

MODULE: WINDOWS PROGRAMMING - C30149

ASSIGNMENT 2 (30%)

FINAL DEADLINE: THURSDAY APRIL 22ND 2015

PLAN, DESIGN AND TEST A SOFTWARE APP IN VISUAL BASIC

You are required to plan, design and test a software program with a database backend for a car dealership. The current time and date must be displayed to the user. The database should store data as shown in table 1.1. Your program must contain a button to calculate the Road Tax based on CO2/gkm and using the Motor Tax Table below. Another button is required to calculate the Sale Price based on 85% of the Cost Price. Your database must contain at least 10 records.

Table 1.1

Year	Car Make	Model	Code	CO2/gkm	Fuel Type	Mileage	Cost Price	Road Tax	Sale Price
141	Toyota	Avensis	D-4D Terra Saloon	130	Diesel	55000	22750		
132	Toyota	Avensis	1.6 Valvematic Strata	150	Petrol	34600	21950		

Table 1.2 Motor Tax Table

Band	CO2 emissions-gm per km	Annual €
A0	0	120
A1	1-80g	170
A2	More than 80g/km up to and including 100g/km	180
A3	More than 100g/km up to and including 110g/km	190
A4	More than 110g/km up to and including 120g/km	200

Your program must :

- link a windows form to a database and allow the user scrolls through the data
- allow the user view a single record and multiple records
- allow the user to Add/Edit/Delete records
- calculate Road Tax and Sale Price of vehicles
- contain a menu bar

All controls should be named according to relevant naming convention and source code commented. Appropriate graphics and colour scheme should be used to enhance user interface. You are required to submit evidence of the following for assessment

Program Documentation	<ul style="list-style-type: none"> • Algorithms, flow charts, sketches of your software design • List the variable names and data types required in memory • A brief outline of the plan for your program (eg Input, Output, etc)
Application Interface	<ul style="list-style-type: none"> • You must supply printouts of each screenshots indicating the correct working of each stage of the program • An appropriate colour scheme and attractive design is required
Quality of Application	<ul style="list-style-type: none"> • You must supply a printout of all source code • Appropriate naming conventions should be used for each control and form • Source code should be commented appropriately
Test, evaluation and report	<ul style="list-style-type: none"> • Screenshots of every working stage of the program to be produced • You must provide a brief report on the software program you have produced

IMPORTANT: A copy of the folder containing all electronic files and all printouts(including sketches/source code/screenshots) must be given to your teacher in class on or before this deadline.

DECLARATION: I _____, confirm that this is my original work

Signed: _____ Date _____

Windows Programming - C30149

Individual Candidate

Marking Scheme – Sheet 2

Programming Assignment 2

Weighting 30%

Candidate Name: _____

PPSN.: _____

School/Centre: Coláiste Stiofáin Naofa

Centre No: 711220

Assessment Criteria	Maximum Mark	Candidate Mark
<ul style="list-style-type: none"> • clearly documented program code <ul style="list-style-type: none"> ○ algorithm provided ○ input-process-output schema provided ○ memory requirements and data types detailed ○ flow chart or sketches 	<p>5</p> <p>5</p> <p>5</p> <p>5</p>	
<ul style="list-style-type: none"> • quality of application <ul style="list-style-type: none"> ○ source code correctly indented ○ prudent use of whitespace ○ source code commented appropriately ○ program works correctly ○ identifiers/controls appropriately named ○ working control structures ○ working loop structures ○ correct events used 	<p>5</p> <p>5</p> <p>5</p> <p>5</p> <p>5</p> <p>5</p> <p>5</p> <p>5</p>	
<ul style="list-style-type: none"> • application interface <ul style="list-style-type: none"> ○ working screen layout ○ prudent use of text, fonts, colour, etc ○ fully functioning menu bar ○ appropriate use of grammar in dialog boxes ○ images/graphics used appropriately 	<p>5</p> <p>5</p> <p>5</p> <p>5</p> <p>5</p>	
<ul style="list-style-type: none"> • Test, Evaluate and Report <ul style="list-style-type: none"> ○ software testing ○ problems encountered correctly documented ○ screen captures, written evidence, etc 	<p>5</p> <p>5</p> <p>5</p>	
Subtotal	100	
WEIGHED TOTAL (= SUBTOTAL X 0.3)		