

```

1  #ifndef SNAKE_HPP
2  #define SNAKE_HPP
3
4  /// Includes
5  #include <vector>
6  #include "SFML/Graphics.hpp"
7
8  /// The snake representation
9  struct SnakeSegment
10 {
11     SnakeSegment(int x, int y) : position(x, y) {};
12     sf::Vector2i position;
13 };
14 using SnakeContainer = std::vector<SnakeSegment>;
15
16 /// Directions of that the snake might take
17 enum class Direction
18 {
19     None,
20     Up,
21     Down,
22     Left,
23     Right
24 };
25
26 /// The snake class.
27 class Snake
28 {
29     public:
30         /** Default constructor */
31         Snake(int l_blockSize);
32         ~Snake();
33
34         /// Helper methods
35         Direction GetDirection();
36         void SetDirection(Direction l_dir);
37         int GetScore();
38         int GetSpeed();
39         sf::Vector2i GetPosition();
40         int GetLives();
41         void IncreaseScore();
42         bool HasLost();
43
44         void Lose();           /// Handle losing here.
45         void ToggleLost();
46
47         void Extend();         /// Grow the snake.
48         void Reset();          /// Reset to starting position.
49
50         void Move();           /// Movement method.
51         void Tick();           /// Update method.
52         void Cut(int l_segments);           ///Method for cutting snake.
53         void Render(sf::RenderWindow& l_window);
54
55         Direction GetPhysicalDirection();
56
57     protected:
58
59     private:
60         void CheckCollision();           /// Checking for collision.
61         SnakeContainer m_snakeBody;      /// Segment vector.
62         int m_size;                      /// Size of the graphics.
63         Direction m_dir;                 /// Current direction of the snake.
64         int m_speed;                     /// Speed.
65         int m_lives;                     /// Lives.
66         int m_score;                     /// Scores.

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67         bool m_lost;           /// Losing state.
68         sf::RectangleShape m_bodyRect;    /// Shape used in rendering.
69     };
70
71 #endif // SNAKE_HPP
```