**CS 3630: Accessing Oracle from VB.NET**

**VB.NET Project**

MS VS 2015

Create Project

Choose Language: VB (or C#)

Choose Project Type: Windows Forms Application

Location: J:\3630 or your USB disk

Project name: UserName1\_UserName2\_A10

Save All

**VB Windows Forms**

Forms is a class

Public Class Form1

Changing form name

Solution Explorere

Change Form1 to FormClassBooking

Member fields

Properties

FormBoarderStyle

Size

StartPosition

Text: title

ControlBox

AcceptButton

CancelButton

Adding controls

dgvBooking

btnUpdate

btnSearch

btnAll

btnExit

**Adding Reference to System.Data.OracleClient**

* Double clicking "My Project"
* Selecting References
* Clicking "Add..."
* Selecting Assemblies/Framework
* Searching for System.Data.OracleClient
* Selecting it
* Clicking OK
* It's deprecated, but still working
* Clicking Compiler
* Make sure Prefer 32-bit is checked

**Using DataAdapter at Design Time**

**Add a class Oracle**

**Using DataAdapter at Run Time**

Public Class Oracle

Friend Shared UserName As String

Friend Shared PassWd As String

Friend Shared Server As String

Friend Shared OracleConnection As New System.Data.OracleClient.OracleConnection

Friend Shared bookingAdapter As New System.Data.OracleClient.OracleDataAdapter

Friend Shared bookingCommand As New System.Data.OracleClient.OracleCommand

Friend Shared bookingCommandBuilder As System.Data.OracleClient.OracleCommandBuilder

Friend Shared myTable As New System.Data.DataTable

Public Shared Sub LogInAtRunTime()

' For testing

UserName = "yangq"

PassWd = "cs3630"

Server = "EDDB"

OracleConnection.ConnectionString = "Data Source = " & Server & ";Persist Security Info=True;User ID=" & UserName & ";Password=" & PassWd & ";Unicode=True"

bookingCommand.CommandType = CommandType.Text

bookingCommand.CommandText = "Select \* from booking"

bookingCommand.Connection = OracleConnection

bookingAdapter.SelectCommand = bookingCommand

bookingCommandBuilder = New System.Data.OracleClient.OracleCommandBuilder(bookingAdapter)

bookingAdapter.Fill(myTable)

End Sub

Public Shared Sub main()

LogInAtRunTime()

Application.Run(New FormClassBooking)

End Sub

End Class

**Form Class FormClassBooking**

Public Class FormClassBooking

Private Sub Form1\_Load(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles MyBase.Load

' Binding it to myTable

DataGridView1.DataSource = Oracle.myTable

End Sub

' Update

Private Sub Button1\_Click(. . .) Handles cmdUpdate.Click

Try

Me.BindingContext(Oracle.myTable).EndCurrentEdit()

Oracle.bookingAdapter.Update(Oracle.myTable)

Catch ex As Exception

MessageBox.Show(ex.Message)

End Try

End Sub

End Class

**Startup object**

* Project Properties (My Project)
* Uncheck Enable application framework

**Controls**

ToolBox

All Windows Forms

Tab Common Controls

TextBox

Label

Command button

...

Tab Data

DatagridView

...

TextBox

CharacterCasing

PasswordChar

ComboBox

Items.Add(obj)

SelectedIndex: starting with 0

Text

Form

FormBorderStyle: Fixed3D, FixedSingle

AcceptButton

CancelButton

**Exit**

Application.Exit()

**Search and All**

SQL Query

Select \*

From Booking

Where SearchCondition

VB.NET

Dim field As String = cobField.Text

Dim op As string = cobOp.text

Dim value as String = txtValue.Text

' For string values

Oracle.bookingCommand.CommandText = \_

"Select \* " & \_

"From Booking " & \_

"Where " & field & op & " '" & value & "'"

' For Date values

' Could enter dates in different formats

' Must Try-and-Catch!

Dim theDate As Date = value

Oracle.bookingCommand.CommandText = \_

"Select \* " & \_

"From Booking " & \_

"Where " & field & op & "to\_Date('" & theDate & "', 'mm/dd/yyyy')"

' Check CommandText

MessageBox.Show(Oracle.bookingCommand.CommandText)

' For All

Oracle.bookingCommand.CommandText = "Select \* from booking"

' Catch exception

Try

Oracle.myTable.Clear()

Oracle.bookingAdapter.Fill(Oracle.myTable)

Catch ex As Exception

MessageBox.Show(ex.Message)

End Try

**Form Class FormClassLogin**

Private Sub Button1\_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button1.Click

Oracle.UserName = Textbox1.Text

Oracle.PassWd = Textbox2.Text

Oracle.Server = TextBox3.Text

Oracle.Result = ResponseType.OK

Me.Close()

End Sub

Private Sub Button2\_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button2.Click

Oracle.Result = ResponseType.Cancel

Me.Close()

End Sub

**Enum Data Type**

Public Class Oracle

Public Enum ResponseType

OK

Cancel

End Enum

Friend Shared UserName As String

Friend Shared PassWd As String

Friend Shared Server As String

Friend Shared Result As ResponseType

Friend Shared frmLogin As New Form2

Private Shared frmBooking As New Form1

Public Shared Sub main()

Dim connected As Boolean

While Not connected

frmLogin.ShowDialog()

If result = ResponseType.Cancel Then

Exit While

End If

Try

LogInAtRunTime()

connected = True

Catch ex As Exception

MessageBox.Show(ex.Message)

End Try

End While

If connected Then

Application.Run(frmBooking)

End If

End Sub