

Design Overview for Hungry Snake

Name: Gia Huy Nguyen

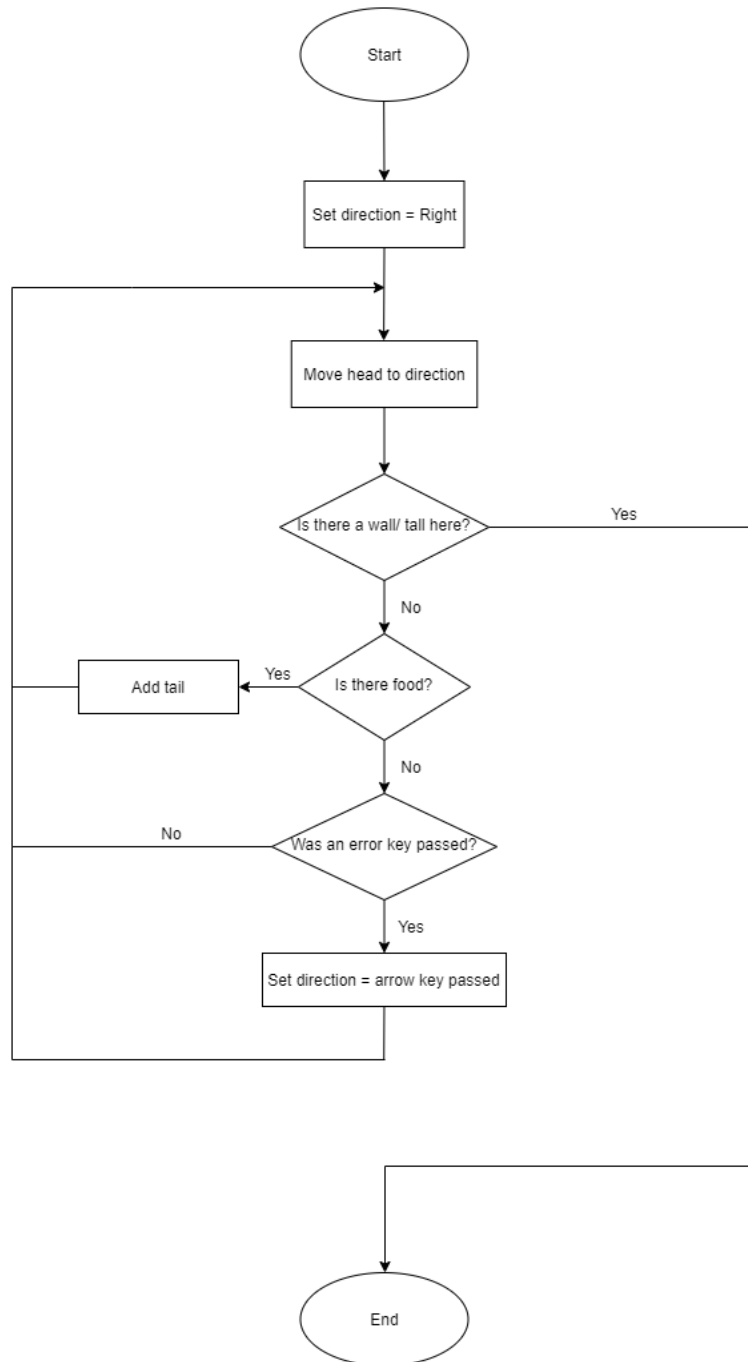
Student ID: 103441107 - SWH00039

Summary of Program

The software is a recreation of the popular snake game called Hungry Snake. Users would initially be welcomed by a start screen that allows them to modify the music, key-bindings, and various game parameters to make the game more or less tough.

It will include a three-dimensional interface to encourage the user to engage with the game. This is a fairly simple rendition of classic snake... nothing very unique here. However, my objective was to add a multiplayer component to it as well as experiment with a Ruby framework.

Sketch of sample output:



Required Data Types

Describe each of the records and enumerations you will create using the following table (one per record).

Table 1: <<record name>> details

Field Name	Type	Notes
Player	String	Name of the player
Difficulty	Integer	Difficulty of the game
Music Volume	Integer	Music volume level
Score	Integer	Score player achieved
High Score	Integer	Highest score player achieved

Table 2: <<enumeration name>> details

Value	Notes
Up	Movement direction
Down	Movement direction
Left	Movement direction
Right	Movement direction

.....

Overview of Program Structuredd

Functions (these functions will execute in response to the user's inputs)

- def initialize
The start of this function is to start the Gosu GUI
- def add_segment
This method is used to initialize the snake's movement. This also stops the snake from backing up. This indicates that the player is unable to maneuver the snake within itself.
- def update
This method takes a user's input commands and converts them into a movement. When a player eats an apple, the function is also utilized to update their score. The function is also used for snake bounds, which means that if the snake reaches the game's boundaries, it will die and display a game over screen.
- def draw
During the game, this function displays the snake's location, the apple's position, and the player's current score. When a player loses a game, the feature displays the Game Over screen.. The function also draws the Game over screen when a player has lost the game.
- def self_harm
This function is used to kill the snake when a player hits the snake's body with its own head.