

FOR 240 Homework – Assignment 4
Using DataGridView and Other VB Controls to Manipulate Database
Introduction to Computing in Natural Resources

This application demonstrates how a DataGridView control can be used to display a table of information from a database. VB makes it easy to access database information from within your application. The data control provides the ability to navigate through the database recordset, synchronizing the display of records in the grid control with the position in the recordset.

The following controls are needed in this application:

- DataGridView control
- Command button

The database we are going to use is timbercruising.accdb created in the database application section. The recordset is table tblPlot in the database.

Creating a Project

You begin creating the application by choosing New Project from the File menu, then selecting Windows Forms Application in the New Project dialog box (when you first start Visual Basic, the New Project dialog box is presented). VB creates a new project and displays a new form. Now we need to design the interface. Follow the steps to add DataGridView and add datasource:

- a. Select “DataGridView” under the group “Data” in the Toolbox, and drag it to the form interface. By default, the control will be named as “DataGridView1”.
- b. Highlight “DataGridView1” and click the right arrow on the top of the control to add data source to it.
- c. In the pop-up dialogue, expand the “Choose Data Source” options and click “Add Project Data Source” (Figure 16.6).
- d. Select “Database” and click “Next” button (Figure 16.7).
- e. Click “New Connection...”, select “Microsoft Access Data File”, and browse the folder to locate your database that you will use in the project (Figure 16.8). In this case, I select “2007Database.accdb”, which is the database you created in labs 5 and 6, and should be saved in the same folder of the project. Click “OK”. Go ahead to save the connection (Figure 16.9).
- f. In Figure 16.10, select the table that you want to display using DataGridView. In this case, I choose tblPlot.

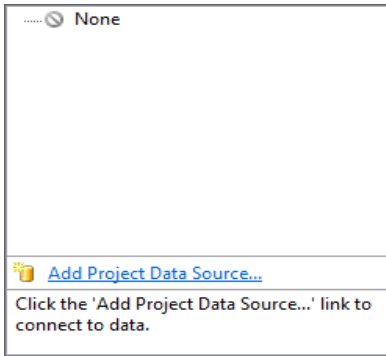


Figure 16.6. Add Project Data Source.

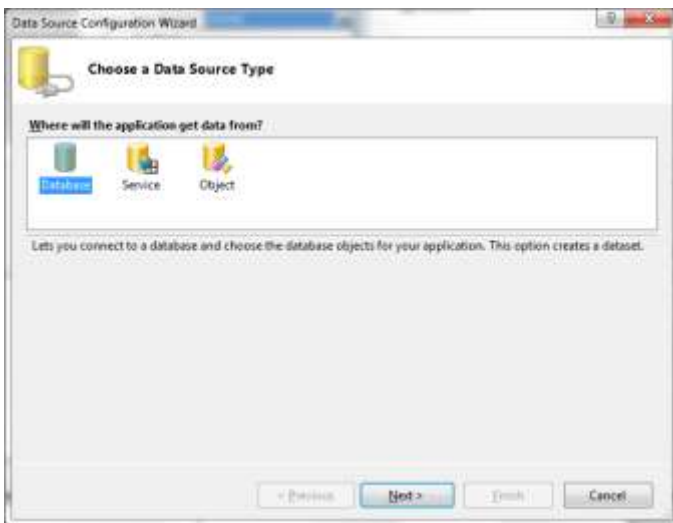
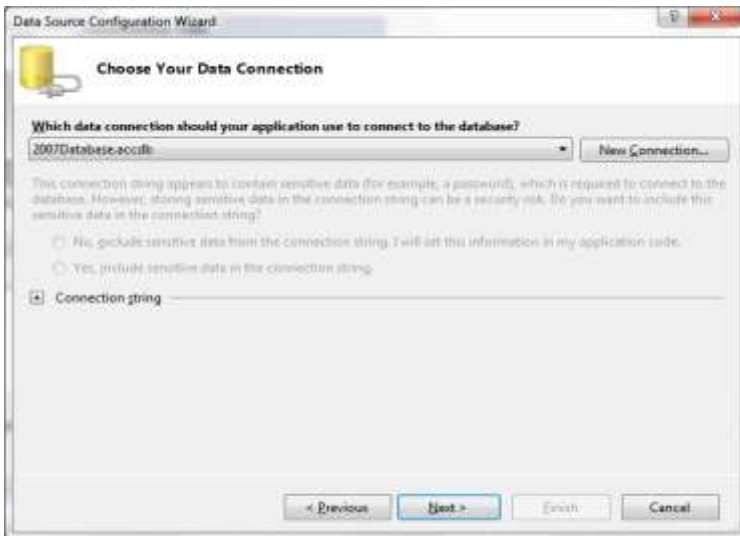
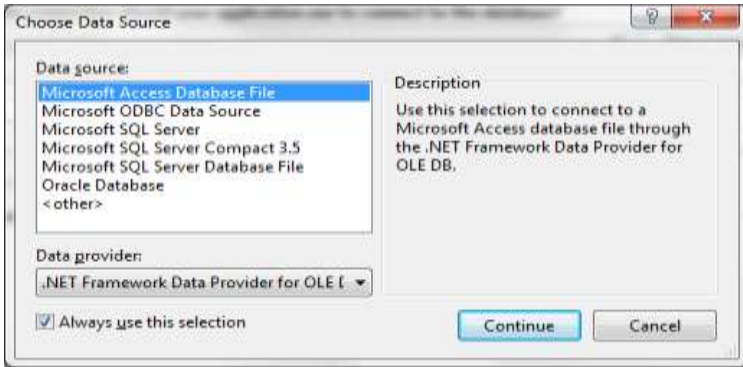


Figure 16.7. Choose a data source type.



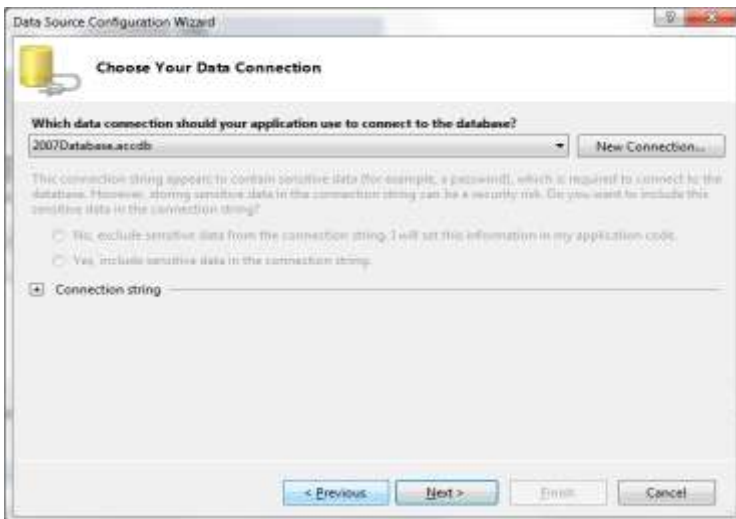
(a)



(b)



(c)



(d)

Figure 16.8. Define data connection.

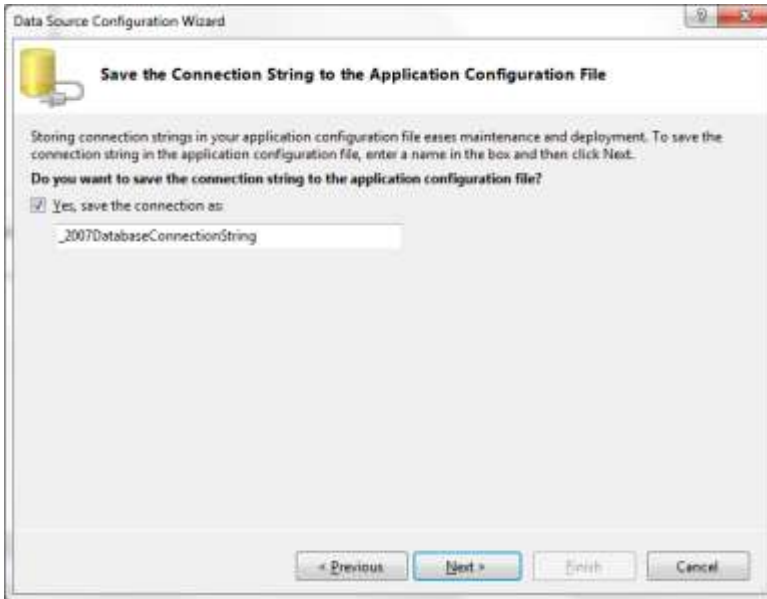


Figure 16.9. Save connection.

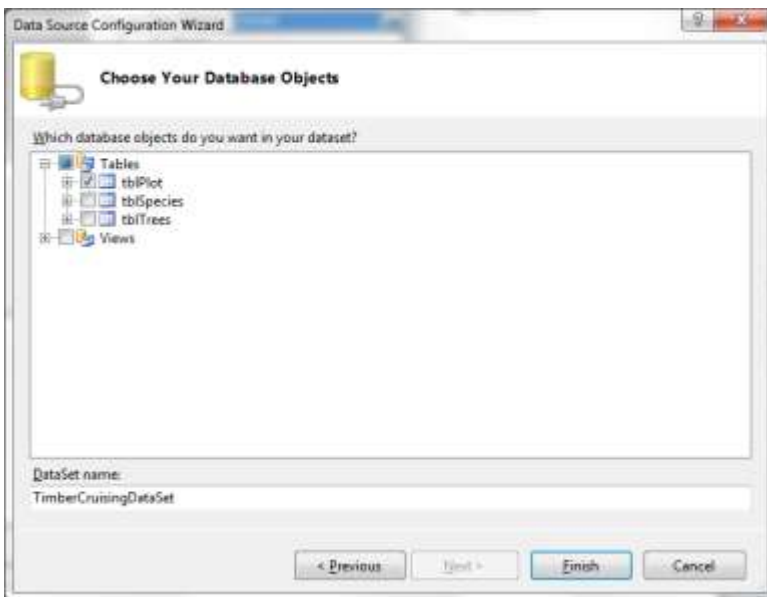


Figure 16.10. Choose source table.

Once everything is set up, your design interface should look like Figure 16.11. You also need to add a command button on the form. Now, save your project with a name of prjFirstapp.

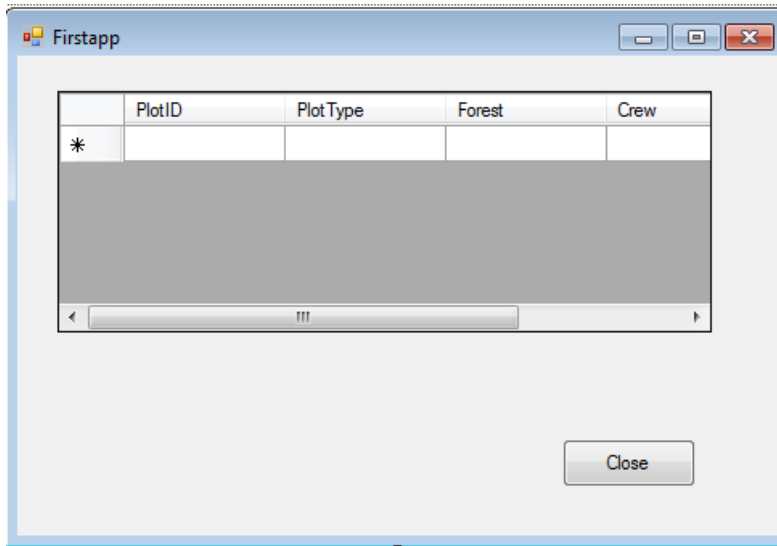


Figure 16.11. Design interface.

Setting Properties

In the Properties window, set properties for the objects according to Table 16.2. Use the default settings for all other properties.

Table 16.2. Property settings of the objects.

Object	Property	Setting
Form	Name	frmCourse
	Text	Firstapp
DataGridView1	Name	DBGridCourse
	Text	Courses
	DataSource	dataCourse
Button1	Name	cmdClose
	Text	Close

Writing Event Code

Double-click the form or control to display the Code window, and then type the code for each event procedure. Add the code to cmdClose_Click event procedure to end the application when you click Close button.

```
Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button1.Click
    End
End Sub
```

Since we have defined data source for DataGridView1, Visual Studio 2010 automatically generate code for the form load event.

```

Private Sub Form2_Load(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles MyBase.Load
'TODO: This line of code loads data into the
'_2007DatabaseDataSet.tblPlot' table. You can move, or remove it, as
needed.
    Me.TblPlotTableAdapter.Fill(Me._2007DatabaseDataSet.tblPlot)
End Sub

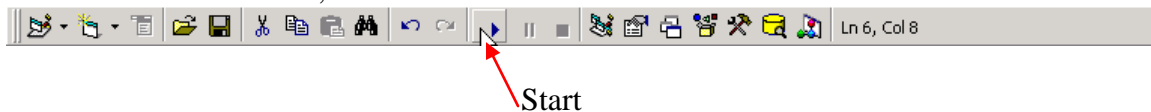
```

Again, save your project at this point.

Running the Project

There are two ways that you can use to run the application:

- a. From Run menu, click Start
- b. From toolbar, click the button



Your application will be in the running mode (Figure 16.12).

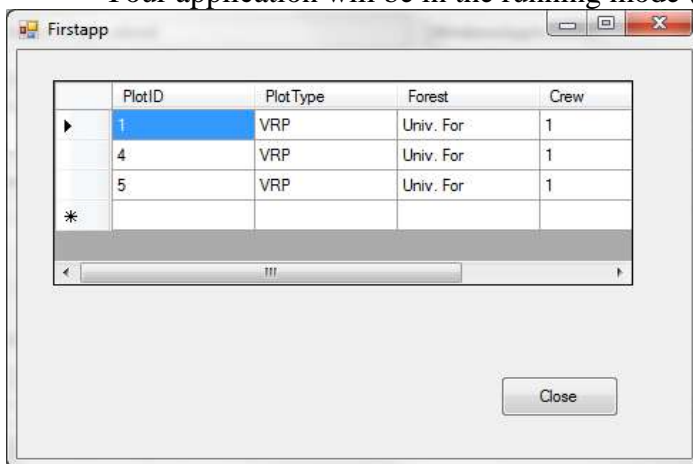


Figure 16.12. Running the application.

You may need to test your program:

- a. Add new courses
- b. Edit existed courses
- c. Delete a course
- d. Close your application

Please provide me a typed summary report together with code listing and your output form (Figure 16.12) by the beginning of the lab next week.