

**C# Formative 2 Assessment (Programming 1)**

***Unit Standards covered:***

* 115359 Demonstrate an understanding of the handling of error in a computer programming
* environment
* 115365 Apply the principles of designing computer system inputs and outputs
* 115362 Manage software development source files using appropriate tools
* 115367 Demonstrate logical problem solving and error detection techniques
* 115373 Demonstrate an understanding of sort and search techniques used in computer programming
* 115384 Test a computer program against a given specification
* 114049 Demonstrate an understanding of Computer Database Management Systems

**Instructions to Learner:**

1. Learner needs to include all criteria evidence of all tasks.
2. The work handed in must be your own and valid.
3. Please take note that failing to adhere to the criteria of each task within this assessment will lead to an immediate NYC.
4. The learner must achieve a mark of 80% to be deemed as competent

Learner Name and Surname: a

Assessor Name and Surname: 

Learner ID Number: 

Date: 

# Scenario

Complete all of the following instructions, also ***have a look at the mark sheet section to see how much each question counts to ensure you provide enough evidence to obtain a maximum mark***.

You have to hand in a folder named Name\_Surname\_C2\_Programming\_1\_Formative2 which will contain all of the evidence as asked further on in this assessment.

CTU Training Solutions have received a request from TruTexts (pty).

You have been tasked with the creation of the TruTexts App.

Company Info:

* TruTexts (pty) is a company specializing in selling books. All along they have been managing their customers’ information manually. However, since the business has grown tremendously, managing volumes of customer data manually is no longer viable.

Requirements:

* Develop a database-driven application to capture information about their customers and to be able to view all existing customers.
* The data to be captured about each customer is as follows:
  + First name
  + Surname
  + Physical Address
  + City
  + Cell number

You need to accomplish the following tasks given to you:

* + Create an Entity Data Model and call the database TruTexts\_Customers.
  + Your database must be able to save information about:
    - Customers,
    - Orders,
    - Books,
    - Suppliers,
    - Employees
    - Roles.
* Ensure that all of your tables have appropriate data types for columns
* Must have at least 5 Rows of Dummy Data per Table
* Database is in 3rd Normal form.
* Your Application must have a meaning full name.
* The Admin Should be able to view a Summary of all the following Information (Make use of Views):
  + Most Popular Books Sold
  + People that Bought the most Books
  + Employee that made the most Sales
  + Suppliers that Provide the most books
* Make use of C# code in order to establish a connection to your database.
* Your Application must make use of a splash screen that is at least 3 seconds long.
* Your application must be able to provide log in support for Administrators and users.
* Your application must allow a normal user to only view the customer data but not be able to insert, update and delete order data in the database.
* An Administrator should be able to insert, update and delete any information from the database.
* Your database must be able to install along with your Application. You do not need to install SQL you can presume that SQL server has already been installed.
* You have to hand in the following documentation along with your application :
  + User Manual.
  + Technical Manual.
  + Planning Manual.

**Mark Sheet**

|  |  |
| --- | --- |
| 1. Database Named TruTexts\_Customers. | **3\** |
| 1. All tables were created as needed. | **7\** |
| 1. All of your tables have meaningful columns and appropriate data types and your database is in 3rd Normal form. | **60\** |
| 1. Dummy Data is Added | **3\** |
| 1. Your application has a meaning full name. | **3\** |
| 1. The Admin Should be able to view a Summary of all the Information | **30\** |
| 1. C# code was used to connect your application to your database. | **3\** |
| 1. Your Application makes use of a splash screen that is at least 3 seconds long. | **4\** |
| 1. Your application must be able to provide log in support for Administrators and users. | **10\** |
| 1. Your application must allow a normal user to only view the customer data but be able to insert, update and delete order data in the database. | **30\** |
| 1. An Administrator should be able to insert, update and delete any information from the database. | **50\** |
| 1. Your database must be able to install along with your Application. | **10\** |
| 1. You have to hand in the following documentation along with your application :  * User Manual. * Technical Manual. * Planning Manual. | **30\** |
| **Total for assessment** | **243\** | |
| **Total percentage for assessment** | **100\** | |

**Competency:**

**Competent**

**Not Yet Competent**

**Final Comment**