

SOUTH EASTERN UNIVERSITY OF SRI LANKA

THIRD EXAMINATION IN BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY
FOR MANAGEMENT STUDIES 2009/2010

SEMESTER – I, AUGUST - 2011

ITMS 3143– RAPID APPLICATION DEVELOPMENT

Answer All Questions

Duration: 03 Hours

01)

a)

- i. Write brief notes on Properties, Events, and Methods
- ii. Write down the steps necessary to set the startup form and the code to hide it when a button is clicked.
- iii. What is an MDI form? How will you set a form to become an MDI?
- iv. You have an MDI form with menus to access child forms in your project. One child form's name is customersForm. Write down the C# code to display the customersForm as a child form by clicking on its relevant menu command.

(05 x 04 = 20 Marks)

b) You want to create a static LogIn form as shown below. The user should give username as SaNa and password as 123@sana!@#

The image shows a standard Windows-style login dialog box. It has a title bar at the top. Inside, there are two labels: 'User Name:' followed by a text box containing 'SaNa', and 'Pass Word:' followed by a password box containing 'XXXXXXXXXX'. At the bottom, there are two buttons: 'OK' and 'Cancel'.

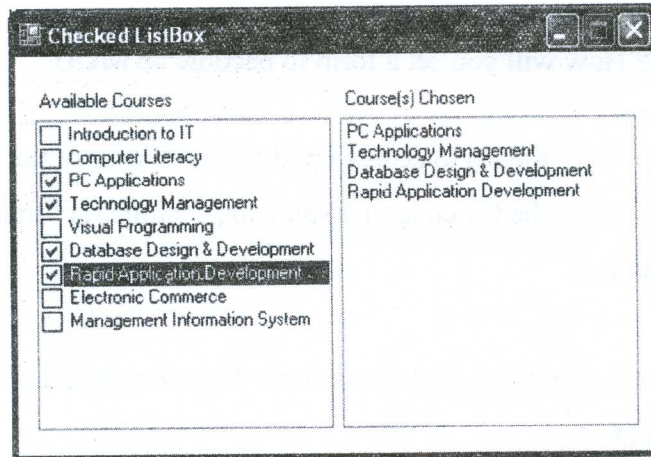
Write down the code that checks username and password. If user verification succeeds it should display mainMDIForm form and hides the logInForm form. Otherwise it should display a messagebox, clears the textboxes and place the curser inside the username textbox.

(05 Marks)

(Total: 25 Marks)

02)

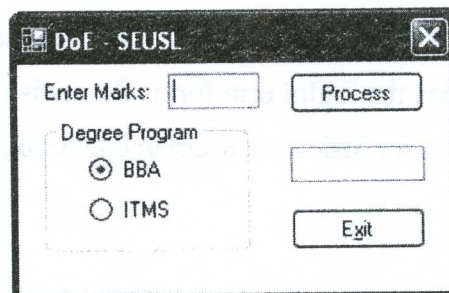
- a) How will you check if a check box is checked or not, in code?
- b) You need to add the names Razeen, Sana, Wikrama, Senthilnith, Balasooriya to a ComboBox. Write down the code to add it.
- c) You want to add numbers starting from 1900 to 2900 in ListBox. Write down the code with For iteration structure.
- d) What is data type? List out 05 data types available in C#.
- e) Look at the figure given below. If the user chooses an item from the Available Courses listbox it should be listed in the Courses Chosen listbox. Write down the C# code to perform this task.



(Total: 04 x 05 = 20 Marks)

03)

SEUSL's Department of Examination wants to calculate Grades obtained by students in an examination. Imagine that marks ranges vary depending on the degree program. You are given the following information with a screenshot.



Degree	Marks Structure
BBA	More than or equal to 70 marks; Grade = A More than or equal to 60 marks; Grade = B More than or equal to 50 marks; Grade = C Less than 50 marks; Grade = F
BSc (ITMS)	More than or equal to 80 marks; Grade = A More than or equal to 70 marks; Grade = B More than or equal to 60 marks; Grade = C Less than 60 marks; Grade = F

Write a C# program that takes Marks, Type of Degree as inputs and calculates the Grade obtained by the student.

- i. By using Nested IF
- ii. By Using IF & Switch.

Try-Catch statement should be used in the code for the above tasks and in case of any error, a general error message should be displayed.

(Total: 20 Marks)

04)

a) What is Table Adapter Manager? Briefly describe.

(05Marks)

b) Briefly describe the usage of following dialog boxes in Windows Forms Application development and what properties you will basically use once each of their ShowDialog method returns OK value.

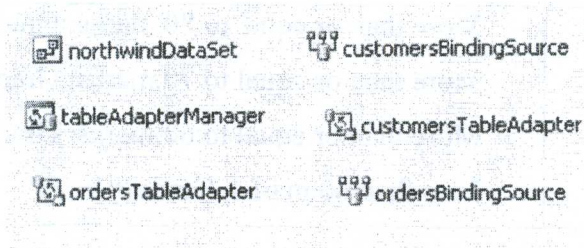
- i. OpenFileDialog
- ii. FolderBrowser Dialog

(05 x 02 = 10 Marks)

(Total: 15 Marks)

05)

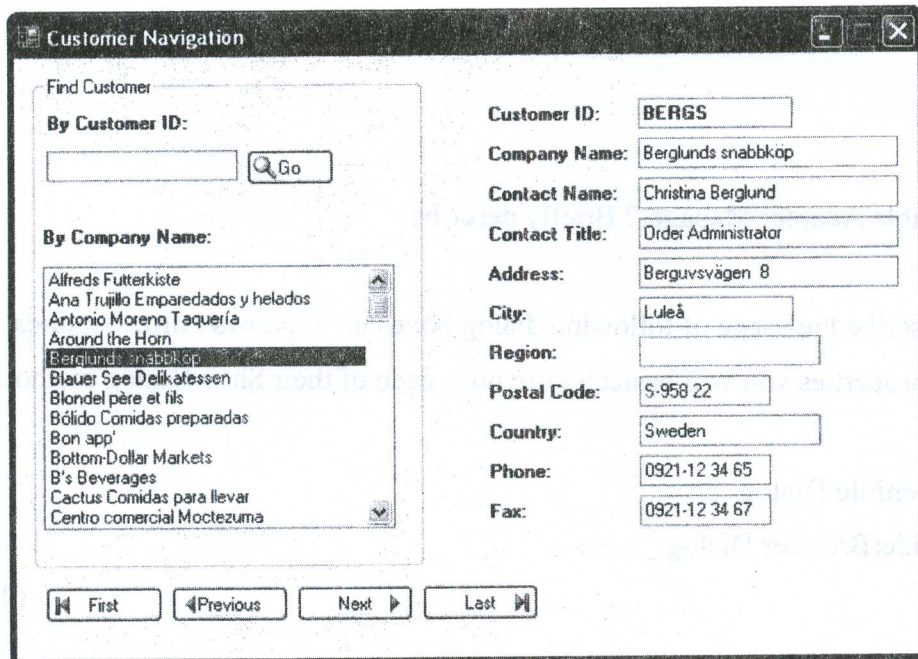
Imagine that you have an Access 2010 database called Northwind to which you are in need of establishing a connection retrieve three tables named Customers and Orders. The figure below shows you the items available in the component tray of VS 2010 IDE. (after establishing connection and creating relevant forms)



(a) Write down the steps necessary to create a connection to the Northwind database file that is available on the Desktop of your PC.

(04 Marks)

(b) Refer the figure which shows up Customers details from the Northwind database. When the user clicks on the Company Name list box, the corresponding customer is searched and found from the table and displayed.



Write down the necessary setting needed to populate the list box with the CompanyName column from the customers table.

(04 Marks)

- (c) Refer to the figure given(b) part. When the user types a CustomerID inside the findCustomerTextBox and clicks on the Go button, the customer is searched from the Customers table and shown in the form. The code behind the Go button is given below. Write down the steps to be followed with the SQL statement to create the parameter query.

```

this.customersTableAdapter.FillByFind(this.northwindDataSet.Customers, findCustomerTextBox.Text);
if (customersBindingSource.Count == 0)
{
    MessageBox.Show("No Matching records!");
    this.customersTableAdapter.Fill(this.northwindDataSet.Customers);
}

```

(04 Marks)

- (d) From the Orders table of the Northwind database we have created the data grid containing details of orders. The query of the ordersTableAdapter has been modified and the form shown below has been designed to filter Orders between two given dates. Write down the command that is needed inside the click event of Show Orders button (the dataset's name and table adapter's names can be seen at the beginning of the question).

OrderID	OrderDate	CustomerID	EmployeeID	RequiredDate	ShippedDate	ShipVia
10760	1/1/1996	MAISD	4	1/29/1996	1/10/1996	1
10761	1/2/1996	RATTC	5	1/30/1996	1/8/1996	2
10762	1/2/1996	FOLKO	3	1/30/1996	1/9/1996	1
10763	1/3/1996	FOLIG	3	1/31/1996	1/8/1996	3
10764	1/3/1996	ERNSH	6	1/31/1996	1/8/1996	3
10765	1/4/1996	QUICK	3	2/1/1996	1/9/1996	3
10766	1/5/1996	OTTIK	4	2/2/1996	1/9/1996	1
10767	1/5/1996	SUPRD	4	2/2/1996	1/15/1996	3
10768	1/8/1996	ARDUT	3	2/5/1996	1/15/1996	2
10769	1/8/1996	VAFFE	3	2/5/1996	1/12/1996	1
10770	1/9/1996	HANAP	8	2/6/1996	1/17/1996	3

No of orders: 318

(04 Marks)

- (e) The following form has been designed in such a way that when the user enters a CustomerID inside the textbox, all customers whose ID contains the string entered in the textbox are filtered. Write down the parameterized query needed to perform this task.

Filter by Customer ID

Customer ID: ANATR Region:

Company Name: Ana Trujillo Emparedados y hel. Postal Code: 05021

Contact Name: Ana Trujillo Country: Mexico

Contact Title: Owner Phone: (5) 555-4729

Address: Avda. de la Constitución 2222 Fax: (5) 555-3745

City: México D.F.

Filter by Customer ID

ar

ANATR
ANTON
FRANK
FRANK
FRANS
HANAR
OCEAN
RANCH
SANTG
WANDK

(04 Marks)

(Total:20 Marks)