Garbage Eater – CSC258H1 Project

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Description:

This is a VGA game, which is controlled by the keyboard. We got the idea from the

traditional game – Snake.

Top Level Name: garbage_eater

Project Design:

Modules:

combined: which is the main module to control the garbage_eater and the

garbage.

random_x_counter: to produce the random coordinate x.

random_y_counter: to produce the random coordinate y.

random_colour_counter: to produce the random colour (although it does not

work well).

datapath: the actual code that draw the VGA and implement the game.

restart: restart the game.

control: to control the signals to decide which state will go.

Verilog That was not created by us:

vga_adapter

vga_address_translator

vga_controller

- vga_pll
- keyboard_tracker
- PS2_Controller
- Other Resource:
 - Snake by Sina Ghaffari and Albert Calzaretto. Retrieved from https://www.youtube.com/watch?v=Whid2Q6af9Y&feature=youtu.be
 Used for idea.