CSN
Coláiste Stiofáin Naofa
College of Further Education

QQI
Quality and Qualifications Ireland
Dearbhú Cáilíochta agus Cáilíochtaí Éireann

Component Name and Code:	Programming & Design Principles (5N2927)	Teacher:	Ray O'Connor
Assessment:	Skills Demo 1	Course(s):	SD
Weighting/Marks:	30%	Issue Date: 2-12-2015	**Deadline: 10-12-2015**

Guidelines/Instructions to Candidates:

You are required to design a software solution which allows up to 10 customers order mobile phones. The program should have a login form for security purposes with username=csn and password=csn to access the main form. This form should display the current date and time. The main form should also contain the following: a combo for Manufacturer (Sony, Samsung or Apple), radio buttons for Battery Life (12, 24 or 36 hours), radio buttons for Camera (True or False), radio buttons for Display size (4 or 4.5 inch), textbox for quantity ordered (1, 2, 3, etc). Your program must have a menu bar and relevant colour scheme with graphics used to enhance the application. You must use the Select…Case statement in your source code.

The program should perform the following:-

1 Set the OrderID to 1 for the first order and increment each subsequent order by 1
2 Calculate the Unit Cost based on all smart phones costing €400 for the basic price with extra costs as follows:-

Battery Life(12 add €20, 24 add €25, 36 add €30), Camera(True or False), Display size(4inch add €40, 4.5 add €55)

OrderID	Manufacturer	Battery Life	Camera	Display	Quantity	Unit Cost	Total Cost
1	Sony	12	True	4	8		

3 Calculate the Total Cost by multiplying the Unit Cost by Quantity
4 The program should allow users to be able to sort the orders in descending order of Total Cost and display on screen

Required

- You need to design a flowchart for the program above and use this to produce an algorithm for same.
- A complete data dictionary (eg variables names including data types).
- Your program must incorporate Selection statement(s) and Boolean operator(s)
- Test data must be provided with screenshots of each working stage of program confirming results for the test data.
- Source code must be commented and indented with suitable names used for all variables and objects.
- Printout of source code and screenshots must be provided and all digital files must be given to your teacher in class.

Assessment: **Note:** You must staple this cover sheet in front of the printouts below *(2 staples top left corner)*

You must present the following in class to your teacher on or before deadline

- printout of algorithm including pseudocode or a flowchart
- printout of data dictionary
- printout of screenshots demonstrating each working stage of the program and for different test data
- printout of all source code
- **IMPORTANT:** Project folder containing all electronic files on USB which must be copied onto teachers folder on server

DECLARATION: I _____ , confirm that everything I submitted for assessment is my own original work.

Signed: _____ Date: _____