**Ch. 5 Written Assignment:**

1. What is an object?
   1. Object is a collection of properties.
   2. Those properties or elements hold a value that can be string, number or Boolean.
   3. Not only this, we can embed a function in an object but in this case it will be called a method.
   4. There are multiple built in objects in JavaScript e.g. Date, Math, RegExp, JSON
2. How do you access a property?
   1. To access a property in an object, I should use the dot notation.
   2. The name of the variable containing the object then a period, then the name of the property.
3. Compare and contrast methods to functions.
   1. Methods: they are functions that are been assigned to a property name in an object

e.g. var car = {

make: ”Toyota”,

year: 2000,

//chosenCar will be considered a method.

chosenCar: function(){

//here will be the function

}

}

To call a method in the code, I should use the “dot” notation (car.chosenCar())

* 1. Functions: they are being defined independently away from an object and could be called without the dot notation.
  2. So overall, a method is just like a function except that it is in an object.

1. What is encapsulation? How is it used in JavaScript?
   1. It is putting/ packing all data into a single unit or component as it is considered to be a programming technique.
   2. Usage in JavaScript: Objects encapsulate, or hide, the complexity of the state and behavior in that object.
   3. And thank you for the support Prof. 😊
2. What is the operator that deletes properties from objects?
   1. We can delete properties from objects using the delete operator.

e.g. var car = {

make:”Toyota”,

Year: 2000

};

//the line below will delete the year property from the car object.

delete car.year

1. What is a behavior?
   1. Stated in the lecture at (32:00) as well as implemented in lab 2b that a behavior is simply calling/executing a method/ function in an object to implement/ render set of actions or events.
   2. A behavior is part of Object Oriented Programming in JavaScript.
   3. A behavior could be adjusted by adjusting the method in the object.
   4. A behavior can affect the values of the same object.
      1. As deployed in lab 5b, the “fuel” element/ property was changing when calling method fiat.addFuel(2) in the fiat object.
   5. An object has both state and behavior. State can affect behavior, and behavior can affect state.
   6. We also learned in Ch. 1 that JavaScript is used to add behavior to web pages but is also used to script applications like Adobe Photoshop, OpenOffice and Google Apps, and is even used as a server-side programming language.