

Question

You are required to design an interface for food ordering system. Requirements for your case study is detailed in the following table.

Item	Requirements
1.	<p>Your system has two types of users: restaurant's staff and customer. Restaurant's staff must register and login to enter the system while customer can enter the system without login. Make sure your program has multiple forms and provides user navigation to all the forms. Provide forms for:</p> <p>Form 1 User registration (for staff)</p> <p>Form 2 Login form (for staff)</p> <p>Form 3 Menus available (for customer)</p> <ul style="list-style-type: none">i. 3 sets/combo menuii. At least 5 add-on sides/a-la-carte menu <p>Form 4 Customer ordering form (for customer)</p> <p>Form 5 Customer ordering report (for staff)</p>
2.	<p>Form 1: User registration (for staff)</p> <p>1) The data needed for the user registration are name, staff id, phone number, email, username and password. Store the data into a database that you created. Make sure you can add, update, delete and traverse the recorded data.</p>
3.	<p>Form 2: Login form (for staff)</p> <p>1) Users have to key in the correct username and password to enter to the system.</p>
4.	<p>Form 3: Menus available (for customer)</p> <p>1) The form for menus available should display a complete menu list for each sets/combo menu and price. This form also will display available add-on sides/a-la-carte menu together with the price.</p>
5.	<p>Form 4: Customer ordering form (for customer)</p> <p>1) Customer ordering form will receive:</p> <ul style="list-style-type: none">i. Customer's personal informationii. Ordering information which included the following information:<ul style="list-style-type: none">• Selected sets/combo menu and quantity (if any)• Selected add-on sides/a-la-carte menu and quantity (if any)• Delivery method (cash on delivery-charge applied / self-collect)• Any other related information <p>2) A receipt with complete information will be displayed to the customer. The receipt must include the following information:</p> <ul style="list-style-type: none">i. Personal informationii. Ordering informationiii. Total price for selected sets/combo menuiv. Total price for selected add-on sides/a-la-carte menu

Item	Requirements
	<ul style="list-style-type: none"> v. Delivery charge vi. Tax price (must include tax for each order) vii. Total amount customer must pay <p>3) Save the information in two text files:</p> <ul style="list-style-type: none"> i. Customer's complete information (as printed in the receipt) ii. Summary of ordering information which includes the following information: <ul style="list-style-type: none"> • Ordered quantity for set 1 (if no order for set 1, save the quantity as 0) • Ordered quantity for set 2 (if no order for set 2, save the quantity as 0) • Ordered quantity for set 3 (if no order for set 2, save the quantity as 0) • Total price for selected sets/combo menu (if no order for set, save the total price as 0) • Total price for selected add-on sides/a-la-carte menu (if no order for add-on sides, save the total price as 0) • Delivery charge (if no delivery charge, save the value as 0) • Tax price • Total amount customer must pay
6.	<p>Form 5: Customer ordering report (for staff)</p> <p>1) This form will be able to display the summary of all orders made by all customers.</p> <p>2) For this report, you must read the data from the summary of ordering information text file and display a report to show:</p> <ul style="list-style-type: none"> i. Total ordered quantity for set 1 for all customers ii. Total ordered quantity for set 2 for all customers iii. Total ordered quantity for set 3 for all customers iv. The most and least chosen set menu by the customers v. Total price for sets/combo menu for all customers vi. Total price for add-on sides/a-la-carte menu for all customers vii. Total delivery charge for all customers viii. Total tax price for all customers ix. Total amount for all customers <p>3) These reports can be displayed by registered restaurant staff only.</p>
7.	Use appropriate controls to get input from user and to display the output.
8	Draw the storyboard first before you start implementing.
9	Create the table to store data of members using Microsoft Access.
10.	Design your form creatively.
11.	Write a report to explain your interface together with your storyboard that you initially prepared.
12.	Submission of report and presentation is in week 14 (22 - 26 January 2023).
13.	Refer to the rubric given.
14.	Start your work early. You can start with designing your forms. Some of the requirements may not have been taught in class and you can do it later after the lesson covered.

ASSESSMENT 3 : CASE STUDY (30%)
CSC301 : Visual Programming

Rubric

Features	Scale and descriptions				Weight	Marks
Overall (57M)						
Applications of controls.	Non-existence (0)	Poorly implemented (1)	Capable-correctly implemented and practical (2)	Expert-design solution is unique and above expectations (3)	1	/3
Assignment of controls properties.	Non-existence (0)	Poorly implemented (1)	Capable-correctly implemented and practical (2)	Expert-design solution is unique and above expectations (3)	1	/3
Usage and declaration of variables.	Non-existence (0)	Poorly implemented (1)	Capable-correctly implemented and practical (2)	Expert-design solution is unique and above expectations (3)	2	/6
Decisions and conditions.	Non-existence (0)	Poorly implemented (1)	Capable-correctly implemented and practical (2)	Expert-design solution is unique and above expectations (3)	2	/6
Applications of sub procedures and function procedures.	Non-existence (0)	Poorly implemented (1)	Capable-correctly implemented and practical (2)	Expert-design solution is unique and above expectations (3)	2	/6
Implementations of multiple forms.	Non-existence (0)	Poorly implemented (1)	Capable-correctly implemented and practical (2)	Expert-design solution is unique and above expectations (3)	2	/6
Applications of loop, lists and print.	Non-existence (0)	Poorly implemented (1)	Capable-correctly implemented and practical (2)	Expert-design solution is unique and above expectations (3)	2	/6
Application of arrays.	Non-existence (0)	Poorly implemented (1)	Capable-correctly implemented and practical (2)	Expert-design solution is unique and above expectations (3)	2	/6
Implementation of files for read and write.	Non-existence (0)	Poorly implemented (1)	Capable-correctly implemented and practical (2)	Expert-design solution is unique and above expectations (3)	2	/6
Application of database.	Non-existence (0)	Poorly implemented (1)	Capable-correctly implemented and practical (2)	Expert-design solution is unique and above expectations (3)	3	/9

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Problem solving (57M)						
Item 1	Non-existence (0)	Poorly implemented (1)	Capable-correctly implemented and practical (2)	Expert-design solution is unique and above expectations (3)	2	/6
Item 2	Non-existence (0)	Poorly implemented (1)	Capable-correctly implemented and practical (2)	Expert-design solution is unique and above expectations (3)	2	/6
Item 3	Non-existence (0)	Poorly implemented (1)	Capable-correctly implemented and practical (2)	Expert-design solution is unique and above expectations (3)	2	/6
Item 4	Non-existence (0)	Poorly implemented (1)	Capable-correctly implemented and practical (2)	Expert-design solution is unique and above expectations (3)	2	/6
Item 5	Non-existence (0)	Poorly implemented (1)	Capable-correctly implemented and practical (2)	Expert-design solution is unique and above expectations (3)	6	/18
Item 6	Non-existence (0)	Poorly implemented (1)	Capable-correctly implemented and practical (2)	Expert-design solution is unique and above expectations (3)	5	/15
Interface Design (36M)						
Creativity	Simple and put less concern into the detail. (1)	Neat (2)	Looking professional and neat. (3)	Looking professional and unique (4)	2	/8
User friendliness	Difficult to navigate (1)		Very user friendly and convenient. (4)		3	/12
Practicality	Solution is not practical (1)		Solution is very practical and relatable. (4)		3	/12
Overall implementation	Poor (1)	Moderate (2)	Accomplish (3)	Expert (4)	1	/4
Report (9M)						
Storyboard	Not exist(0)	Incomplete (1)	Sufficient (2)	Above expectation(3)	1	/3
Written explanations	Not exist(0)	Hard to understand (1)	Accomplish (2)	Well done (3)	1	/3
Oral explanations	Not exist(0)	Hard to understand (1)	Accomplish (2)	Well done (3)	1	/3
Total marks						/159

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Each group should consist of max 4 members per group.

Restaurant type will be assigned by the lecturer to each group, and you are not allowed to change the assignation:

GROUP	RESTAURANT
1 (4 members)	Irish cuisine restaurant
1 (4 members)	Brazilian restaurant
1 (3 members)	Korean food restaurant
1 (3 members)	Thailand cuisine restaurant
1 (3 members)	Mexican restaurant