EASTERN UNIVERSITY, SRILANKA

THIRD EXAMINATION IN SCIENCE-2004/2005

SECOND SEMESTER (Oct./Nov.,2006)

OC351 – Rapid Application Development (Practical)

Answer all questions   **Time:3Hours**

Q1)

A Computer Institution wants to computerize their Inventory System. This Inventory System will be storing the details of computer purchase and the details of the distributors. A System Analyst has studied their system and selected Visual Basic as front end and MS Access database as back end.

You have been hired to perform this task and be asked to create the database with the following details in MS Access, necessary forms and the respective code in VB.
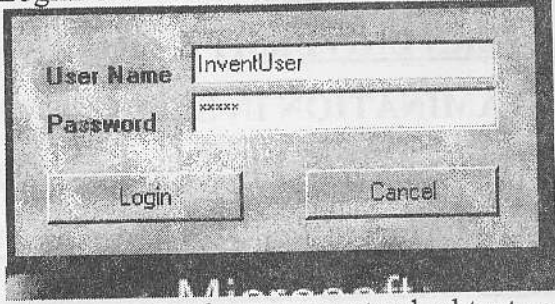
1. Create a database "InventData.mdb" which contains two tables **Computer** and **Distributor.** Save the database in "A:\OC351\InventData.mdb"
A distributor can deliver many computers and one particular computer can be delivered by only one distributor.

Computer		Distributor	
Field	**Type**	**Field**	**Type**
CompID	INTEGER	**DstID**	INTEGER
Manufacture	TEXT(Company)	Name	TEXT
MonitorType	TEXT(Brand, Inches, Etc)	Address	TEXT
CaseType	TEXT(Desktop/Towertop)	Telephone1	TEXT[10]
CPUType	TEXT(Pentium/AMD..)	Telephone2	TEXT[10]
RAM	TEXT(Type and size)	Email	TEXT
ROM	TEXT(CD/DVD…)	HomePage	TEXT
FloppyDrive	BOOLEAN (YES/NO)		
VGACard	BOOLEAN (YES/NO)		
HardDrive	INTEGER (Size)		
DstID	INTEGER (Foreign Key)		

Enter at least 5 appropriate records in both tables.

15 Marks

2. Create a VB Project and save it in "A:\OC351\InventSys.vbp". Create the following forms and develop the respective program.
   - Create a LoginForm without title bar as shown below.

   This form contains two text boxes; one standard text control and other with password control, two labels and two buttons. It should perform the following tasks.
   - Contents of the text boxes must be cleared when user click on the text boxes.
   - "Login" button must be default.
   - It is assumed that the correct user name is "inventuser" and correct password is "user351". When the user enters correct user name and password then show the main form which will be created next and hide the login form. If the user name or password is not correct, display a login error message box with **critical icon**.

   > 25 Marks

3. Main Form
   a. Create a **MainForm** with Title name "Main Form".
   b. Show the **MainForm** in Maximized state.
   c. Add a proper Data Control to your from and connect with your InvenData.mdb.
   d. Set data source property so as that to display all fields in Computer table.
   e. Add proper Grid Control to display the result.
   f. Design a menu system as mentioned below.
      - **System**
        - Log Out   Ctrl+L
        - ----------------------
        - Exit   Ctrl+X
      - **Edit**
        - Add New Computer   Ctrl+A
        - ---
        - Search   Ctrl+F
      - **Help**
        - About

   Above mentioned menu commands must perform the following tasks.

Command	Task
Log Out	UnLoad the MainForm and Shows the LoginForm
Exit	Terminates the application
Add New Computer	Shows a data entry form (Described Latter on 4.*)
Search	Shows an easy search form (Described Latter on 5.*)
About	Show a message box with your Index Number.

   > 20 Marks

4. Data Entry Form for entering details of a new purchased computer.
   a. Create a form called **DEForm** with title "Computer Data Entry Form".
   b. **DEForm** should contain proper label with text, text boxes for entering data and two buttons "Add", "Cancel".
   c. For the fields **CaseType, FlppyDrive, VGACard** use combo box, give the values of the items on design time.
   d. For the field **DstID** use another combo box and load the **DstID** s from the table **Distributor** when form loads, so that the user can select the available Distributors ID easily.
   e. Add the new record to database when user clicked on "Add" button and close the form when user clicked on "Cancel" button.

   20 Marks

5. Easy Search Form
   a. Create another form called **SrchForm** with title "Easy Search Form".
   b. This form contains one combo box, data grid and suitable data control. Design and write proper code in such way that the user should be able to select the distributors name from the combo box and should display all the computers delivered by the selected distributor.

   20 Marks