Task 1: Report

A picture containing clock

Description automatically generatedThe snake can go over upcoming path and it can turn left by clicking on ‘Turn Left’ button and turn right by clicking on ‘Turn Right’.

I used drawing on canvas HTML5 to create the snake. The (x,y) will constantly change based on the next upcoming path. The constant change is created by the set Interval. If the snake is constantly going horizontal, then the x will increase or decrease and if the snake is moving in the vertical direction then the y will increase or decrease.

The x and y will change when the snake is turning left. The x and y will also change when the snake is turning right. Both of the changes will depend on what direction the snake is moving.

A picture containing drawing

Description automatically generated

A close up of a logo

Description automatically generatedThe snake will stop if it reaches out of bounds. If x and y is less than 0 or if x is more than the width and y is more than the length. Then the snake will stop using clear interval.

The snake will stop if it touches the body of the snake. I used an array to keep track of all of the coordinates that the snake has been. I use a for loop to see if the next coordinate will match the coordinates in the array. If it does, then the snake will stop.

A picture containing drawing

Description automatically generatedA close up of a logo

Description automatically generated

The start button will change to stop when the snake starts to move and vice versa. I used usedRemoveListener () and addEventListener (). I used Boolean to keep track if the snake should continue moving or not when clicking start again after stopping.

Task 2: Report

I created four different functions to get the specific outcome stated in the assignment. To calculate the factorial, if it’s 0 or one it will return 1. Else, I used for loop to constantly multiply the number and the previous number until it reached to 1. To calculate the second statement, the I used modulus to get the last number of the digit. Then I will add it to the variable. Then divided by 10 to get the next number. Once the number got to 0 after constantly dividing by 10 with math. Floor, then the all the added number will return by the function. To calculate the third statement, I use modulus function to get the last digit and multiply by 10. It will keep adding to the point where it will reverse the order. For the last required output, I kept track of the original number and then use another variable to reverse the original number. If the A screenshot of a cell phone

Description automatically generatedoriginal number matches the revers, then it is true else it is false.