Carleton UNIVERSITY

Developer Manual of “SNAKE GAME”

To have relief from stress and reminding of old days memories when we used to play snake game in Nokia mobile, we suggest the “Snake Game” game as the best entertaining program.

The key goal is to present the legendary Nokia mobile “SNAKE” game in windows platform that has been accomplished in C programming language.

File and Folder Structure Organization

File and Folder Structure Organization:

1. bin: This folder has executable and data file for the game 'Snake Game'.

- snake.exe
- data.txt

2. doc: It contains all the documents for the project.

- html: The html folder generated by Doxigen for our project.
- latex: The latex folder generated by Doxigen for our project.
- User Manual.pdf
- Developer Manual.pdf
- Cygwin Installation.pdf

3. include: It contains all the header files included in the project.

- snake.h

4. obj: This folder has all the object files generated using make file.

- snake.o

5. src: It has following files:

- snake.c

Prepared By: Group-H

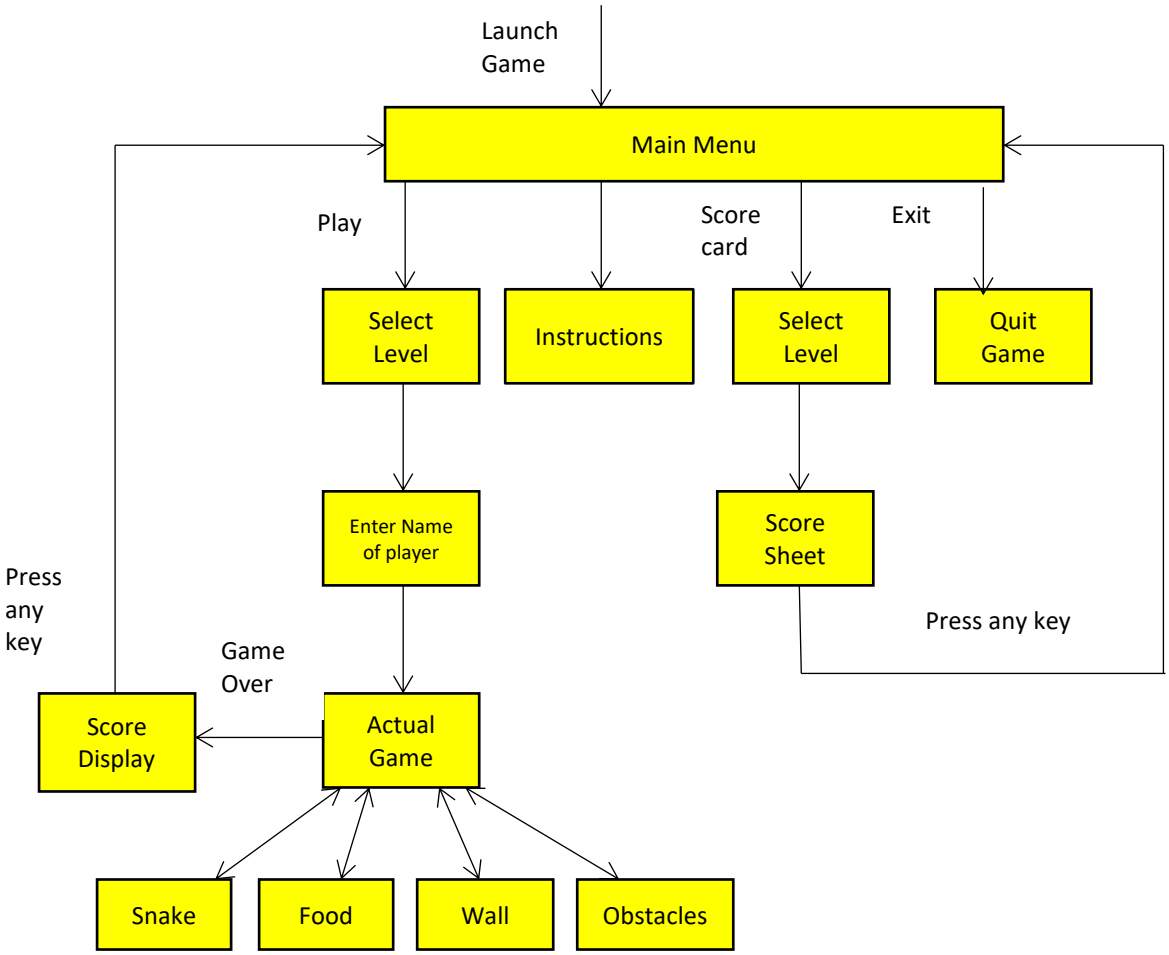
Soham Patel
GitHub ID: *patel-soham*

Tharun Merapala
GitHub ID: *tharunmerapala*

Siddharth Ashish Upadhyaya
GitHub ID: *Siddharth-104*

Aditi Biswas
GitHub ID: *aditi-21*

Flow Diagram:



Here a brief description of the given flow diagram. The rules of the game is stated clearly in the description.

1. Play
After choosing the 'Play' option, the user will be guided to the following sequence of functions.

1.1. Select Level
The player can select the difficulty level of the game. Easy, Medium and Hard. The Latter two types of difficulty level will be introduced in release 2. In release 1, there will be only the Easy level.

1.2. Player Name
This function will ask to enter the name of the player before starting to play the game.

1.3. Actual Game
The four main functions of the game namely Snake, Wall, Food and Obstacles will be monitored. In detail these functions are explained below-

1.3.1. Snake
This function will display the snake and will move its position as per the guidance of the user. It will also increase the length of the snake when getting the input from the 'Food' function.

1.3.2. Food
The key role of this function is to place the food in various locations within the confined boundary and change the location when the user will guide the Snake to consume the food.

1.3.3.Wall
This function will display a confined boundary on the screen, and it will monitor whether the snake collides the boundary or not. The game will be over if the Snake will hit the wall.

1.3.4.Obstacle
Based on the difficulty Level chosen by the player, there will be various obstacles placed in the confined boundary. This function will also monitor whether the snake collides any obstacle or not. On the condition of colliding any obstacle, the game will End.

1.4. Scorecard
This function will be called at the End of the game to show the score of the Player. The score will depend on the number of foods consumed by the snake. It will ask to "Press any Key" to go back to the 'Main Menu'.

2. Instructions
This section will give instruction to the user about how to play the game.

3. Scorecard
This function will be used for checking and displaying the Record of Top 5 Scorers of each level of the game. Choosing this 'Score Record' option will lead to the following sub options-

3.1. Select Level
The program will ask the user to choose any one of the three difficulty levels. The input from the user will pass to the next function 'Score Sheet'.

3.2. Score Sheet
This program will display the Top 5 Scores along with the Players' name of the chosen level of the game. Pressing any key will take the user back to the 'Main Menu'.

4. Exit
Choosing this option from the main menu, then the Program will be terminated (Quit Game)

Github Link: From the following link you can download the project file.

https://github.com/patel-soham/Group_H_SnakeGame