ASSIGNMENT GUIDELINES

A) Requirements

- All reports must be an original piece of work. They must have a cover page, table of contents, appendices and be correctly referenced. Students are not required to ring-bind their reports.
- All pages must be numbered consecutively and all appendices referenced in the main report. The report must be type-written on A4-sized paper using suggested font-size-12 with proper sectioning and paragraphing.
- Marks will be awarded for
  - Logical and coherent thinking depicted in the solutions.
  - Proper referencing and creativity.
- Referencing involves acknowledging original sources of information when producing written work. By referencing correctly, students not only add credence to arguments or statements made, but also avoid plagiarism.
- For documents saved in a CD, or any secondary storage media, please check with your lecturer on software versions and compatibility. All such submissions must be virus free. Submitted media containing a virus, or which cannot be run directly will result in a FAIL grade being awarded.

B) Backup

- All assignments submitted will not be returned to students.
- Please ensure that duplicates are kept. Students are responsible for their own work and must perform the necessary backups.

C) Plagiarism

- Plagiarism occurs when you claim ownership of written words or ideas which are not your own. Students must use their own words and structure. Views and information obtained from books, journals, magazines, URLs, etc. must be appropriately referenced.
- Bulk copying of information or/and sentences from textbooks are also not acceptable. This is not allowed even if the source of information is referenced. Plagiarism relates to students copying or basing their written work on that of others. Any piece of work submitted for assessment must be of one's own original work.
- Where it has been established that a candidate has engaged in plagiarism, the examiner may deem that the candidate has FAILED all or part of the assessment concerned.

D) Report Submission Deadline

- Students MUST submit the assignment by the stated deadlines.
- Please note that students must submit all coursework by the stated due date (s). Coursework submitted within 3 calendar days after the due date will be capped at the pass mark. No coursework will be accepted for marking after 3 calendar days from the due date. The decision to approve or not to approve an extension rests with the Academic Department.

E) Deliverables

- Where necessary, include a CD, or any secondary storage media containing the relevant and required files.

Assignment

This assignment contributes **60%** of the total allocated marks for the assessment of this module. You are required to accomplish each of the given tasks based on the given scenario.

Introduction

The key objective of this assignment is to provide students with a thorough understanding of how Visual C# can be used as Rapid Application Tool to design and implemented for Windows applications. Students can apply the language concepts including advanced controls within Windows Forms, and provide database connectivity using ADO.NET.

TASK LIST

This assignment consists of **FIVE** tasks.

Case Scenario:

You are being asked to design a system to manage a food ordering and delivery system. The system will store information about the different food items, staff and customer information, etc. You will need to store the details of the food items, customer information, and customer order information. Develop a simple data entry system application that consists of interface that allows user to do the followings:

Task 1 – Login Account

The administrator is given the rights to create accounts and administer the accounts of the other users.

Each user will log-in to the application using a given username and password. The users are expected to enter the correct username and password before they can use the system. Upon successfully logging in, the Main Menu will be displayed.

Implement an interface that will be used by the administrator to create and administer the accounts of other users.

Task 2: Customer Registration Form

A customer must be registered before they are able to use the system.

Implement an interface which captures the customer personal details, any other appropriate details for the new registration and stores these details appropriately.

Task 3: Food Ordering Form

a) A registered customer is able to view all the food items in the system. E.g. food name, description, category, price and their availability. For food items that are not available, the "Not Available" status will be displayed. Therefore, the user will not be able to order the item.

b) The food items should be categorised as Main, Sides and Beverages.

c) Once the order is confirmed, the order will be captured along with the confirmation date, time, delivery address and date of delivery.

d) The customer can only cancel his/her order 4 hours before the delivery time.

Implement an interface which captures the above details, and any other appropriate details for the food ordering and stores these details appropriately.

Note: An order can consist of at least one or more food items.

Task 4: Administrator user privileges

The administrator needs to be facilitated with the following privileges:

a) Should be able to update customer and staff personal details e.g. name, address and phone number etc. and view the status of customers. Provide a facility for the administrators to add new customer.

b) Should be able to update and manipulate the entry's details of the food items and customer details; this includes updating the user and food items status (availability).

Task 5: Test plan

You are required to design a minimum of four test cases, with appropriate test data, the expected and actual test results in your Test Plan. Please make sure your case objectives test the major functions of the system.

Note: For all the above Tasks, appropriate validations and exception handlers should be included in the interfaces. These may include checking for empty fields as well as specific required formats. Appropriate database tables should be designed and created to store the details for the respective tasks.

Documentation

A written documentation which covers the following should be prepared:

- Screenshots of all interface screens, forms, and output generated.
- The database design for the system.
- The test plan written in Task 5.

SUBMISSION REQUIREMENTS

A. A word-processed, printed document that contains all the written components of the assignment.
B. A compiled, error free Visual C# program, together with the database file on a CD.

GUIDANCE

- Please make sure that you understand the requirements of each Task before embarking on them.
- Consult with your Lecturer during and after familiarising yourself with the requirements for the assignment.

MARK DISTRIBUTION

Note: This assignment contributes **60%** of the total allocated marks for the assessment of this module.

	Component	Guide	Maximum marks	Total
1	Form Controls	Appropriate form controls for all forms created in the system	5	5
2	Validation	Appropriate validation for all forms created in the system	8	15
		Use of exception handler for all forms created in the system	7	
3	Login	Login process	10	20
		Login authentication – administrator/customer	10	
4	Customer registration (For first-time user)	Code to add new customer details	10	10
5	Management of Ordering data	Code to add new order details	10	20
		Code to manage order details (edit/delete operations)	10	
6	Management of food item data	Code to add new food item details	5	10
		Code to update food item details (edit/delete operations)	5	
Documentation		Screenshots of all output generated.	4	20
		Database design	8	
		Test Plan / Test Data / Test Results	8	
		TOTAL	100	100