right arrows to move the sprite (recall Lesson 1).
- 3. Select another sprite and name him Bad Guy. Allow him to move randomly around the screen when the green flag is pressed. (as for sprites in examples above).
- 4. Give the first sprite 5 lives.
- 5. Every time Bad Guy touches Good Guy, Good Guy should lose a life.
- Allow your classmates to play your game. See who can keep their lives the longest!

Ultimate Challenge!

- 1. Plan a game on paper. It could be a chasing game as above, a maze or a football game or your own idea.
- 2. Create the game, using movement, sound, sensing and lives.
- 3. In the project notes (File, Project notes) write the instructions for your game.
- 4. Have a look at other people's games. Tell them what you like and suggest ideas to make their game even better!