Group-1 Team-6
Project plan + Requirement analysis

SERPENTES - THE RETRO SNAKE GAME

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. 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.

Requirements:
- Pygame library for game simulations
- Tkinter library for game menu
- Soundtracks for background music or game sounds
- Images for snakes, food and background

Project plan:
The project is expected to be completed in 25 days
- Installing and getting familiar with pygame module - 3 Days
- Creating a screen, food, and movable object - 3 Days
- Creating a scoring system and increasing the size of snake on eating food - 3 Days
- Creating settings and game menu- 6 Days
- Optimising the game, creating different game modes, adding music, images, etc.- 10 Days

Work distribution:
The project is expected to be completed in 25 days
- Creating a screen, food, and movable object - Harsh Jha
- Creating a scoring system and increasing the size of snake on eating food - Sathvik I Bhat
- Creating settings and game menu- Yash Koushik
- Creating different game modes, adding music, images, etc.- Siddharth Yedlapati

After completion of the allotted tasks, the person will assist the other team members in optimising their codes. Finally, we will collectively make minor changes to the code

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
https://www.codementor.io/@info658/coding-the-classic-snake-game-with-python-turtle-graphics-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