**OOP 2018 Project**

For my project I want to recreate the classic snake game which featured on the Nokia 3310.

I will do this using a GUI to create the board that it will be displayed on.

I will have a menu screen that has 3 options – Play, high scores and quit

I will be creating a snake class that will model the attributes the snake has, these will include the location of the snake on the board using x and y location variables.

I will also be creating a food class that will be modelled similar to the snake except it will not be increasing but rather it will be removed from the game when the snake eats it and a new random piece of food will be displayed to the board. Also there will be a verification check to make sure that the food is not located under where the snake’s current position is, if it is however the food will be recreated and displayed to a new part of the board until it is not under the snake anymore.

I will need to have some collision detection to make sure that the game ends if the snakes head runs into its body I will do this using an algorithm that checks the snakes head position against all the positions of the snakes’ body.

I will also need to have another algorithm that checks if the snakes head is leaving the board on one side that it will be displayed on the opposite side of the board.

I will need to figure out a method of controlling the snake via keystrokes and making it turn in the direction I will for it to go.

If I get time I would like to implement a sound effect for when the snake eats the food and background sound that loops on the main menu.

GITHUB link - https://github.com/L30n95/SnakeGame