Game synopsis: Ekans

Harry Mumford-Turner & Kristian Shaw

Description:

The player controls a group of connected blocks called ‘Ekans’ which they direct around the screen with the goal of colliding with a single block called a ‘Gem’. The movement of the Ekans is much like a real snake, where the player moves the head and the body follows the exact path of the head. On the collision with the head of the Ekans and the Gem, a block is added to the Ekans tail, (so the end of the body) the current Gem is destroyed and a new Gem is created which is again randomly placed on the screen. If the Ekans collides with itself or the edge of the screen the player loses.

Movement/controls:

The snake will move either up, down, left or right. Not diagonally. The direction will be changed by pressing arrow keys, but will only change if you have selected a direction with 90° difference to the current direction. The Ekans will move on a grid where all the elements are locked onto, this grid will end at the border and each block is 25 pixels by 25 with the board size of 500 pixels by 500.

Pickups:

The pickups will be given random coordinates every time one spawns, these will be locked to the same grid as the Ekans and will be one block in size. Only a single Gem will be on the screen at any given time and when one is destroyed another is created. When 5 Gems are destroyed a ‘SuperGem’ is created along with a Gem and a ‘SuperGem’ is worth 10 points, times the number of a points for a Gem, but disappears after 5 seconds of spawning.

Object structure:

Ekans will be made up of equal segments that follow each other through movement, each occupying a square on an invisible grid. The gems will also take up a square of the same size to make alignment more visible to the player.

Object looks:

Ekans will be block colour of purple and will be played upon a green background with blue Gems and SuperGem of flashing blue and white.

Options:

A difficulty changer will be available which will simply change the speed at which the snake moves. 1 being slow 3 being fast. This will alter the score and give the player an advantage to playing faster. The number of segments added per gem and the speed multiplier per gem can be changed as an additional option.

Scoring:

The scoring system will be simple. On the easiest difficulty the user will score 1 point per gem, and for harder difficulties score multipliers will be made active. For example 2x speed will also mean a 2x score multiplier, meaning 2 points per gem.