**Assignment 8 OO Techniques CPS 245(Thorson)**

**Intro**

These questions relate to the object oriented techniques you used to complete Asn 7.

**Details**

1. What is the ultimate super class in the Car Dealer project?

**Car**

1. List the abstract classes.

**Car**

1. List the non-abstract classes.

**SUVS, Dealership, Truck, Coupe, Driver, Economy, Luxury ,Sedan, Van**

1. True or false (explain your answer):
   1. **Cars is-A object :** True – Since we are using object oriented, A car has to be an object
   2. **Trucks is-A car:** True- A track is a car by inheritence
   3. **Trucks has-A color:** True, Since a car has a color, and a Tuck is a car, therefore a track has a color
   4. **Luxury cars is-A car:** True- Luxury extends a Coupe, i.e Luxury is a Coupe and a Coupe is a Car, this hence makes Luxury a car by inheritence
   5. **Luxury cars is-A object :**  False -. A luxury can only be an object if instantiated which in this case is false
   6. **Interfaces are effectively a way to allow an object to support two (or more) types of behavior.** True: An interface provides the minimum implementation of an object, example could be a payement system that allows an individual to use diffent methods of payement. However , the minimum required info e.g Name will be required. Hence this enforces the defintion.
2. How many cars can be in the Dealerships lot (inventory)?

1000 cars

1. What is a car composed of?

model  
 color  
 MilesPerGallon

1. Polymorphism
   1. Which of these are examples of polymorphism?
      1. I can add numbers regardless of type (int, double, etc.)
      2. Any car can be anywhere on the lot.
      3. **ToString**: It is an exaple of polymorphism
      4. isEquals
2. ‘Setters and getters’ and private member variables are characteristics of data **hiding**
3. Comment on ‘Interfaces indicate to the developer and eclipse what constitutes a recognized behavior’.
4. Inheritance
   1. Number of classes you can inherit from 4
   2. Number of super classes you can inherit from 5
   3. Number of classes you can effectively inherit from 5

**Deliverables**

This document edited with the answers to the questions in drop box 8.

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