

Using an array of object instances

STD2, 19.11.2009, MOME

The task:

Make a number of creatures, with simple form (use ellipse, square, triangle to start with), placed randomly on the screen, or on a grid.

The creatures should look by and large the same. However, their appearance reflects their emotion.

Each creature is in some mood between the extremes: sad/depressed and happy/energetic. If one clicks on them, they are cheered up by the attention. With time passing without attention, their mood turns down.

Place for creativity:

Use simple drawing to show your creature, but allow for individual variations.

How to express the change of mood? By colour, movement, size, . . . ?

Hints for the design:

Provide the definition of the creature as an Object, with variables as location, size and mood, . . .

Write object methods to display the creature (depending on its mood), and to change the mood: to cheer up (on mouse click) or to turn down (if nothing happens).

The mood can reach a maximum (if the creature gets triggered), and then slowly decreases to a minimum, corresponding to a depressed state.

Make an array of your creatures, use the number of creatures as a variable.

To check if a creature was clicked you need to see if the mouse click was close enough to the location of the creature.

Put the code for the class definition and the rest of the program (initialization, interaction) in two separate files.

Success!