

UNIVERSITY OF COLOMBO, SRI LANKA



UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING



DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL) Academic Year $2014/2015 - 2^{nd}$ Year Examination – Semester 3

IT3105: Object Oriented Analysis and Design

CASE STUDY

An Information System needs to be developed for 'Dream Motors' company.

Dream Motors is a company which imports and sells Brand-New and Re-conditioned motor vehicles. Currently, company only deals with Motor cars and SUVs. They are planning to expand sales to passenger vans and motor coaches as well in near future. Important information regarding each vehicle are Chassis No, Engine No, the Make (Toyota Nissan etc), Model (Axio, Allion etc), Year of Manufacture, Country of Manufacture, Country of Import, Cylinder Capacity (1.5 cc, 1.8 cc), Vehicle type (Motor Car, SUV), Fuel Type (Petrol Diesel), Mileage (0 for Brand New Vehicles). Purchased price and selling price.

There are different options that may be available with vehicles such as power mirrors, power shutters, retractable mirrors, cruise control, multifunction keys, push start etc. Each vehicle may have one or more of these options.

Information about customers who buy a vehicle needs to be recorded. NIC/Passport number, name, address, contact number is important.

Customers can pay for a purchase using different types of payment methods. A payment clerk enters the payment details into the system.

Customers who have purchased a vehicle from Dream Motors can upgrade their vehicle after using it for some years by exchanging the old vehicle to a new vehicle. Old vehicle is valued and that value known as Exchange Value is given as a discount for the new vehicle purchase. Information regarding the exchange is maintained. Discounts are given at an exchange.

There is a warranty period for vehicles sold by Dream Motors. For a brand new Vehicle, 50000 Km warranty is given and for a re-conditioned motor vehicle, warranty is for 25000 km. Customers can claim for a free repair of the vehicle during this period if some fault occurs. Information regarding such repairs are also maintained. Customers can view such information after login into the system.

The Manager of Dream Motors should be able to get different types of reports regarding purchases and sales of the company.

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