**Lab 5b: Auto-O-Matic 2**

For a better view of the code, please check the github repository in the link below.

<https://github.com/AhmedAbdelRazak/RCC/blob/master/Chapter5/behave.html>

Here is the code only:

<!DOCTYPE html>

<html lang="en">

    <head>

        <title>Improving The Drive Method</title>

        <meta charset="UTF-8" />

    </head>

    <body>

        <script>

            // identifying the object fiat

            var fiat = {

                make: "fiat",

                model: "500",

                year: "1957",

                color: "Medium Blue",

                passengers: 2,

                convertible: false,

                mileage: 88000,

                started: false,

                fuel: 0,

                // when this function is being called, it will overwrite the object element/Property "Started" to true

                start: function () {

                    this.started = true;

                },

                // when this function is being called, it will overwrite the object element/Property "Started" to false

                stop: function () {

                    this.started = false;

                },

                //Here is the main function w/n this object

                drive: function () {

                    //first, I should check if the engine was started or not

                    if (this.started) {

                        //if the engine started, I should make sure that the car has fuel in it or not

                        if (this.fuel > 0) {

                            //If true, this block will be executed such that, I will decreace the fuel by 1 which makes sense.

                            alert(this.make + " " + this.model + " goes zoom zoom!");

                            this.fuel = this.fuel - 1;

                        } else {

                            //Here if the car doesn't have enough fuel

                            alert("Uh oh, out of fuel.");

                            // since no enough fuel then I should switch off the engine or stop the car by calling this.stop()

                            this.stop();

                        }

                    } else {

                        //If the engine here was not started

                        alert("You need to start the engine first.");

                    }

                },

                addFuel: function (amount) {

                    this.fuel = this.fuel + amount;

                },

            };

            //I should expect the fiat.started will be true

            fiat.start();

            //I should expect the alert window that display there is no fuel will pop up.

            fiat.drive();

            //I should expect that fial.fuel will be 2

            fiat.addFuel(2);

            //fiat.started will be true

            fiat.start();

            //I should expect the alert window that display that I'm driving

            // the fial.fuel will decrease to be 1

            fiat.drive();

            //I should expect the alert window that display that I'm driving

            // the fial.fuel will decrease to be 0

            fiat.drive();

            //I should expect the alert window that display there is no fuel will pop up.

            fiat.drive();

            //fiat.started should be false

            fiat.stop();

            // fiat.drive();

            // fiat.start();

            // fiat.drive();

            // fiat.addFuel(2);

            // fiat.start();

            // fiat.drive();

            // fiat.drive();

            // fiat.drive();

            // fiat.stop();

            console.log(fiat);

        </script>

    </body>

</html>

Here is the output if called the functions as ordered in the assignment and page 211:

You can check this github repository for a better view of the output:

<https://github.com/AhmedAbdelRazak/RCC/blob/master/Chapter5/Ahmed_Lab5b_Output1.jpg>

fiat.start();

fiat.drive();

fiat.addFuel(2);

fiat.start();

fiat.drive();

fiat.drive();

fiat.drive();

fiat.stop();

Graphical user interface, application, Teams

Description automatically generated

Here, I will just try to drive first without starting the engine just to check whether the code will be executed as expected or not:

You can check this github repository for a better view of the output:

<https://github.com/AhmedAbdelRazak/RCC/blob/master/Chapter5/Ahmed_Lab5b_Output2.jpg>

fiat.drive();

fiat.start();

fiat.addFuel(2);

fiat.start();

fiat.drive();

fiat.drive();

fiat.drive();

fiat.stop();

Graphical user interface, application

Description automatically generated