**Lab 12: The Car Constructor**

For a better layout of the code, please check the GitHub Repo in the link below:

<https://github.com/AhmedAbdelRazak/RCC/blob/master/Chapter12/Lab12.html>

Code:

<!DOCTYPE html>

<html lang="en">

    <head>

        <meta charset="utf-8" />

        <title>Lab 12 | Car Constructor</title>

        <script>

            //3.a Instantiate & Construct 5 different cars with their own values. See Page 538 for examples. You can use these values if you wish

            var cadiParams = {

                make: "GM",

                model: "Cadillac",

                year: 1955,

                color: "tan",

                passengers: 5,

                convertible: false,

                mileage: 12892,

            };

            var chevyParams = {

                make: "Chevy",

                model: "Bel Air",

                year: 1957,

                color: "red",

                passengers: 2,

                convertible: false,

                mileage: 1021,

            };

            var taxiParams = {

                make: "Webville Motors",

                model: "Taxi",

                year: 1955,

                color: "yellow",

                passengers: 4,

                convertible: false,

                mileage: 281341,

            };

            var fiatParams = {

                make: "Fiat",

                model: "500",

                year: 1957,

                color: "Medium Blue",

                passengers: 2,

                convertible: false,

                mileage: 88000,

            };

            var testCarParams = {

                make: "Webville Motors",

                model: "Test Car",

                year: 2014,

                color: "marine",

                passengers: 2,

                convertible: true,

                mileage: 21,

            };

            //3.a Instantiate & Construct 5 different cars with their own values. See Page 538 for examples. You can use these values if you wish

            var chevy = new Car(chevyParams);

            var cadi = new Car(cadiParams);

            var taxi = new Car(taxiParams);

            var fiat = new Car(fiatParams);

            var testCar = new Car(testCarParams);

            //4.  Put the cars in an array. See Page 538.

            var cars = [chevy, cadi, taxi, fiat, testCar];

            //1- Create a car constructor with parameters for make, model, year, color, passengers, convertible, and mileage

            function Car(params) {

                //2-a. Use this keyword to link the parameters to the constructor

                this.make = params.make;

                this.model = params.model;

                this.year = params.year;

                this.color = params.color;

                this.passengers = params.passengers;

                this.convertible = params.convertible;

                this.mileage = params.mileage;

                this.started = false;

                //2-b. Include the functions start ( ), stop ( ), and drive ( ). See pg. 539 for examples

                this.start = function () {

                    this.started = true;

                };

                this.stop = function () {

                    this.started = false;

                };

                this.drive = function () {

                    if (this.started) {

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

                    } else {

                        console.log("Start the engine first.");

                    }

                };

            }

            //5. Iterate over the array using a for loop and call the functions start, drive (2x), and stop. See Page 538.

            for (var i = 0; i < cars.length; i++) {

                cars[i].start();

                cars[i].drive();

                cars[i].drive();

                cars[i].stop();

            }

        </script>

    </head>

    <body></body>

</html>

Output:

Graphical user interface, text, application, email

Description automatically generated