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Project Proposal

Project Summary:

1. Title- Snake game
2. Description- The program is a basic snake game with a boundary of 50 by 50 %’s. The user will be able to control the snake with the inputs of ‘w’ for up ‘s’ for down ‘a’ for left and ‘d’ for right. The main goal is to bring the snake to the food and the snake keeps growing. There will be a score board on the top left side of the screen, the snake can go through walls, and it will die if it hits himself while trying to get to the food. User will be prompted with ‘Opps your snake died’ if he chooses the wrong food and the game will end there.
3. Intended User- The Intended user for this program is any person who plays the game as the snake and tries to get the food and keep growing.
4. What problem is project trying to solve? – The program is trying to make the snake reach to its food and grow the snak by taking inputs for the direction in which the snake moves from the user.
5. I will user C++ for this program.

UML Diagram-

A picture containing text

Description automatically generatedAlgorithm-

Goals- The main goal of the program is to print out a board with a ‘food’ and a ‘snake’ in it. The main goal is to take inputs from the user to move the snake up, down, left or right with the w s a d keys and get it to the food to make it grow in size.

Input- main.cpp will take inputs from the user to move the snake up, down, left, or right. Main.cpp will also get input of food’s position from food.h and snake’s position from snake.h.

Output- The main output is the printing of the board on which the user will move the snake and printing out the food which will help the snake grow. There will also be a score board printed on the top left side of the screen which will showcase every time the snake eats the food.

Steps- main.cpp will print out the board using for loops, snake.cpp and snake.h will have different attributes of the snakes such as the length of the snake, the speed of the snake, the positon of the snake, and the direction changing for the snake. The food.cpp and food.h will have different attributes for the food such as the generation of the food and the positon of the food on the board. We will take inputs from the user to move the snake to get to the food to grow, the user will press ‘w’ for snake to go up ‘s’ for snake to go down ‘a’ for snake to go left and ‘d’ for snake to go right. There will also be a print function in main.cpp to print out the score each time the snake eats the food and grows.