

Independent Activity – 17 (Snake Game)

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Create a version of the 'SNAKE' game

Activity	Examples
<p>Create your own version of the SNAKE game.</p> <p>The snake should move around in a 'park' looking for and eating some fruit. For every fruit that the snake eats, its body should get longer.</p> <p>The game ends when the snake hits the edge.</p>	<p>https://scratch.mit.edu/projects/425122353/ https://scratch.mit.edu/projects/426484339/ https://scratch.mit.edu/projects/419621741/</p> <p>https://scratch.mit.edu/projects/153706787/editor/ https://inventwithscratch.com/book/chapter6.html</p>
	<p>Class Project: https://scratch.mit.edu/projects/418037336/editor/</p>

Please see SLIDE number 4 for a step-by-step guidance on how you should approach this activity. Be systematic. Be creative. Enjoy the process.



Marking Criteria (Max Marks: 12)

Task	Marks Given
LIST Created to store Snake Head positions in the correct order	2
Snake head turns with ARROW keys (but no about turn)	2
A fruit randomly appears on the screen every time it is eaten	2
SNAKE body clones correctly using local variables and broadcasting when the fruit is eaten.	2
Game ends when the snake head touches the edge	2
Bonus: Add different types of fruits, fancy costumes/backdrops, end when snake eats its own tail, change snake speed/movement as the game progresses etc	2
PENALTY: Late Submission (Per Day)	-1
PENALTY: Project not shared on scratch	-1

Step by Step Approach

Step 0

Revise the key concepts :
Lists, Broadcast, Cloning,
Variables for this sprite
only etc
(See Class notes)



Step 1

Create a Snake head sprite
and give it the code for
movement
Store its x and y positions
in LISTS



Step 2

Create the fruit sprite
Ensure it goes to a random
position once eaten by the
Snakehead.



Step 3

Create a Snake body sprite
Give it local variables and
ensure it is cloning
correctly when receiving
the broadcast that the fruit
has been eaten



Step 4

Make sure that the clones
reach the correct position
using the lists that were
created in Step 1



Step 5

Add code for ending the
game and add elements to
beautify, e.g., music etc.

*Do not go to the next step unless the present step is clear.
At every step, ask yourself, what can I do differently?*

Common Problems

Problem	Remedy
Too many clones appear	Are you using variables 'FOR this sprite only' to control the cloning.
Clone position is strange	Did you store the x and y locations correctly? (recall the item 1 is the latest location.) Also, in the snake body code, did you index the list correctly.
Game ends as soon as it starts	Make sure the condition for 'tail eating' is coded correctly.

Enjoy!

- * Remember to submit your project in time!