# PYTHON PROJECT REPORT

#### **SERPENTUS - THE RETRO SNAKE GAME**

#### **ABSTRACT**

This project wishes to implement the classic snake game which appeared first on Nokia phones in 1997, and was very popular back in the day when smartphones did not exist.

# INTRODUCTION

The user must move the snake with arrow keys and eat the food placed at random positions (some modes will also have a time limit for food expiration). The player gets a point and the snake grows bigger in size as it consumes food. If while looking for food, the snake accidentally eats itself, it dies and the player loses the game.

Settings will have options to turn off game sound, change colour of snake, change speed of the snake, etc.

Game modes will have options to toggle presence of obstacles, presence of borders, etc.

### **FLOWCHART**

Functions in Game class calls functions in all other classes. There is no inheritance as such.

# **SYSTEM REQUIREMENTS:**

- Download Python 3.0
- Install Pygame library
- Operating system: windows/mac/any linux distribution
- The drive should have a free space of at least 70 mb

## **FUTURE ASPECT**

We are planning on including more modes into the game and make the game more lively by adding different snake images and background music.

## **GITHUB REPOSITORY**

https://github.com/sathvik-bhat/Serpentus.git

#### **REFERENCES:**

For pygame library

https://pythonprogramming.net/pygame-python-3-part-1-intro/

https://www.youtube.com/watch?v=FfWpgLFMI7w&feature=youtu.be

For tkinter library

https://www.geeksforgeeks.org/python-tkinter-tutorial/

Game specific( We didn't refer to these :- )

 $\underline{https://www.codementor.io/@info658/coding-the-classic-snake-game-with-python-turtle-grap \\ \underline{hics-19vyn3xq58}$ 

https://pythonspot.com/snake-with-pygame/

http://programarcadegames.com/python\_examples/f.php?file=snake.py

https://en.wikipedia.org/wiki/Snake\_(video\_game\_genre)

For images

https://www.flaticon.com/

For soundtrack

https://mixkit.co/free-sound-effects/

https://www.audionetwork.com/content/music-for/music-for-games