**1.LoginForm**

Public Class LoginForm

Public Sub New()

' This call is required by the designer.

InitializeComponent()

' Add any initialization after the InitializeComponent() call.

Me.FormBorderStyle = FormBorderStyle.None

End Sub

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

Me.Close()

End Sub

Private Sub Button1\_Click\_1(sender As Object, e As EventArgs) Handles btnLogin.Click

If CheckField() Then

If User.CheckLogin(txtUserName.Text.Trim(), txtPassWord.Text.Trim()) Then

MainForm.Visible = True

Me.Hide()

Else

MessageBox.Show("ឈ្មោះអ្នកប្រើប្រាស់ ឬ ពាក្យសម្ងាត់មិនត្រឹមត្រូវទេ", "ការព្រមាន", MessageBoxButtons.OK, MessageBoxIcon.Warning)

txtUserName.Focus()

End If

End If

End Sub

Function CheckField() As Boolean

If txtUserName.Text = "" Then

MessageBox.Show("សូមបញ្ចូលឈ្មោះអ្នកប្រើប្រាស់", "ការព្រមាន", MessageBoxButtons.OK, MessageBoxIcon.Warning)

txtUserName.Focus()

Return False

Else

If txtPassWord.Text = "" Then

MessageBox.Show("សូមបញ្ចូលពាក្យសម្ងាត់", "ការព្រមាន", MessageBoxButtons.OK, MessageBoxIcon.Warning)

txtPassWord.Focus()

Return False

Else

Return True

End If

End If

End Function

Private Sub btnShowHide\_Click(sender As Object, e As EventArgs) Handles btnShowHide.Click

If txtPassWord.UseSystemPasswordChar = True Then

txtPassWord.UseSystemPasswordChar = False

btnShowHide.IconChar = FontAwesome.Sharp.IconChar.EyeSlash

Else

txtPassWord.UseSystemPasswordChar = True

btnShowHide.IconChar = FontAwesome.Sharp.IconChar.Eye

End If

End Sub

Private Sub btnClose\_Click(sender As Object, e As EventArgs) Handles btnClose.Click

Me.Close()

End Sub

Private Sub txtPassWord\_KeyDown(sender As Object, e As KeyEventArgs) Handles txtPassWord.KeyDown

If e.KeyCode = Keys.Enter Then

btnLogin.PerformClick()

End If

End Sub

End Class

**2.MainForm**

Imports FontAwesome.Sharp

Public Class MainForm

Private currentBtn As IconButton

Private leftBorderBtn As Panel

Private currentChildForm As Form

Public login As Integer

'Constructor

Public Sub New**()**

' This call is required by the designer.

InitializeComponent**()**

'Add any initialization after the InitializeComponent() call.

Me.FormBorderStyle **=** FormBorderStyle.None

leftBorderBtn **=** New Panel**()**

leftBorderBtn.Size **=** New Size**(10,** btnReport.Height**)**

panelMenu.Controls.Add**(**leftBorderBtn**)**

Me.DoubleBuffered **=** True

Me.MaximizedBounds **=** Screen.FromHandle**(**Me.Handle**).**WorkingArea

Dim test As LoginForm **=** New LoginForm**()**

login **=** test.ShowDialog**()**

lbUsername.Text **=** lbUsername.Tag.ToString**()** **&** User.userName

End Sub

Private Sub Activatebutton**(**senderBtn As Object**,** customColor As Color**)**

If senderBtn IsNot Nothing Then

DisableButton**()**

currentBtn **=** CType**(**senderBtn**,** IconButton**)**

currentBtn.BackColor **=** ThemeColor.ChangeColorBrightness**(**customColor**,** **-0.7)**

currentBtn.ForeColor **=** ThemeColor.ChangeColorBrightness**(**customColor**,** **0.5)**

currentBtn.IconColor **=** ThemeColor.ChangeColorBrightness**(**customColor**,** **0.5)**

currentBtn.Font **=** New Font**(**currentBtn.Font.FontFamily**,** **12.0,** FontStyle.Bold**)**

If panelMenu.Width **>=** **200** Then

currentBtn.ImageAlign **=** ContentAlignment.MiddleRight

currentBtn.Padding **=** New Padding**(10,** **0,** **20,** **0)**

End If

'Left Border

leftBorderBtn.BackColor **=** customColor

leftBorderBtn.Location **=** New Point**(0,** currentBtn.Location.Y**)**

leftBorderBtn.Visible **=** True

leftBorderBtn.BringToFront**()**

'Current Form Icon

IconCurrentForm.IconChar **=** currentBtn.IconChar

IconCurrentForm.IconColor **=** ThemeColor.ChangeColorBrightness**(**customColor**,** **0.5)**

'Current Form Title

lbFormTitle.Text **=** LTrim**(**currentBtn.Tag.ToString**)**

Dim middle As Integer **=** **((**panelTitlebar.Size.Width **/** **2)** **-** **(**lbFormTitle.Size.Width **/** **2))**

lbFormTitle.Location **=** New Point**(**middle**,** lbFormTitle.Location.Y**)**

End If

End Sub

Private Sub DisableButton**()**

If currentBtn IsNot Nothing Then

currentBtn.BackColor **=** ThemeColor.menuBackColor

currentBtn.ForeColor **=** Color.Gainsboro

currentBtn.IconColor **=** Color.Gainsboro

currentBtn.Font **=** New Font**(**currentBtn.Font.FontFamily**,** **10.0,** FontStyle.Bold**)**

currentBtn.ImageAlign **=** ContentAlignment.MiddleLeft

currentBtn.Padding **=** New Padding**(10,** **0,** **20,** **0)**

If panelMenu.Width **<** **200** Then

currentBtn.ImageAlign **=** ContentAlignment.MiddleCenter

End If

End If

End Sub

'Open Child Form

Private Sub OpenChildForm**(**childForm As Form**)**

If currentChildForm IsNot Nothing Then

currentChildForm.Close**()**

End If

currentChildForm **=** childForm

childForm.TopLevel **=** False

childForm.FormBorderStyle **=** FormBorderStyle.None

childForm.Dock **=** DockStyle.Fill

panelChildForm.Controls.Add**(**childForm**)**

'panelChildForm.Tag = childForm

childForm.BringToFront**()**

childForm.Show**()**

End Sub

Private Sub Reset**()**

DisableButton**()**

leftBorderBtn.Visible **=** False

IconCurrentForm.IconChar **=** IconChar.Home

IconCurrentForm.IconColor **=** Color.Gainsboro

lbFormTitle.Text **=** "Home"

End Sub

Private Sub BtnDashboard\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnDashboard.Click

Activatebutton**(**sender**,** ThemeColor.DashboardColor**)**

OpenChildForm**(**New DashboardForm**())**

End Sub

Private Sub BtnStudent\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnRegister.Click

Activatebutton**(**sender**,** ThemeColor.activeColor**)**

OpenChildForm**(**New RegisterForm**())**

End Sub

Private Sub btnClose\_Click**(**sender As Object**,** e As EventArgs**)**

Application.Exit**()**

End Sub

Private Sub btnCourse\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnCourse.Click

Activatebutton**(**sender**,** ThemeColor.activeColor**)**

OpenChildForm**(**New SubjectForm**())**

End Sub

Private Sub btnTeacher\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnTeacher.Click

Activatebutton**(**sender**,** ThemeColor.activeColor**)**

OpenChildForm**(**New TeachersForm**())**

End Sub

Private Sub btnStudent\_Click\_1**(**sender As Object**,** e As EventArgs**)** Handles btnStudent.Click

Activatebutton**(**sender**,** ThemeColor.activeColor**)**

OpenChildForm**(**New StudentForm**())**

End Sub

Private Sub btnClass\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnClass.Click

Activatebutton**(**sender**,** ThemeColor.activeColor**)**

OpenChildForm**(**New CourseForm**())**

End Sub

Private Sub btnClose\_Click\_1**(**sender As Object**,** e As EventArgs**)** Handles btnClose.Click

Application.Exit**()**

End Sub

Private Sub btnMin\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnMin.Click

Me.WindowState **=** FormWindowState.Minimized

End Sub

Private Sub MainForm\_Load**(**sender As Object**,** e As EventArgs**)** Handles MyBase.Load

If login **=** **2** Then

Application.Exit**()**

End If

btnDashboard.PerformClick**()**

End Sub

Private Sub btnReport\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnReport.Click

Activatebutton**(**sender**,** ThemeColor.activeColor**)**

OpenChildForm**(**New ReportForm**())**

End Sub

Private Sub btnAbout\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnAbout.Click

Activatebutton**(**sender**,** ThemeColor.activeColor**)**

OpenChildForm**(**New AboutSystemForm**())**

End Sub

End Class

**3.DashboardForm**

Imports System.Windows.Forms.DataVisualization.Charting

Imports Guna.UI2.WinForms

Public Class DashboardForm

Dim dashboard As New Dashboard()

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

lbTotalStudnet.Text = dashboard.totalStudent.ToString()

lbCompleteStudent.Text = dashboard.completeStudent.ToString()

lbTotalClass.Text = dashboard.totalCourse

lbCompleteClass.Text = dashboard.completeCourse

lbTotalTeacher.Text = dashboard.totalTeacher

lbTotalCourse.Text = dashboard.TotalSubject

'Insert Data to chart

StudentChart.DataSource = dashboard.CourseList

StudentChart.Series(0).XValueMember = "Key"

StudentChart.Series(0).YValueMembers = "Value"

StudentChart.DataBind()

StudentChart.Legends(0).CustomItems.Clear()

CourseChart.DataSource = dashboard.SubjectList

CourseChart.Series(0).XValueMember = "Key"

CourseChart.Series(0).YValueMembers = "Value"

CourseChart.DataBind()

'Insert Data To DG CourseCoomingSoon

CoomingCouseList.DataSource = dashboard.CourseCoomingSoon()

With CoomingCouseList

.Columns(0).Width = 60

.Columns(0).HeaderText = "Nº"

.Columns(0).SortMode = DataGridViewColumnSortMode.NotSortable

.Columns(0).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleCenter

.Columns(1).Width = 150

.Columns(1).HeaderText = "មុខវិជ្ជា"

.Columns(1).SortMode = DataGridViewColumnSortMode.NotSortable

.Columns(1).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleLeft

.Columns(2).Width = 100

.Columns(2).HeaderText = "ថ្ងៃចូលរៀន"

.Columns(2).SortMode = DataGridViewColumnSortMode.NotSortable

.Columns(2).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleCenter

.Columns(3).Width = 90

.Columns(3).HeaderText = "សិស្សសរុប"

.Columns(3).SortMode = DataGridViewColumnSortMode.NotSortable

.Columns(3).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleCenter

End With 'Insert Data To DG CourseCoomingSoon

dgSubjectList.DataSource = dashboard.GetSubjectList()

With dgSubjectList

.Columns(0).Width = 80

.Columns(0).HeaderText = "លេខកូដ"

.Columns(0).SortMode = DataGridViewColumnSortMode.NotSortable

.Columns(0).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleCenter

.Columns(1).Width = 170

.Columns(1).HeaderText = "មុខវិជ្ជា"

.Columns(1).SortMode = DataGridViewColumnSortMode.NotSortable

.Columns(1).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleLeft

.Columns(2).Width = 100

.Columns(2).HeaderText = "វគ្គសិក្សាសរុប"

.Columns(2).SortMode = DataGridViewColumnSortMode.NotSortable

.Columns(2).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleCenter

.Columns(3).Width = 90

.Columns(3).HeaderText = "បានបញ្ចប់"

.Columns(3).SortMode = DataGridViewColumnSortMode.NotSortable

.Columns(3).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleCenter

.Columns(4).Width = 90

.Columns(4).HeaderText = "សិស្សសរុប"

.Columns(4).SortMode = DataGridViewColumnSortMode.NotSortable

.Columns(4).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleCenter

End With

End Sub

End Class

**4.RegisterForm**Imports System.Data.OleDb

Imports System.Data.SqlTypes

Imports System.IO

Imports CrystalDecisions.CrystalReports.Engine

Imports CrystalDecisions.Shared

Imports Guna.UI2.WinForms

Imports Microsoft.SqlServer

Public Class RegisterForm

Dim register As New Register**()**

Dim startup As Boolean **=** True

Public Sub New**()**

' This call is required by the designer.

InitializeComponent**()**

' Add any initialization after the InitializeComponent() call.

GetCbSubject**()**

GetCbAddress**()**

picStudent.ImageLocation **=** Application.StartupPath **&** "\Images\default.png"

End Sub

Sub Display**()**

DataGridView1.DataSource **=** register.GetRegisterData**()**

Regonize**()**

End Sub

Private Sub btnChooseImage\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnChooseImage.Click

OpenPic.Filter **=** "Image Files|\*.jpg;\*.jpeg;\*.png;\*.bmp"

OpenPic.Title **=** "Select a Picture"

OpenPic.InitialDirectory **=** Environment.GetFolderPath**(**Environment.SpecialFolder.MyPictures**)**

If OpenPic.ShowDialog**()** **=** DialogResult.OK Then

Dim filePath As String **=** OpenPic.FileName

picStudent.ImageLocation **=** filePath

End If

End Sub

Private Function CheckField**()** As Boolean

If txtKhName.Text.Length **<=** **0** Then

MessageBox.Show**(**"សូមបញ្ចូលឈ្មោះសិស្ស"**,** "Warning"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Warning**)**

txtKhName.Focus**()**

Return False

End If

If txtEngName.Text.Length **<=** **0** Then

MessageBox.Show**(**"សូមបញ្ចូលឈ្មោះឡាតាំងរបស់សិស្ស"**,** "Warning"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Warning**)**

txtEngName.Focus**()**

Return False

End If

If cbAddress.SelectedIndex **=** cbAddress.Items.Count **-** **1** Then

MessageBox.Show**(**"សូមជ្រើសរើសអាស័យដ្ឋាន"**,** "Warning"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Warning**)**

cbAddress.Focus**()**

Return False

End If

If txtPhone.Text.Length **=** **0** Then

Dim result **=** MessageBox.Show**(**"តើអ្នកសិស្សមិនមានលេខទូរស័ព្ទមែនទេ"**,** "Warning"**,** MessageBoxButtons.YesNo**,** MessageBoxIcon.Warning**)**

If result **=** DialogResult.No Then

txtPhone.Focus**()**

Return False

End If

ElseIf **(**txtPhone.Text.Length **<** **9** Or txtPhone.Text.Length **>** **10)** And txtPhone.Text.Length **<>** **0** Then

MessageBox.Show**(**"សូមបញ្ចូលលេខទូរស័ព្ទដែលត្រឹមត្រូវ"**,** "Warning"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Warning**)**

txtPhone.Focus**()**

Return False

End If

If txtPay.Text.Length **<=** **0** Or Not IsNumeric**(**txtPay.Text**)** Then

MessageBox.Show**(**"សូមបញ្ចូលចំនួនទឹកប្រាក់ដែលសិស្សបង់"**,** "Warning"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Warning**)**

txtPay.Focus**()**

Return False

End If

Return True

End Function

Function CheckValidation**()** As Boolean

'Check if the student has already registered for the Course

Dim studentID As Integer **=** register.student.id

Dim courseID As Integer **=** register.course.ID

Dim query As String **=** "SELECT COUNT(\*) FROM tblRegister WHERE StudentID = @StudentID AND CourseID = @CourseID"

Dim cmd As New OleDbCommand**(**query**,** register.GetConnection**())**

cmd.Parameters.AddWithValue**(**"@StudentID"**,** studentID**)**

cmd.Parameters.AddWithValue**(**"@CourseID"**,** courseID**)**

register.OpenConnection**()**

Dim count As Integer **=** Convert.ToInt32**(**cmd.ExecuteScalar**())**

register.CloseConnection**()**

If count **>** **0** Then

MessageBox.Show**(**"សូមអភ័យទោសសិស្សឈ្មោះ " **&** register.student.khName **&** " ចានចុះឈ្មោះវគ្គសិក្សានេះរូចហើយ"**,** "Warning"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Warning**)**

Return False

End If

'Check if the Student has already Other at this Schedule

Dim scheduleQuery As String **=** "SELECT Count(\*)

FROM tblCourse INNER JOIN tblRegister ON tblCourse.ID **=** tblRegister.CourseID

WHERE **(((**tblRegister.StudentID**)=**@StudentID**)** AND **((**tblCourse.StatusID**)=**@ScheduleID**));**"

cmd **=** New OleDbCommand**(**scheduleQuery**,** register.GetConnection**())**

cmd.Parameters.AddWithValue**(**"@StudentID"**,** studentID**)**

cmd.Parameters.AddWithValue**(**"@ScheduleID"**,** register.course.scheduleID**)**

register.OpenConnection**()**

count **=** Convert.ToInt32**(**cmd.ExecuteScalar**())**

If count **>** **0** Then

MessageBox.Show**(**"សូមអភ័យទោសសិស្សឈ្មោះ " **&** register.student.khName **&** " ចានចុះឈ្មោះវេនសិក្សានេះរូចហើយ"**,** "Warning"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Warning**)**

Return False

End If

Return True

End Function

'Save Image and reture the path

Function SaveImageAndReturnPath**()** As String

If Path.GetFileName**(**picStudent.ImageLocation**)** **=** "default.png" Then

Return picStudent.ImageLocation

End If

Dim source As String **=** picStudent.ImageLocation

Dim imagesDir As String **=** Path.Combine**(**Application.StartupPath**,** "Images"**)**

Dim destination As String **=** Path.Combine**(**imagesDir**,** Path.GetFileName**(**source**))**

Try

If Not Directory.Exists**(**imagesDir**)** Then

Directory.CreateDirectory**(**imagesDir**)**

End If

FileCopy**(**source**,** destination**)**

Return destination

Catch ex As Exception

MessageBox.Show**(**"Failed to copy image: " **&** ex.Message**)**

Return ""

End Try

End Function

Sub GetCbSubject**()**

cbCourse.DataSource **=** New BindingSource**(**register.GetSubjectList**(),** Nothing**)**

cbCourse.DisplayMember **=** "Key"

cbCourse.ValueMember **=** "Value"

cbCourse.SelectedIndex **=** cbCourse.Items.Count **-** **1** ' Set to the last item

End Sub

Sub GetCbAddress**()**

Dim addressData **=** register.student.GetAddressData**()**

addressData.Add**(**"ជ្រើសរើសខេត្ត"**)**

cbAddress.DataSource **=** addressData

cbAddress.SelectedIndex **=** cbAddress.Items.Count **-** **1**

End Sub

Private Sub cbCourse\_SelectedIndexChanged**(**sender As Object**,** e As EventArgs**)** Handles cbCourse.SelectedIndexChanged

If Integer.TryParse**(**cbCourse.SelectedValue.ToString**(),** Nothing**)** **=** False Then

Return

End If

If Integer.Parse**(**cbCourse.SelectedValue**)** **=** **-1** Then

cbTime.Enabled **=** False

Return

End If

Dim SubjectID As Integer **=** Convert.ToInt32**(**cbCourse.SelectedValue**)**

cbTime.DataSource **=** New BindingSource**(**register.GetTimeList**(**SubjectID**),** Nothing**)**

register.course.subject.GetSubjectByID**(**SubjectID**)**

txtPrice.Text **=** register.course.subject.basePrice.ToString**(**"F2"**)**

cbTime.DisplayMember **=** "Key"

cbTime.ValueMember **=** "Value"

cbTime.SelectedIndex **=** cbTime.Items.Count **-** **1**

cbTime.Enabled **=** True

End Sub

Private Sub btnRegister\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnRegister.Click

'Step 1 : Check Field

If Not CheckField**()** Then

Return

End If

'if don't Choose Student From List Thus Create a new student

If register.student.id **=** String.Empty Then

register.student.AddStudent**(**txtKhName.Text.Trim**(),** txtEngName.Text.Trim**(),** cbGender.Text**,** dtpDob.Text**,** cbAddress.Text.Trim**(),** txtPhone.Text.Trim**(),** SaveImageAndReturnPath**())**

End If

'Assign Course Data to Register

register.course.GetCourseByID**(**cbTime.SelectedValue.ToString**())**

'Check Student Duplicate Course or Schedule

If Not CheckValidation**()** Then

Return

End If

Dim Price **=** Convert.ToDecimal**(**txtPrice.Text**)**

Dim Dis **=** Convert.ToInt16**(**txtDis.Text**)**

register.discount **=** Price **\*** Dis **/** **100.0**

Dim amount As Decimal **=** Decimal.Parse**(**txtAmount.Text**)**

Dim unpaid As Decimal **=** amount **-** Convert.ToDecimal**(**txtPay.Text**)**

'Step 2 : Create Register

register.RegisterStudent**()**

register.payment.NewPayment**(**register.registerID**,** amount**,** unpaid**)** 'Create Payment

'Print Invoice

ExportAndShow**()**

'Step 4 Display Data

Display**()**

register **=** New Register**()**

btnClear.PerformClick**()**

End Sub

Private Sub cbTime\_SelectedIndexChanged**(**sender As Object**,** e As EventArgs**)** Handles cbTime.SelectedIndexChanged

If cbTime.Items.Count **=** **1** Then

Return

End If

If Not IsNumeric**(**cbTime.SelectedValue.ToString**())** Then

Return

End If

If cbTime.SelectedValue **=** **-1** Then

Return

End If

register.course.GetCourseByID**(**cbTime.SelectedValue.ToString**())**

txtRoom.Text **=** register.course.room.room

txtPrice.Text **=** register.course.subject.basePrice.ToString**(**"F2"**)**

txtAmount.Text **=** register.course.subject.basePrice.ToString**(**"F2"**)**

txtDis.Text **=** "0"

txtPay.Text **=** register.course.subject.basePrice.ToString**(**"F2"**)**

End Sub

Sub Regonize**()**

For Each col As DataGridViewColumn In DataGridView1.Columns

col.SortMode **=** DataGridViewColumnSortMode.NotSortable

Next

With DataGridView1

**.**ColumnHeadersHeight **=** **40**

**.**Columns**(0).**Width **=** **50** ' ID column width

**.**Columns**(0).**DefaultCellStyle.Alignment **=** DataGridViewContentAlignment.MiddleCenter

**.**Columns**(0).**DefaultCellStyle.Format **=** "000"

**.**Columns**(1).**Width **=** **250** ' Course Name column width

**.**Columns**(2).**Width **=** **200** ' Description column width

**.**Columns**(3).**Width **=** **150** ' Description column width

**.**Columns**(3).**DefaultCellStyle.Alignment **=** DataGridViewContentAlignment.MiddleCenter

**.**Columns**(4).**Width **=** **150**

**.**Columns**(5).**Width **=** **150**

**.**Columns**(6).**Width **=** **150**

**.**Columns**(0).**HeaderText **=** "លេខកូដ"

**.**Columns**(1).**HeaderText **=** "វគ្គសិក្សា"

**.**Columns**(2).**HeaderText **=** "គ្រូបង្រៀន"

**.**Columns**(3).**HeaderText **=** "ថ្ងៃចូលរៀន"

**.**Columns**(4).**HeaderText **=** "វេនសិក្សា"

**.**Columns**(5).**HeaderText **=** "បន្ទប់រៀន"

**.**Columns**(6).**HeaderText **=** "សិស្សសរុប"

**.**Columns**(4).**DefaultCellStyle.Alignment **=** DataGridViewContentAlignment.MiddleCenter

**.**Columns**(5).**DefaultCellStyle.Alignment **=** DataGridViewContentAlignment.MiddleCenter

**.**Columns**(6).**DefaultCellStyle.Alignment **=** DataGridViewContentAlignment.MiddleCenter

**.**ClearSelection**()**

End With

End Sub

Private Sub PanelListShow\_Paint**(**sender As Object**,** e As PaintEventArgs**)** Handles PanelListShow.Paint

Display**()**

End Sub

Private Sub dtpDob\_TextChanged**(**sender As Object**,** e As EventArgs**)** Handles dtpDob.TextChanged

Dim input As String **=** dtpDob.Text.Replace**(**"/"**,** ""**)** ' Remove existing slashes

If input.Length **>=** **2** AndAlso input.Length **<** **4** Then

dtpDob.Text **=** input.Insert**(2,** "/"**)** ' Add slash after day

dtpDob.SelectionStart **=** dtpDob.Text.Length ' Move cursor to end

ElseIf input.Length **>=** **4** Then

dtpDob.Text **=** input.Insert**(2,** "/"**).**Insert**(5,** "/"**)** ' Add slash after month

dtpDob.SelectionStart **=** dtpDob.Text.Length ' Move cursor to end

End If

End Sub

Private Sub dtpDob\_Leave**(**sender As Object**,** e As EventArgs**)** Handles dtpDob.Leave

Dim inputDate As DateTime

If DateTime.TryParse**(**dtpDob.Text**,** inputDate**)** Then

dtpDob.Text **=** inputDate.ToString**(**"dd/MM/yyyy"**)**

Else

If dtpDob.Text.Length **=** **0** Then

Return

End If

MessageBox.Show**(**"សូមបញ្ចូលថ្ងៃខែឆ្នាំកំណើតរបស់សិស្ស"**,** "បញ្ចូលទិន្ន័យមិនត្រឹមត្រូវ"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Error**)**

Return

End If

End Sub

Private Sub btnClear\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnClear.Click

txtKhName.Clear**()**

txtEngName.Clear**()**

txtDis.Text **=** "0"

txtPay.Clear**()**

txtPhone.Clear**()**

txtAmount.Text **=** "0"

txtPrice.Text **=** "0"

dtpDob.Clear**()**

txtRoom.Text **=** ""

cbAddress.SelectedIndex **=** cbAddress.Items.Count **-** **1**

cbCourse.SelectedIndex **=** cbCourse.Items.Count **-** **1**

cbGender.SelectedIndex **=** cbGender.Items.Count **-** **1**

cbTime.SelectedIndex **=** cbTime.Items.Count **-** **1**

cbTime.Enabled **=** False

picStudent.ImageLocation **=** Application.StartupPath **&** "\Images\default.png"

register **=** New Register**()**

End Sub

Private Sub txtDis\_TextChanged**(**sender As Object**,** e As EventArgs**)** Handles txtDis.TextChanged

If cbCourse.SelectedIndex **=** cbCourse.Items.Count **-** **1** Then

Return

End If

Dim dis As Decimal

If cbCourse.Text **=** String.Empty Then

txtDis.Text **=** **0**

Return

End If

If Not **(**Decimal.TryParse**(**txtDis.Text**,** dis**))** Or dis **<** **0** Or dis **>** **100** Then

MessageBox.Show**(**"សូមបញ្ចូលភាគរយបញ្ចុះតម្លៃអោយបានត្រឹមត្រូវ!!!"**,** "បញ្ចូលទិន្ន័យមិនត្រឹមត្រូវ"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Warning**)**

txtDis.Focus**()**

txtDis.SelectAll**()**

Return

End If

Dim amount As Decimal

Dim price As Decimal **=** Decimal.Parse**(**txtPrice.Text**)**

amount **=** price **-** price **\*** **(**dis **/** **100.0)** ' Ensures decimal division

txtAmount.Text **=** amount.ToString**(**"F2"**)** ' Formats output as 2 decimal places

amount.ToString**(**"F2"**)**

End Sub

Private Sub btnChooseStudent\_Click\_1**(**sender As Object**,** e As EventArgs**)** Handles btnChooseStudent.Click

Dim student As New StudentList**()**

If student.ShowDialog**()** **=** **2** Then

Return

End If

register.student **=** student.student

txtKhName.Text **=** register.student.khName

txtEngName.Text **=** register.student.engName

txtPhone.Text **=** register.student.phone

cbGender.SelectedIndex **=** cbGender.FindStringExact**(**register.student.gender**)**

dtpDob.Text **=** register.student.DateOfBirth.ToString**(**"dd/MM/yyyy"**)**

cbAddress.SelectedIndex **=** cbAddress.FindStringExact**(**register.student.address**)**

picStudent.ImageLocation **=** register.student.picture

End Sub

Private Sub ExportAndShow**()**

Dim rdReport As New ReportDocument

rdReport.Load**(**"Report\Invoice.rpt"**)**

Dim num As Integer **=** Convert.ToInt16**(**register.payment.paymentID**)**

rdReport.SetParameterValue**(**"PaymentID"**,** num.ToString**(**"0000"**))**

rdReport.SetParameterValue**(**"khName"**,** register.student.khName**)**

rdReport.SetParameterValue**(2,** register.student.engName**)**

rdReport.SetParameterValue**(3,** register.student.address**)**

rdReport.SetParameterValue**(4,** register.student.phone**)**

rdReport.SetParameterValue**(7,** register.registerID**)**

rdReport.SetParameterValue**(9,** register.course.subject.Subject**)**

rdReport.SetParameterValue**(8,** register.course.subject.basePrice**)**

rdReport.SetParameterValue**(5,** register.payment.amount**)**

rdReport.SetParameterValue**(6,** register.payment.unpaid**)**

rdReport.SetParameterValue**(10,** register.course.startDate**)**

rdReport.SetParameterValue**(11,** register.course.GetSchedule**())**

rdReport.SetParameterValue**(12,** register.course.room.room**)**

rdReport.PrintOptions.PaperSize **=** PaperSize.PaperA4

Dim exportPath As String **=** Application.StartupPath **&** "\Export\Invoices"

If Not Directory.Exists**(**exportPath**)** Then

Directory.CreateDirectory**(**exportPath**)**

End If

exportPath **=** **(**exportPath **+** "\"**)** **&** register.student.khName **&** "\_" **&** Date.Now**().**ToString**(**"dd-MMM-yyyy"**)** **&** ".pdf"

rdReport.ExportToDisk**(**ExportFormatType.PortableDocFormat**,** exportPath**)**

Process.Start**(**exportPath**)**

End Sub

Sub SearchData**()** Handles txtSearch.TextChanged

If startup Then

Return

End If

Dim query As String **=** "SELECT tblCourse.ID, tblSubject.Subject, tblTeacher.EngName, tblCourse.StartDate, tblSchedule.Schedule, tblRoom.Room, (Select COUNT(\*) FROM tblRegister WHERE tblCourse.ID = tblRegister.CourseID) As TotalStudent

From tblTeacher INNER Join **(**tblSchedule INNER Join **(**tblRoom INNER Join **(**tblSubject INNER Join **(**tblCourseStatus INNER Join tblCourse On tblCourseStatus.ID **=** tblCourse.StatusID**)** ON tblSubject.ID **=** tblCourse.SubjectID**)** ON tblRoom.ID **=** tblCourse.RoomID**)** ON tblSchedule.ID **=** tblCourse.ScheduleID**)** ON tblTeacher.ID **=** tblCourse.TeacherID

Where tblCourse.StatusID **<=** **2** AND tblSubject.Subject LIKE @subject

Order By tblCourse.ID**;**"

Dim subject As String **=** If**(**txtSearch.Text **=** ""**,** "%"**,** txtSearch.Text **&** "%"**)**

Dim cmd As New OleDbCommand**(**query**,** register.GetConnection**())**

cmd.Parameters.AddWithValue**(**"@subject"**,** subject**)**

DataGridView1.DataSource **=** register.ExecuteQuery**(**cmd**)**

Regonize**()**

End Sub

Private Sub RegisterForm\_Load**(**sender As Object**,** e As EventArgs**)** Handles MyBase.Load

startup **=** False

End Sub

Private Sub DataGridView1\_CellDoubleClick**(**sender As Object**,** e As DataGridViewCellEventArgs**)** Handles DataGridView1.CellDoubleClick

Dim courseID As String **=** DataGridView1.SelectedRows**(0).**Cells**(0).**Value

register.course.GetCourseByID**(**courseID**)**

cbCourse.SelectedIndex **=** cbCourse.FindStringExact**(**register.course.subject.Subject**)**

cbTime.SelectedIndex **=** cbTime.FindStringExact**(**register.course.GetSchedule**)**

End Sub

Private Sub txtDis\_Leave**(**sender As Object**,** e As EventArgs**)** Handles txtDis.Leave

If txtDis.Text.Length **=** **0** Then

txtDis.Text **=** "0"

End If

End Sub

Private Sub SearchData**(**sender As Object**,** e As EventArgs**)** Handles txtSearch.TextChanged

End Sub

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

txtSearch.Clear**()**

End Sub

End Class

**5.TeacherForm**

Imports System.Data.OleDb

Imports System.IO

Public Class TeachersForm

Dim teacher As Teacher **=** New Teacher**()**

Dim startup As Boolean **=** True

Public Sub New**()**

' This call is required by the designer.

InitializeComponent**()**

' Add any initialization after the InitializeComponent() call.

End Sub

'Display all teachers in DataGridView

Sub Display**()**

DataGridView1.DataSource **=** teacher.GetTeacherData**()**

Regonize**()**

End Sub

'Check User Input

Private Function CheckField**()** As Boolean

Dim khName As String **=** txtKhName.Text

Dim engName As String **=** txtEngName.Text.Trim**()**

Dim Gender As String **=** cbGender.Text

Dim DoB As Date **=** Convert.ToDateTime**(**dtpDob.Text.Trim**())**

Dim Address As String **=** cbAddress.Text.Trim**()**

Dim Phone As String **=** txtPhone.Text.Trim**()**

Dim Email As String **=** txtEmail.Text.Trim**()**

' Validate inputs

If String.IsNullOrEmpty**(**khName**)** Then

MessageBox.Show**(**"សូមបញ្ចូល គោត្តនាម នាម"**,** "Validation Error"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Error**)**

Return False

ElseIf String.IsNullOrEmpty**(**engName**)** Then

MessageBox.Show**(**"សូមបញ្ចូល ឈ្មោះឡាតាំង"**,** "Validation Error"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Error**)**

Return False

ElseIf String.IsNullOrEmpty**(**Gender**)** Then

MessageBox.Show**(**"សូមជ្រើសភេទ"**,** "Validation Error"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Error**)**

Return False

ElseIf String.IsNullOrEmpty**(**DoB.ToString**())** Then

MessageBox.Show**(**"សូមបញ្ចូលថ្ងៃខែឆ្មាំកំណើត."**,** "Validation Error"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Error**)**

Return False

ElseIf String.IsNullOrEmpty**(**Address**)** Then

MessageBox.Show**(**"សូមបញ្ជូលអាស័យដ្ឋាន"**,** "Validation Error"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Error**)**

Return False

ElseIf String.IsNullOrEmpty**(**Phone**)** Or IsNumeric**(**Phone**)** **=** False Then

MessageBox.Show**(**"សូមបញ្ចូលលេខទូរស័ព្ទ"**,** "Validation Error"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Error**)**

Return False

ElseIf String.IsNullOrEmpty**(**Email**)** Or Not Email.Contains**(**"@"**)** Then

MessageBox.Show**(**"សូមបញ្ចូល Email"**,** "Validation Error"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Error**)**

Return False

End If

Return True

End Function

Private Sub DataGridView1\_Click**(**sender As Object**,** e As EventArgs**)** Handles DataGridView1.CellClick

If btnEdit.Visible **=** False Then

Return

End If

Dim teacterID As String **=** DataGridView1.CurrentRow.Cells**(0).**Value.ToString**()**

teacher.GetTeacherByID**(**teacterID**)**

txtKhName.Text **=** teacher.KhName

txtEngName.Text **=** teacher.EngName

cbAddress.SelectedIndex **=** cbAddress.FindStringExact**(**teacher.Address**)**

dtpDob.Text **=** teacher.DoB.ToString**(**"dd/MM/yyyy"**)**

txtPhone.Text **=** teacher.Phone

cbGender.Text **=** teacher.Gender

txtEmail.Text **=** teacher.Email

If Not String.IsNullOrEmpty**(**teacher.Picture**)** Then

picTeacher.ImageLocation **=** teacher.Picture

Else

picTeacher.ImageLocation **=** Application.StartupPath **&** "\Images\default.png"

End If

End Sub

Private Sub btnChooseImage\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnChooseImage.Click

OpenPic.Filter **=** "Image Files|\*.jpg;\*.jpeg;\*.png;\*.bmp"

OpenPic.Title **=** "Select a Picture"

OpenPic.InitialDirectory **=** Environment.GetFolderPath**(**Environment.SpecialFolder.MyPictures**)**

If OpenPic.ShowDialog**()** **=** DialogResult.OK Then

Dim filePath As String **=** OpenPic.FileName

picTeacher.ImageLocation **=** filePath

End If

End Sub

Sub Regonize**()**

If DataGridView1.Columns.Count **=** **7** Then

With DataGridView1

**.**Columns**(0).**HeaderText **=** "លេខកូដ"

**.**Columns**(0).**Width **=** **100**

**.**Columns**(0).**DefaultCellStyle.Alignment **=** DataGridViewContentAlignment.MiddleCenter

**.**Columns**(0).**DefaultCellStyle.Format **=** "000"

**.**Columns**(1).**Width **=** **250**

**.**Columns**(1).**HeaderText **=** "គោត្តនាម នាម"

**.**Columns**(2).**Width **=** **250**

**.**Columns**(2).**HeaderText **=** "ឈ្មោះឡាតាំង"

**.**Columns**(3).**Width **=** **200**

**.**Columns**(3).**HeaderText **=** "ថ្ងៃខែឆ្នាំកំណើត"

**.**Columns**(3).**DefaultCellStyle.Alignment **=** DataGridViewContentAlignment.MiddleCenter

**.**Columns**(4).**Width **=** **200**

**.**Columns**(4).**HeaderText **=** "អាស័យដ្ឋាន"

**.**Columns**(5).**Width **=** **250**

**.**Columns**(5).**HeaderText **=** "Email"

**.**Columns**(6).**Width **=** **200**

**.**Columns**(6).**HeaderText **=** "លេខទូរស័ព្ទ"

**.**Columns**(6).**DefaultCellStyle.Alignment **=** DataGridViewContentAlignment.MiddleLeft

End With

For i As Integer **=** **0** To DataGridView1.Rows.Count **-** **1**

If i Mod **2** **=** **1** Then

DataGridView1.Rows**(**i**).**DefaultCellStyle.BackColor **=** Color.FromArgb**(254,** **254,** **254)** ' Alternate row color

Else

DataGridView1.Rows**(**i**).**DefaultCellStyle.BackColor **=** Color.FromArgb**(245,** **250,** **253)**

End If

For Each col As DataGridViewColumn In DataGridView1.Columns

col.SortMode **=** DataGridViewColumnSortMode.NotSortable

Next

Next i

End If

DataGridView1.ClearSelection**()**

End Sub

Private Sub btnAdd\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnAdd.Click

Panel2.Visible **=** True

picTeacher.ImageLocation **=** Application.StartupPath **&** "\Images\default.png"

btnAddNew.Visible **=** True

btnEdit.Visible **=** False

End Sub

Private Sub btnEdit\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnEdit.Click

If Not CheckField**()** Then

Return

End If

Dim count **=** **0**

If txtKhName.Text **<>** teacher.KhName Then

count **+=** **1**

End If

If txtEngName.Text **<>** teacher.EngName Then

count **+=** **1**

End If

If Convert.ToDateTime**(**dtpDob.Text**)** **<>** teacher.DoB Then

count **+=** **1**

End If

If cbAddress.Text **<>** teacher.Address Then

count **+=** **1**

End If

If txtPhone.Text **<>** teacher.Phone Then

count **+=** **1**

End If

If cbGender.Text **<>** teacher.Gender Then

count **+=** **1**

End If

If txtEmail.Text **<>** teacher.Email Then

count **+=** **1**

End If

If count **=** **0** Then

MessageBox.Show**(**"មិនមានការផ្លាស់ប្តូរទេ។"**,** "No Changes"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Information**)**

Return

End If

teacher.KhName **=** txtKhName.Text

teacher.EngName **=** txtEngName.Text.Trim**()**

teacher.DoB **=** Convert.ToDateTime**(**dtpDob.Text**)**

teacher.Address **=** cbAddress.Text.Trim**()**

teacher.Phone **=** txtPhone.Text.Trim**()**

teacher.Gender **=** cbGender.Text

teacher.Email **=** txtEmail.Text.Trim**()**

teacher.Picture **=** picTeacher.ImageLocation

teacher.UpdateTeacher**()**

Display**()**

End Sub

Private Sub btnAddNew\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnAddNew.Click

If Not CheckField**()** Then

Return

Else

teacher.KhName **=** txtKhName.Text

teacher.EngName **=** txtEngName.Text.Trim**()**

teacher.DoB **=** Convert.ToDateTime**(**dtpDob.Text**)**

teacher.Address **=** cbAddress.Text

teacher.Phone **=** txtPhone.Text.Trim**()**

teacher.Gender **=** cbGender.Text

teacher.Email **=** txtEmail.Text.Trim**()**

teacher.Picture **=** SaveImageAndReturnPath**()**

teacher.AddTeacher**()**

End If

Display**()**

End Sub

Function SaveImageAndReturnPath**()** As String

If Path.GetFileName**(**picTeacher.ImageLocation**)** **=** "default.png" Then

Return picTeacher.ImageLocation

End If

Dim source As String **=** picTeacher.ImageLocation

Dim imagesDir As String **=** Path.Combine**(**Application.StartupPath**,** "Images"**)**

Dim destination As String **=** Path.Combine**(**imagesDir**,** Path.GetFileName**(**source**))**

Try

If Not Directory.Exists**(**imagesDir**)** Then

Directory.CreateDirectory**(**imagesDir**)**

End If

FileCopy**(**source**,** destination**)**

Return destination

Catch ex As Exception

MessageBox.Show**(**"Failed to copy image: " **&** ex.Message**)**

Return ""

End Try

End Function

Private Sub btnCancel\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnCancel.Click

Panel2.Visible **=** False

txtKhName.Text **=** ""

txtEngName.Text **=** ""

cbAddress.SelectedIndex **=** cbAddress.Items.Count **-** **1**

txtPhone.Text **=** ""

txtEmail.Text **=** ""

cbGender.SelectedText **=** cbGender.Items.Count **-** **1**

dtpDob.Text **=** DateTime.Now**().**ToString**(**"dd/MM/yyyy"**)**

picTeacher.ImageLocation **=** Application.StartupPath **&** "\Images\default.png"

btnAddNew.Visible **=** False

End Sub

Private Sub DataGridView1\_MouseClick**(**sender As Object**,** e As MouseEventArgs**)** Handles DataGridView1.MouseClick

Dim menu As New ContextMenuStrip**()**

menu.Font **=** New Font**(**"Khmer OS System"**,** **11)**

menu.Items.Add**(**"លម្អិត"**,** Nothing**,** AddressOf ShowDetails**)**

menu.Items.Add**(**"កែប្រែ"**,** Nothing**,** AddressOf EditClass**)**

menu.Items.Add**(**"លុប"**,** Nothing**,** AddressOf DeleteCourse**)**

menu.Items**(0).**BackColor **=** Color.FromArgb**(245,** **250,** **253)**

If e.Button **=** MouseButtons.Right Then

Dim hit As DataGridView.HitTestInfo **=** DataGridView1.HitTest**(**e.X**,** e.Y**)**

If hit.RowIndex **>=** **0** Then

Dim teacherID As String **=** DataGridView1.Rows**(**hit.RowIndex**).**Cells**(0).**Value.ToString**()**

teacher.GetTeacherByID**(**teacherID**)**

menu.Show**(**DataGridView1**,** e.Location**)**

End If

End If

End Sub

Private Sub DeleteCourse**()**

If DialogResult.Yes **=** MessageBox.Show**(**"តើអ្នកពិតជាចង់លុប គ្រូបង្រៀនឈ្មោះ " **&** teacher.KhName **&** " នេះ មែនទេ?"**,** "Confirm Delete"**,** MessageBoxButtons.YesNo**,** MessageBoxIcon.Question**)** Then

teacher.DeleteTeacher**(**teacher.TeacherID**)**

Display**()**

End If

End Sub

Private Sub ShowDetails**()**

Dim detailForm As New TeacherDetail**(**teacher**)**

detailForm.ShowDialog**()**

detailForm.Dispose**()**

Display**()**

End Sub

Private Sub EditClass**()**

Panel2.Visible **=** True

txtKhName.Text **=** teacher.KhName

txtEngName.Text **=** teacher.EngName

cbAddress.SelectedIndex **=** cbAddress.FindStringExact**(**teacher.Address**)**

txtPhone.Text **=** teacher.Phone

dtpDob.Text **=** teacher.DoB.ToString**(**"dd/MM/yyyy"**)**

cbGender.SelectedIndex **=** cbGender.FindStringExact**(**teacher.Gender**)**

txtEmail.Text **=** teacher.Email

picTeacher.ImageLocation **=** teacher.Picture

btnEdit.Visible **=** True

btnAddNew.Visible **=** False

End Sub

Sub SearchData**()** Handles cbSearchAddress.SelectedIndexChanged**,** txtSearch.TextChanged

If startup Then

Return

End If

Dim query As String **=** "SELECT tblTeacher.ID, tblTeacher.KhName AS KhmerName, tblTeacher.EngName AS EnglishName, tblTeacher.DOB AS DateOfBirth,

tblTeacher.Address AS PlaceOfBirth**,** tblTeacher.Email**,** tblTeacher.Phone FROM tblTeacher

WHERE Address LIKE @address AND **(**ID Like @id OR **(**KhName Like @name OR engName Like @name**));**"

Dim cmd As OleDbCommand **=** New OleDbCommand**(**query**,** teacher.GetConnection**())**

Dim name As String **=** If**(**txtSearch.Text.Trim**()** **=** ""**,** "%"**,** txtSearch.Text.Trim**()** **&** "%"**)**

Dim id As String **=** If**(**IsNumeric**(**txtSearch.Text.Trim**()),** txtSearch.Text.Trim**()** **&** "%"**,** "0"**)**

Dim address As String **=** If**(**cbSearchAddress.SelectedIndex **=** cbSearchAddress.Items.Count **-** **1,** "%"**,** cbSearchAddress.SelectedItem.ToString**())**

address **=** "%" **&** address **&** "%"

cmd.Parameters.AddWithValue**(**"@address"**,** address**)**

cmd.Parameters.AddWithValue**(**"@id"**,** id**)**

cmd.Parameters.AddWithValue**(**"@name"**,** name**)**

Dim dt As DataTable **=** teacher.ExecuteQuery**(**cmd**)**

DataGridView1.DataSource **=** dt

Regonize**()**

End Sub

Sub GetCbAddress**()**

Dim SearchAddressData As ArrayList **=** teacher.GetAddressData**()**

SearchAddressData.Add**(**"គ្រប់ខេត្តទាំងអស់"**)**

cbSearchAddress.DataSource **=** SearchAddressData

cbSearchAddress.SelectedIndex **=** cbSearchAddress.Items.Count **-** **1**

Dim addressData **=** teacher.GetAddressData**()**

addressData.Add**(**"ជ្រើសរើសខេត្ត"**)**

cbAddress.DataSource **=** addressData

cbAddress.SelectedIndex **=** cbAddress.Items.Count **-** **1**

End Sub

Private Sub btnClear\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnClear.Click

cbAddress.SelectedIndex **=** cbAddress.Items.Count **-** **1**

txtSearch.Text **=** ""

End Sub

Private Sub btnAdd\_Click\_1**(**sender As Object**,** e As EventArgs**)** Handles btnAdd.Click

Panel2.Visible **=** True

End Sub

Private Sub Panel9\_Paint\_1**(**sender As Object**,** e As PaintEventArgs**)** Handles Panel9.Paint

startup **=** False

End Sub

Private Sub Guna2Panel1\_Paint**(**sender As Object**,** e As PaintEventArgs**)** Handles Guna2Panel1.Paint

Display**()**

GetCbAddress**()**

End Sub

End Class

**6.StudentForm**

Imports System.Data.OleDb

Imports System.Windows.Forms.VisualStyles.VisualStyleElement

Public Class StudentForm

Dim student As Student **=** New Student**()**

Dim startup As Boolean **=** True ' To prevent initial search on form load

Public Sub New**()**

'Constructor for StudentForm class

InitializeComponent**()**

picStudent.ImageLocation **=** Application.StartupPath **&** "\Images\default.png"

GetCbAddress**()**

End Sub

Private Sub Display**()**

DataGridView1.DataSource **=** student.GetStudentData**()**

Regonize**()**

End Sub

'Check User Input

Private Function CheckField**()** As Boolean

Dim khName As String **=** txtKhName.Text.Trim**()**

Dim engName As String **=** txtEngName.Text.Trim**()**

Dim address As String **=** cbAddress.Text.Trim**()**

Dim phone As String **=** txtPhone.Text.Trim**()**

If String.IsNullOrEmpty**(**khName**)** Then

MessageBox.Show**(**"សូ​មបញ្ជូលឈ្មោះសិស្ស"**,** "Input Error"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Error**)**

Return False

End If

If String.IsNullOrEmpty**(**engName**)** Then

MessageBox.Show**(**"សូ​មបញ្ជូលឈ្មោះឡាតាំង"**,** "Input Error"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Error**)**

Return False

End If

If String.IsNullOrEmpty**(**address**)** Then

MessageBox.Show**(**"សូមបញ្ជូលអាសស័យដ្ឋាន"**,** "Input Error"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Error**)**

Return False

End If

If String.IsNullOrEmpty**(**phone**)** Then

MessageBox.Show**(**"សូមបញ្ជូលលេខទូរស័ព្ទ"**,** "Input Error"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Error**)**

Return False

End If

Dim result As Boolean **=** True

If Not IsNumeric**(**phone**)** Or phone.Length **<=** **8** Or phone.Length **>=** **11** Then

MessageBox.Show**(**"លេខទូរស័ព្ទត្រូវតែជាលេខ"**,** "Input Error"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Error**)**

result **=** False

End If

Dim count As Integer **=** **0**

If student.khName **<>** khName Then

count **+=** **1**

End If

If student.engName **<>** engName Then

count **+=** **1**

End If

If student.address **<>** address Then

count **+=** **1**

End If

If student.phone **<>** phone Then

count **+=** **1**

End If

If student.gender **<>** cbGender.Text Then

count **+=** **1**

End If

If student.DateOfBirth **<>** Convert.ToDateTime**(**dtpDob.Text**)** Then

count **+=** **1**

End If

If count **=** **0** Then

MessageBox.Show**(**"មិនមានការផ្លាស់ប្តូរទេ"**,** "កែប្រែព័ត៌មានសិស្ស"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Information**)**

Return False

End If

Return result

End Function

Sub Regonize**()**

If DataGridView1.Columns.Count **=** **7** Then

With DataGridView1

**.**Columns**(0).**Width **=** **75**

**.**Columns**(0).**DefaultCellStyle.Alignment **=** DataGridViewContentAlignment.MiddleCenter

**.**Columns**(0).**DefaultCellStyle.Format **=** "000"

**.**Columns**(1).**Width **=** **250**

**.**Columns**(1).**HeaderText **=** "គោត្តនាម នាម"

**.**Columns**(2).**Width **=** **200**

**.**Columns**(2).**HeaderText **=** "ឈ្មោះឡាតាំង"

**.**Columns**(3).**Width **=** **75**

**.**Columns**(3).**HeaderText **=** "ភេទ"

**.**Columns**(3).**DefaultCellStyle.Alignment **=** DataGridViewContentAlignment.MiddleCenter

**.**Columns**(4).**Width **=** **200**

**.**Columns**(4).**HeaderText **=** "ថ្ងៃខែឆ្នាំកំណើត"

**.**Columns**(4).**DefaultCellStyle.Alignment **=** DataGridViewContentAlignment.MiddleCenter

**.**Columns**(5).**Width **=** **150**

**.**Columns**(5).**HeaderText **=** "អាស័យដ្ឋាន"

**.**Columns**(5).**DefaultCellStyle.Alignment **=** DataGridViewContentAlignment.MiddleCenter

**.**Columns**(6).**Width **=** **200**

**.**Columns**(6).**HeaderText **=** "លេខទូរស័ព្ទ"

**.**Columns**(6).**DefaultCellStyle.Alignment **=** DataGridViewContentAlignment.MiddleCenter

End With

For i As Integer **=** **0** To DataGridView1.Rows.Count **-** **1**

If i Mod **2** **=** **1** Then

DataGridView1.Rows**(**i**).**DefaultCellStyle.BackColor **=** Color.FromArgb**(254,** **254,** **254)** ' Alternate row color

Else

DataGridView1.Rows**(**i**).**DefaultCellStyle.BackColor **=** Color.FromArgb**(245,** **250,** **253)**

End If

Next i

For Each col As DataGridViewColumn In DataGridView1.Columns

col.SortMode **=** DataGridViewColumnSortMode.NotSortable

Next

End If

DataGridView1.ClearSelection**()**

End Sub

Private Sub DataGridView1\_MouseClick**(**sender As Object**,** e As MouseEventArgs**)** Handles DataGridView1.MouseClick

Dim menu As New ContextMenuStrip**()**

menu.Font **=** New Font**(**"Khmer OS System"**,** **11)**

menu.Items.Add**(**"លម្អិត"**,** Nothing**,** AddressOf ShowDetails**)**

menu.Items.Add**(**"កែប្រែ"**,** Nothing**,** AddressOf EditStudent**)**

menu.Items.Add**(**"លុប"**,** Nothing**,** AddressOf DeleteStudent**)**

menu.Items**(0).**BackColor **=** Color.FromArgb**(245,** **250,** **253)**

If e.Button **=** MouseButtons.Right Then

Dim hit As DataGridView.HitTestInfo **=** DataGridView1.HitTest**(**e.X**,** e.Y**)**

If hit.RowIndex **>=** **0** Then

Dim studentID As String **=** DataGridView1.Rows**(**hit.RowIndex**).**Cells**(0).**Value.ToString**()**

student.GetStudentByID**(**Convert.ToInt32**(**studentID**))**

menu.Show**(**DataGridView1**,** e.Location**)**

End If

End If

End Sub

Private Sub DeleteStudent**()**

If DialogResult.Yes **=** MessageBox.Show**(**"តើអ្នកពិតជាចង់លុប សិស្សឈ្មោះ" **&** student.khName **&** " នេះ មែនទេ?"**,** "Confirm Delete"**,** MessageBoxButtons.YesNo**,** MessageBoxIcon.Question**)** Then

student.DeleteStudent**()**

Display**()**

End If

End Sub

Private Sub ShowDetails**()**

Dim detailForm As New StudentDetail**(**student**)**

detailForm.ShowDialog**()**

detailForm.Dispose**()**

Display**()**

End Sub

Private Sub EditStudent**()**

Panel2.Visible **=** True

txtKhName.Text **=** student.khName

txtEngName.Text **=** student.engName

cbAddress.SelectedIndex **=** cbAddress.FindStringExact**(**student.address**)**

txtPhone.Text **=** student.phone

dtpDob.Text **=** student.DateOfBirth.ToString**(**"dd/MM/yyyy"**)**

cbGender.SelectedIndex **=** cbGender.FindStringExact**(**student.gender**)**

picStudent.ImageLocation **=** student.picture

End Sub

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

Panel2.Visible **=** False

txtKhName.Text **=** ""

txtEngName.Text **=** ""

cbAddress.Text **=** ""

txtPhone.Text **=** ""

dtpDob.Text **=** DateTime.Now**().**ToString**(**"dd/MM/yyyy"**)**

End Sub

Private Sub btnEdit\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnEdit.Click

If CheckField**()** Then

student.UpdateStudent**(**student.id**,** txtKhName.Text.Trim**(),** txtEngName.Text.Trim**(),** cbGender.SelectedItem.ToString**(),** dtpDob.Text**,** cbAddress.Text.Trim**(),** txtPhone.Text.Trim**(),** picStudent.ImageLocation**)**

MessageBox.Show**(**"ព័ត៌មានសិស្សបានកែប្រែដោយជោគជ័យ"**,** "Success"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Information**)**

Display**()**

End If

End Sub

Private Sub dtpDob\_TextChanged**(**sender As Object**,** e As EventArgs**)** Handles dtpDob.TextChanged

Dim input As String **=** dtpDob.Text.Replace**(**"/"**,** ""**)** ' Remove existing slashes

If input.Length **>=** **2** AndAlso input.Length **<** **4** Then

dtpDob.Text **=** input.Insert**(2,** "/"**)** ' Add slash after day

dtpDob.SelectionStart **=** dtpDob.Text.Length ' Move cursor to end

ElseIf input.Length **>=** **4** Then

dtpDob.Text **=** input.Insert**(2,** "/"**).**Insert**(5,** "/"**)** ' Add slash after month

dtpDob.SelectionStart **=** dtpDob.Text.Length ' Move cursor to end

End If

End Sub

Private Sub dtpDob\_Leave**(**sender As Object**,** e As EventArgs**)** Handles dtpDob.Leave

Dim inputDate As DateTime

If DateTime.TryParse**(**dtpDob.Text**,** inputDate**)** Then

dtpDob.Text **=** inputDate.ToString**(**"dd/MM/yyyy"**)**

Else

If dtpDob.Text.Length **=** **0** Then

Return

End If

MessageBox.Show**(**"សូមបញ្ចូលថ្ងៃខែឆ្នាំកំណើតរបស់សិស្ស"**,** "បញ្ចូលទិន្ន័យមិនត្រឹមត្រូវ"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Error**)**

Return

End If

End Sub

Sub GetCbAddress**()**

Dim SearchAddressData As ArrayList **=** student.GetAddressData**()**

SearchAddressData.Add**(**"គ្រប់ខេត្តទាំងអស់"**)**

cbSearchAddress.DataSource **=** SearchAddressData

cbSearchAddress.SelectedIndex **=** cbSearchAddress.Items.Count **-** **1**

Dim addressData **=** student.GetAddressData**()**

addressData.Add**(**"ជ្រើសរើសខេត្ត"**)**

cbAddress.DataSource **=** addressData

cbAddress.SelectedIndex **=** cbAddress.Items.Count **-** **1**

End Sub

Private Sub Panel1\_Paint**(**sender As Object**,** e As PaintEventArgs**)** Handles Panel1.Paint

'GetCbAddress()

'startup = False

End Sub

Sub SearchData**()** Handles cbSearchAddress.SelectedIndexChanged**,** txtSearch.TextChanged

If startup Then

Return

End If

Dim query As String **=** "SELECT tblStudent.ID, tblStudent.KhName, tblStudent.EngName, tblStudent.Gender,

tblStudent.DateOfBirth**,** tblStudent.Address**,** tblStudent.Phone FROM tblStudent

WHERE Address LIKE @address AND **(**ID Like @id AND **(**KhName Like @name OR EngName Like @name**));**"

Dim cmd As OleDbCommand **=** New OleDbCommand**(**query**,** student.GetConnection**())**

Dim id As String **=** If**(**IsNumeric**(**txtSearch.Text.Trim**()),** txtSearch.Text.Trim**()** **&** "%"**,** "%"**)**

Dim name As String **=** If**(**txtSearch.Text.Trim**()** **=** ""**,** "%"**,** If**(**IsNumeric**(**txtSearch.Text.Trim**()),** "%"**,** "%" **&** txtSearch.Text.Trim**()** **&** "%"**))**

Dim address As String **=** If**(**cbSearchAddress.SelectedIndex **=** cbSearchAddress.Items.Count **-** **1,** "%"**,** cbSearchAddress.SelectedItem.ToString**())**

address **=** "%" **&** address **&** "%"

cmd.Parameters.AddWithValue**(**"@address"**,** address**)**

cmd.Parameters.AddWithValue**(**"@id"**,** id**)**

cmd.Parameters.AddWithValue**(**"@name"**,** name**)**

Dim dt As DataTable **=** student.ExecuteQuery**(**cmd**)**

DataGridView1.DataSource **=** dt

Regonize**()**

End Sub

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

txtSearch.Text **=** ""

cbSearchAddress.SelectedIndex **=** cbSearchAddress.Items.Count **-** **1**

End Sub

Private Sub btnChooseImage\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnChooseImage.Click

OpenPic.Filter **=** "Image Files|\*.jpg;\*.jpeg;\*.png;\*.bmp"

OpenPic.Title **=** "Select a Picture"

OpenPic.InitialDirectory **=** Environment.GetFolderPath**(**Environment.SpecialFolder.MyPictures**)**

If OpenPic.ShowDialog**()** **=** DialogResult.OK Then

Dim filePath As String **=** OpenPic.FileName

picStudent.ImageLocation **=** filePath

End If

End Sub

Private Sub Guna2Panel3\_Paint**(**sender As Object**,** e As PaintEventArgs**)** Handles Guna2Panel3.Paint

Display**()**

End Sub

Private Sub StudentForm\_Load**(**sender As Object**,** e As EventArgs**)** Handles MyBase.Load

GetCbAddress**()**

startup **=** False

End Sub

End Class

**7.CourseForm**

Imports System.Data.OleDb

Imports System.Data.SqlTypes

Imports System.Windows

Public Class CourseForm

Dim course As Course **=** New Course**()**

Dim startup As Boolean **=** True

Public Sub New**()**

'This call is required by the designer.

InitializeComponent**()**

'Add any initialization after the InitializeComponent() call.

GetcbStatus**()**

GetcbSearch**()**

End Sub

'Check Validation

Function CheckValidation**()** As Boolean

If Not CheckField**()** Then

Return False

End If

Dim result As Boolean **=** True

Dim query As String **=** "SELECT COUNT(\*) FROM tblCourse WHERE ScheduleID = @ScheduleID AND RoomID = @RoomID AND StatusID <= 2;" 'Check if the room and schedule are already in use

Dim cmd As New OleDbCommand**(**query**,** course.GetConnection**())**

cmd.Parameters.AddWithValue**(**"@ScheduleID"**,** cbSchedule.SelectedValue**)**

cmd.Parameters.AddWithValue**(**"@RoomID"**,** cbRoom.SelectedValue**)**

Dim count As Integer **=** Convert.ToInt32**(**course.ExecuteScalar**(**cmd**))**

If count **>** **0** Then

MessageBox.Show**(**"បន្ទប់ និង វេនសិក្សា ត្រូវបានប្រើប្រាស់រួចហើយ។ សូមជ្រើសរើសវេនសិក្សា ឬ បន្ទប់ផ្សេងទៀត។"**,** "ទិន្ន័យមិនត្រឹមត្រូវ"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Error**)**

result **=** False

End If

query **=** "SELECT COUNT(\*) FROM tblCourse WHERE ID = @ID;"

cmd **=** New OleDbCommand**(**query**,** course.GetConnection**())**

cmd.Parameters.AddWithValue**(**"@ID"**,** txtCourseID.Text.Trim**())**

count **=** Convert.ToInt32**(**course.ExecuteScalar**(**cmd**))**

If count **>** **0** Then

MessageBox.Show**(**"លេខកូដវគ្គសិក្សា នេះមានរួចហើយ."**,** "ទិន្ន័យមិនត្រឹមត្រូវ"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Error**)**

result **=** False

End If

query **=** "SELECT COUNT(\*) FROM tblCourse WHERE ID = @subjectID AND StatusID <= 2 AND ScheduleID = @ScheduleID ;" 'Check if the subject and teacher are already assigned

cmd **=** New OleDbCommand**(**query**,** course.GetConnection**())**

cmd.Parameters.AddWithValue**(**"@subjectID"**,** cbSubject.SelectedValue**)**

cmd.Parameters.AddWithValue**(**"@ScheduleID"**,** cbSchedule.SelectedValue**)**

count **=** Convert.ToInt32**(**course.ExecuteScalar**(**cmd**))**

If count **>** **0** Then

MessageBox.Show**(**"វគ្គសិក្សា ត្រូវបានប្រើប្រាស់រួចហើយនៅក្នុងវេនសិក្សានេះ ។ សូមជ្រើសរើស វគ្គសិក្សាថ្មី។"**,** "ទិន្ន័យមិនត្រឹមត្រូវ"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Error**)**

result **=** False

End If

query **=** "SELECT COUNT(\*) FROM tblCourse WHERE TeacherID = @TeacherID AND StatusID <= 2 AND ScheduleID = @ScheduleID ;" 'Check if the subject and teacher are already assigned

cmd **=** New OleDbCommand**(**query**,** course.GetConnection**())**

cmd.Parameters.AddWithValue**(**"@TeacherID"**,** cbTeacher.SelectedValue**)**

cmd.Parameters.AddWithValue**(**"@ScheduleID"**,** cbSchedule.SelectedValue**)**

count **=** Convert.ToInt32**(**course.ExecuteScalar**(**cmd**))**

If count **>** **0** Then

MessageBox.Show**(**"គ្រូបង្រៀននេះ ត្រូវបានប្រើប្រាស់រួចហើយនៅក្នុងវេនសិក្សានេះ ។ សូមជ្រើសរើស គ្រូបង្រៀនថ្មី ។"**,** "ទិន្ន័យមិនត្រឹមត្រូវ"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Error**)**

result **=** False

End If

If dtpStartDate.Value.Date **<=** DateTime.Now**().**Date Then

MessageBox.Show**(**"សូមបញ្ចូលថ្ងៃចូលរៀនអោយបានត្រឹមត្រូវ !!!!"**,** "ទិន្ន័យមិនត្រឹមត្រូវ"**,** MessageBoxButton.OK**,** MessageBoxIcon.Warning**)**

End If

If dtpEndDate.Value.Date **<=** dtpStartDate.Value.Date.AddDays**(10)** Then

MessageBox.Show**(**"សូមបញ្ចូលថ្ងៃចូលរៀនអោយបានត្រឹមត្រូវ !!!!"**,** "ទិន្ន័យមិនត្រឹមត្រូវ"**,** MessageBoxButton.OK**,** MessageBoxIcon.Warning**)**

End If

Return result

End Function

'Check User Input

Private Function CheckField**()** As Boolean

Dim ClassName As String **=** txtCourseID.Text.Trim**()**

Dim TimeID As Integer **=** Convert.ToInt32**(**cbSchedule.SelectedValue**)**

Dim RoomID As Integer **=** Convert.ToInt32**(**cbRoom.SelectedValue**)**

Dim TeacherID As Integer **=** cbTeacher.SelectedValue

Dim CourseID As Integer **=** cbSubject.SelectedValue

course.startDate **=** dtpStartDate.Value

If String.IsNullOrEmpty**(**ClassName**)** Then

MessageBox.Show**(**"សូមបញ្ចូលលេខកូដវគ្គសិក្សា"**,** "បញ្ចូលទិន្ន័យមិនត្រឹមត្រូវ"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Error**)**

Return False

End If

If TimeID **<=** **0** Or RoomID **<=** **0** Or TeacherID **<=** **0** Or CourseID **<=** **0** Then

MessageBox.Show**(**"សូមជ្រើសរើវេនសិក្សា បន្ទប់ គ្រូបង្រៀន និង វគ្គសិក្សា"**,** "បញ្ចូលទិន្ន័យមិនត្រឹមត្រូវ"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Error**)**

Return False

End If

Return True

End Function

'GetData From Class ManageClass

Private Sub Display**()**

InsertData**(**course.GetCourseData**())**

End Sub

Sub GetCbTime**()**

Dim timeList **=** course.GetTimeList**()**

timeList.Add**(**"ជ្រើសរើសវេនសិក្សា"**,** **-1)**

cbSchedule.DataSource **=** New BindingSource**(**timeList**,** Nothing**)**

cbSchedule.DisplayMember **=** "Key"

cbSchedule.ValueMember **=** "Value"

cbSchedule.SelectedIndex **=** cbSchedule.Items.Count **-** **1**

End Sub

Sub GetCbRoom**()**

Dim RoomList **=** course.GetRoomList**()**

RoomList.Add**(**"ជ្រើសរើសបន្ទប់រៀន"**,** **-1)**

cbRoom.DataSource **=** New BindingSource**(**RoomList**,** Nothing**)**

cbRoom.DisplayMember **=** "Key"

cbRoom.ValueMember **=** "Value"

cbRoom.SelectedIndex **=** cbRoom.Items.Count **-** **1**

End Sub

Sub GetCbTeacher**()**

Dim teacherList **=** course.GetTeacherList**()**

teacherList.Add**(**"ជ្រើសរើសគ្រូបង្រៀន"**,** "-1"**)**

cbTeacher.DataSource **=** New BindingSource**(**teacherList**,** Nothing**)**

cbTeacher.DisplayMember **=** "Key"

cbTeacher.ValueMember **=** "Value"

cbTeacher.SelectedIndex **=** cbTeacher.Items.Count **-** **1**

End Sub

Sub GetcbCourse**()**

Dim courseList **=** course.GetCourseList**()**

courseList.Add**(**"ជ្រើសរើសវគ្គសិក្សា"**,** **-1)**

cbSubject.DataSource **=** New BindingSource**(**courseList**,** Nothing**)**

cbSubject.DisplayMember **=** "Key"

cbSubject.ValueMember **=** "Value"

cbSubject.SelectedIndex **=** cbSubject.Items.Count **-** **1** ' Select the last item (which is "All")

End Sub

Sub GetcbSearch**()**

Dim teacherList **=** course.GetTeacherList**()**

teacherList.Add**(**"គ្រប់គ្រូទាំងអស់"**,** "%"**)**

cbSearchTeacher.DataSource **=** New BindingSource**(**teacherList**,** Nothing**)**

cbSearchTeacher.DisplayMember **=** "Key"

cbSearchTeacher.ValueMember **=** "Value"

cbSearchTeacher.SelectedIndex **=** cbSearchTeacher.Items.Count **-** **1**

End Sub

Sub GetcbStatus**()**

Dim classStatusList **=** course.GetClassStatusList**()**

classStatusList.Add**(**"គ្រប់ស្ថានភាព"**,** **0)**

cbSearchStatus.DataSource **=** New BindingSource**(**classStatusList**,** Nothing**)**

cbSearchStatus.DisplayMember **=** "Key"

cbSearchStatus.ValueMember **=** "Value"

cbSearchStatus.SelectedIndex **=** cbSearchStatus.Items.Count **-** **1** ' Select the last item (which is "All")

End Sub

Private Sub btnNewClass\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnNewClass.Click

If Not CheckValidation**()** Then

Return

End If

course.ID **=** txtCourseID.Text.Trim**()**

course.scheduleID **=** Convert.ToInt32**(**cbSchedule.SelectedValue.ToString**())**

course.room.GetRoomByID**(**cbRoom.SelectedValue**)**

course.teacher.TeacherID **=** cbTeacher.SelectedValue.ToString**()**

course.subject.ID **=** cbSubject.SelectedValue.ToString**()**

course.startDate **=** dtpStartDate.Value

course.endDate **=** dtpEndDate.Value

course.AddCourse**()**

Display**()**

End Sub

Sub SearchCourseData**()** Handles txtSearch.TextChanged**,** cbSearchTeacher.SelectedIndexChanged**,** cbSearchStatus.SelectedIndexChanged

If startup Then

Return

Else

Dim textSearch **=** If**(**txtSearch.Text.Trim**()** **=** ""**,** "%"**,** txtSearch.Text.Trim**())**

Dim id As String **=** If**(**IsNumeric**(**textSearch**),** textSearch **&** "%"**,** "%"**)**

Dim subject As String **=** If**(**IsNumeric**(**textSearch**),** "%"**,** textSearch **&** "%"**)**

Dim StatusID As String **=** If**(**cbSearchStatus.SelectedValue **=** **0,** "%"**,** cbSearchStatus.SelectedValue.ToString**())**

Dim teacherSearch **=** cbSearchTeacher.SelectedValue.ToString**()**

Dim query As String **=** " SELECT tblCourse.ID, tblSubject.Subject, tblTeacher.KhName, tblRoom.Room,

tblSchedule.Schedule**,** tblCourse.CurrentEnrollment**,** tblCourseStatus.Status

FROM tblSchedule INNER JOIN **(**tblRoom INNER JOIN **(**tblTeacher

INNER JOIN **(**tblSubject INNER JOIN **(**tblCourseStatus INNER JOIN tblCourse

ON **(**tblCourseStatus.ID **=** tblCourse.StatusID**)** AND **(**tblCourseStatus.ID **=** tblCourse.StatusID**))**

ON tblSubject.ID **=** tblCourse.SubjectID**)** ON tblTeacher.ID **=** tblCourse.TeacherID**)**

ON tblRoom.ID **=** tblCourse.RoomID**)** ON tblSchedule.ID **=** tblCourse.ScheduleID

WHERE tblCourse.ID LIKE @id AND tblSubject.Subject LIKE @subject AND tblTeacher.ID LIKE @teacher AND tblCourse.StatusID LIKE @StatusID**;**"

Dim cmd As New OleDbCommand**(**query**,** course.GetConnection**())**

cmd.Parameters.AddWithValue**(**"@id"**,** id**)**

cmd.Parameters.AddWithValue**(**"@subject"**,** subject**)**

cmd.Parameters.AddWithValue**(**"@Teacher"**,** teacherSearch**)**

cmd.Parameters.AddWithValue**(**"@StatusID"**,** StatusID**)**

InsertData**(**course.ExecuteQuery**(**cmd**))**

End If

End Sub

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

cbSearchTeacher.SelectedIndex **=** cbSearchTeacher.Items.Count **-** **1**

cbSearchStatus.SelectedIndex **=** cbSearchStatus.Items.Count **-** **1**

txtSearch.Text **=** ""

Display**()**

End Sub

'Insert DATA To DataGridView

Private Sub InsertData**(**data As DataTable**)**

DataGridView1.DataSource **=** data

Regonize**()**

End Sub

' Regonize DataGridView2

Sub Regonize**()**

If DataGridView1.Columns.Count **=** **7** Then

With DataGridView1

**.**Columns**(0).**HeaderText **=** "លេខកូដ"

**.**Columns**(0).**Width **=** **100**

**.**Columns**(0).**DefaultCellStyle.Alignment **=** DataGridViewContentAlignment.MiddleCenter

**.**Columns**(0).**DefaultCellStyle.Format **=** "000"

**.**Columns**(1).**Width **=** **250**

**.**Columns**(1).**HeaderText **=** "វគ្គសិក្សា"

**.**Columns**(2).**Width **=** **200**

**.**Columns**(2).**HeaderText **=** "គ្រូបង្រៀន"

**.**Columns**(3).**Width **=** **150**

**.**Columns**(3).**HeaderText **=** "បន្ទប់"

**.**Columns**(3).**DefaultCellStyle.Alignment **=** DataGridViewContentAlignment.MiddleCenter

**.**Columns**(4).**Width **=** **200**

**.**Columns**(4).**HeaderText **=** "វេនសិក្សា"

**.**Columns**(4).**DefaultCellStyle.Alignment **=** DataGridViewContentAlignment.MiddleCenter

**.**Columns**(5).**Width **=** **150**

**.**Columns**(5).**HeaderText **=** "សិស្សសរុប"

**.**Columns**(5).**DefaultCellStyle.Alignment **=** DataGridViewContentAlignment.MiddleCenter

**.**Columns**(6).**Width **=** **200**

**.**Columns**(6).**HeaderText **=** "ស្ថានភាព"

**.**Columns**(6).**DefaultCellStyle.Alignment **=** DataGridViewContentAlignment.MiddleCenter

End With

For i As Integer **=** **0** To DataGridView1.Rows.Count **-** **1**

If i Mod **2** **=** **1** Then

DataGridView1.Rows**(**i**).**DefaultCellStyle.BackColor **=** Color.FromArgb**(254,** **254,** **254)** ' Alternate row color

Else

DataGridView1.Rows**(**i**).**DefaultCellStyle.BackColor **=** Color.FromArgb**(245,** **250,** **253)**

End If

Next i

End If

For Each col As DataGridViewColumn In DataGridView1.Columns

col.SortMode **=** DataGridViewColumnSortMode.NotSortable

Next

DataGridView1.ClearSelection**()**

End Sub

Private Sub ManageClassForm\_Load**(**sender As Object**,** e As EventArgs**)** Handles MyBase.Load 'Load the form and initialize components

GetCbTime**()**

GetCbRoom**()**

GetCbTeacher**()**

GetcbCourse**()**

End Sub

Private Sub btnTime\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnTime.Click 'Show the Schedule form

Dim ScheduleForm As New Schedule**()**

ScheduleForm.ShowDialog**()**

ScheduleForm.Dispose**()**

startup **=** True

GetCbTime**()**

GetcbStatus**()**

GetcbSearch**()**

startup **=** False

End Sub

Private Sub btnRoom\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnRoom.Click 'Show the Room form

Dim RoomForm As New RoomForm**()**

RoomForm.ShowDialog**()**

RoomForm.Dispose**()**

GetCbRoom**()**

GetcbSearch**()**

GetcbStatus**()**

End Sub

Private Sub btnAdd\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnAdd.Click

Panel2.Visible **=** True 'Show the panel for adding a new class

cbStatus.Enabled **=** False

End Sub

Private Sub btnCancel\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnCancel.Click

txtCourseID.Text **=** ""

cbSubject.SelectedIndex **=** cbSubject.Items.Count **-** **1**

cbRoom.SelectedIndex **=** cbRoom.Items.Count **-** **1**

cbTeacher.SelectedIndex **=** cbTeacher.Items.Count **-** **1**

cbSchedule.SelectedIndex **=** cbSchedule.Items.Count **-** **1**

dtpStartDate.Value **=** DateTime.Now

Panel2.Visible **=** False

btnEdit.Visible **=** False

txtCourseID.ReadOnly **=** False

btnNewClass.Visible **=** True 'Hide the panel for adding a new class

End Sub

Private Sub DataGridView2\_Sorted**(**sender As Object**,** e As EventArgs**)** Handles DataGridView1.Sorted

Regonize**()** 'Prepare the DataGridView after sorting

End Sub

Private Sub DataGridView1\_MouseClick**(**sender As Object**,** e As MouseEventArgs**)** Handles DataGridView1.MouseClick

Dim menu As New ContextMenuStrip**()**

menu.Font **=** New Font**(**"Khmer OS System"**,** **11)**

menu.Items.Add**(**"លម្អិត"**,** Nothing**,** AddressOf ShowDetails**)**

menu.Items.Add**(**"កែប្រែ"**,** Nothing**,** AddressOf EditClass**)**

menu.Items.Add**(**"លុប"**,** Nothing**,** AddressOf DeleteCourse**)**

menu.Items**(0).**BackColor **=** Color.FromArgb**(245,** **250,** **253)**

If e.Button **=** MouseButtons.Right Then

Dim hit As DataGridView.HitTestInfo **=** DataGridView1.HitTest**(**e.X**,** e.Y**)**

If hit.RowIndex **>=** **0** Then

Dim ClassID As String **=** DataGridView1.Rows**(**hit.RowIndex**).**Cells**(0).**Value.ToString**()**

course.GetCourseByID**(**ClassID**)**

menu.Show**(**DataGridView1**,** e.Location**)**

End If

End If

End Sb

Private Sub DeleteCourse**()**

If DialogResult.Yes **=** MessageBox.Show**(**"តើអ្នកពិតជាចង់លុបថ្នាក់រៀននេះមែនទេ?"**,** "លុបវគ្គសិក្សា"**,** MessageBoxButtons.YesNo**,** MessageBoxIcon.Question**)** Then

course.DeleteCourse**()**

Display**()**

End If

End Sub

Private Sub ShowDetails**()**

Dim classDetail As New CourseDetail**(**course**)**

classDetail.ShowDialog**()**

classDetail.Dispose**()**

Display**()**

startup **=** True

GetcbSearch**()**

GetcbStatus**()**

startup **=** False

End Sub

Private Sub EditClass**()**

txtCourseID.Text **=** course.ID

cbSubject.SelectedIndex **=** cbSubject.FindStringExact**(**course.subject.Subject**)**

cbTeacher.SelectedValue **=** course.teacher.TeacherID

cbRoom.SelectedValue **=** course.room.id

cbSchedule.SelectedValue **=** course.scheduleID

dtpStartDate.Value **=** course.startDate

dtpEndDate.Value **=** course.endDate

cbStatus.SelectedIndex **=** course.statusID **-** **1**

Panel2.Visible **=** True

btnEdit.Visible **=** True

btnNewClass.Visible **=** False

cbStatus.Enabled **=** True

End Sub

Private Sub btnEdit\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnEdit.Click

If txtCourseID.Text **=** course.ID And cbSubject.SelectedValue **=** course.subject.ID And cbRoom.SelectedValue **=** course.room.id And cbTeacher.SelectedValue **=** course.teacher.TeacherID And dtpStartDate.Value **=** course.startDate And dtpEndDate.Value **=** course.endDate And

cbSchedule.SelectedValue **=** course.scheduleID And cbStatus.SelectedIndex **=** course.statusID **-** **1** Then

MessageBox.Show**(**"សូមកែប្រែវគ្គសិក្សា"**,** "ទិន្ន័យមិនត្រឹមត្រូវ"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Information**)**

Return

End If

If Not CheckField**()** Then

Return

End If

course.ID **=** txtCourseID.Text.Trim**()**

course.scheduleID **=** Convert.ToInt32**(**cbSchedule.SelectedValue.ToString**())**

course.room.GetRoomByID**(**cbRoom.SelectedValue**)**

course.teacher.TeacherID **=** cbTeacher.SelectedValue.ToString**()**

course.subject.ID **=** cbSubject.SelectedValue.ToString**()**

course.startDate **=** dtpStartDate.Value

course.endDate **=** dtpEndDate.Value

course.statusID **=** cbStatus.SelectedIndex **+** **1**

txtCourseID.ReadOnly **=** True

course.UpdateCourse**()**

MessageBox.Show**(**"វគ្គសិក្សា ត្រូវបានកែប្រែដោយជោគជ័យ!"**,** "បច្ចុប្បន្នភាពវគ្គសិក្សា"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Information**)**

Display**()**

End Sub

Private Sub Panel1\_Paint**(**sender As Object**,** e As PaintEventArgs**)** Handles Panel1.Paint

Display**()**

startup **=** False

End Sub

End Class

**8.SubjectForm**

Imports System.Windows

Imports System.Windows.Controls

Public Class SubjectForm

Dim subject As New Subject**()**

Dim startup As Boolean **=** True

Sub Display**()**

DataGridView1.DataSource **=** subject.GetSubjectData**()**

Regonize**()**

End Sub

Function CheckField**()** As Boolean

Dim subject As String **=** txtSubject.Text.Trim**()**

Dim description As String **=** txtDes.Text.Trim**()**

Dim creditHours As String **=** txtCreditHours.Text.Trim**()**

Dim basePrice As String **=** txtBasePrice.Text.Trim**()**

If String.IsNullOrEmpty**(**subject**)** Then

MessageBox.Show**(**"សូមបញ្ចូលមុខវិជ្ជាអោយបានត្រឹមត្រូវ!!!!"**,** "បញ្ចូលទិន្ន័យមិនត្រឹមត្រូវ"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Error**)**

Return False

End If

If String.IsNullOrEmpty**(**description**)** Then

MessageBox.Show**(**"សូមបញ្ចូលការពិពណ៌នាអំពីមុខវិជ្ជា!!!!"**,** "បញ្ចូលទិន្ន័យមិនត្រឹមត្រូវ"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Error**)**

Return False

End If

If String.IsNullOrEmpty**(**creditHours**)** OrElse Not IsNumeric**(**creditHours**)** Then

MessageBox.Show**(**"សូមបញ្ចូលរយៈពេលសិក្សា!!!!"**,** "បញ្ចូលទិន្ន័យមិនត្រឹមត្រូវ"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Error**)**

Return False

End If

If String.IsNullOrEmpty**(**basePrice**)** OrElse Not IsNumeric**(**basePrice**)** Then

MessageBox.Show**(**"សូមបញ្ចូលតម្លៃនៃមុខវិជ្ជានេះ!!!!"**,** "បញ្ចូលទិន្ន័យមិនត្រឹមត្រូវ"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Error**)**

Return False

End If

Return True

End Function

Private Sub btmCreate\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnCreate.Click

If Not CheckField**()** Then

Return

Else

'Check Duplicate Subject

Dim dt As DataTable **=** Me.subject.GetSubjectData**()**

For Each row As DataRow In dt.Rows

If txtSubject.Text.Trim**()** **=** row**(1).**ToString**()** Then

MsgBox**(**"មុខវិជ្ជានេះគឺមានរូចហើយ"**)**

Return

End If

Next

subject.AddSubject**(**txtSubject.Text.Trim**(),** txtDes.Text.Trim**(),** Convert.ToInt32**(**txtCreditHours.Text.Trim**()),** Convert.ToDecimal**(**txtBasePrice.Text.Trim**()))**

MessageBox.Show**(**"វគ្គសិក្សា ៖ " **&** txtSubject.Text **&** "ត្រូវបានបង្កើតបានដោយជោគជ័យ!!!!"**,** "Success"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Information**)**

End If

Display**()**

End Sub

Private Sub Panel5\_Paint**(**sender As Object**,** e As PaintEventArgs**)** Handles Panel5.Paint

Display**()**

startup **=** False

End Sub

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

Panel1.Visible **=** True

btnCreate.Visible **=** True

End Sub

Private Sub DataGridView1\_MouseClick**(**sender As Object**,** e As MouseEventArgs**)** Handles DataGridView1.MouseClick

Dim menu As New ContextMenuStrip**()**

menu.Font **=** New Font**(**"Khmer OS System"**,** **11)**

menu.Items.Add**(**"លម្អិត"**,** Nothing**,** AddressOf ShowDetails**)**

menu.Items.Add**(**"កែប្រែ"**,** Nothing**,** AddressOf EditCourse**)**

menu.Items.Add**(**"លុប"**,** Nothing**,** AddressOf DeleteCourse**)**

menu.Items**(0).**BackColor **=** Color.FromArgb**(245,** **250,** **253)**

If e.Button **=** MouseButtons.Right Then

Dim hit As DataGridView.HitTestInfo **=** DataGridView1.HitTest**(**e.X**,** e.Y**)**

If hit.RowIndex **>=** **0** Then

DataGridView1.Rows**(**hit.RowIndex**).**Selected **=** True

Dim subjectID As String **=** DataGridView1.Rows**(**hit.RowIndex**).**Cells**(0).**Value.ToString**()**

subject.GetSubjectByID**(**subjectID**)**

menu.Show**(**DataGridView1**,** e.Location**)**

End If

End If

End Sub

Private Sub DeleteCourse**()**

If DialogResult.Yes **=** MessageBox.Show**(**"តើអ្នកពិតជាចង់លុបវគ្គសិក្សានេះទេ?"**,** "Confirm Delete"**,** MessageBoxButtons.YesNo**,** MessageBoxIcon.Question**)** Then

subject.DeleteSubject**()**

MessageBox.Show**(**"វគ្គសិក្សា ៖ " **&** subject.Subject **&** " ត្រូវបានលុបដោយជោគជ័យ!"**,** "Success"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Information**)**

Display**()**

End If

End Sub

Private Sub EditCourse**()**

Panel1.Visible **=** True

btnEdit.Visible **=** True

txtSubject.Text **=** subject.Subject

txtDes.Text **=** subject.Description.ToString**()**

txtCreditHours.Text **=** subject.CreditHours.ToString**()**

txtBasePrice.Text **=** subject.basePrice.ToString**(**"F2"**)**

End Sub

Private Sub ShowDetails**()**

Dim courseDialog As New SubjectDetail**(**subject**)**

courseDialog.ShowDialog**()**

Display**()**

End Sub

Private Sub btnCancel\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnCancel.Click

txtBasePrice.Text **=** ""

txtSubject.Text **=** ""

txtDes.Text **=** ""

txtCreditHours.Text **=** ""

subject.ID **=** ""

subject.Subject **=** ""

subject.Description **=** ""

subject.CreditHours **=** **0**

subject.basePrice **=** **0D**

btnEdit.Visible **=** False

btnCreate.Visible **=** False

Panel1.Visible **=** False

End Sub

Private Sub txtSearch\_\_TextChanged**(**sender As Object**,** e As EventArgs**)** Handles txtSearch.TextChanged

If startup Then

Return

End If

Dim dt As New DataTable**()**

Dim query As String **=** "SELECT tblSubject.ID, tblSubject.Subject, tblSubject.Description, tblSubject.CreditHours, tblSubject.BasePrice,

**(**SELECT COUNT**(\*)** FROM tblCourse WHERE tblCourse.ID **=** tblSubject.ID**)** AS AllCourses**,**

**(**SELECT COUNT**(\*)** FROM tblCourse WHERE StatusID **=** **3** AND tblCourse.ID **=** tblSubject.ID**)** AS CompleteCourse

FROM tblSubject

WHERE **((**tblSubject.ID **=** @id**)** or **(**tblSubject.Subject LIKE @Condition**));**"

Dim cmd As New OleDb.OleDbCommand**(**query**,** subject.GetConnection**())**

Dim id As Integer

Dim condition As String **=** txtSearch.Text.Trim**()**

If IsNumeric**(**condition**)** Then

id **=** Integer.Parse**(**condition**)**

Else

id **=** **0**

End If

condition **=** condition **+** "%"

cmd.Parameters.AddWithValue**(**"@id"**,** id**)**

condition **=** condition **&** "%"

cmd.Parameters.AddWithValue**(**"@Condition"**,** condition**)**

DataGridView1.DataSource **=** subject.ExecuteQuery**(**cmd**)**

Regonize**()**

End Sub

Private Sub btnClear\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnClear.Click

txtSearch.Texts **=** ""

Display**()**

End Sub

Sub Regonize**()**

With DataGridView1

**.**ColumnHeadersHeight **=** **40**

**.**Columns**(0).**Width **=** **50** ' ID column width

**.**Columns**(0).**DefaultCellStyle.Format **=** "000"

**.**Columns**(1).**Width **=** **200** ' Course Name column width

**.**Columns**(2).**Width **=** **250** ' Description column width

**.**Columns**(3).**Width **=** **150** ' Description column width

**.**Columns**(4).**Width **=** **150**

**.**Columns**(5).**Width **=** **150**

**.**Columns**(6).**Width **=** **150**

**.**Columns**(0).**HeaderText **=** "ID"

**.**Columns**(1).**HeaderText **=** "វគ្គសិក្សា"

**.**Columns**(2).**HeaderText **=** "ការពិពណ៌នា"

**.**Columns**(3).**HeaderText **=** "រយៈពេល (ម៉ោង)"

**.**Columns**(3).**DefaultCellStyle.Format **=** "00ម៉ោង"

**.**Columns**(4).**HeaderText **=** "តម្លៃ ($)"

**.**Columns**(4).**DefaultCellStyle.Format **=** "C2"

**.**Columns**(5).**HeaderText **=** "ចំនួនថ្នាក់រៀន"

**.**Columns**(6).**HeaderText **=** "ចំនួនថ្នាក់បញ្ចប់"

End With

For i As Integer **=** **0** To DataGridView1.Rows.Count **-** **1**

If i Mod **2** **=** **1** Then

DataGridView1.Rows**(**i**).**DefaultCellStyle.BackColor **=** Color.FromArgb**(254,** **254,** **254)** ' Alternate row color

Else

DataGridView1.Rows**(**i**).**DefaultCellStyle.BackColor **=** Color.FromArgb**(245,** **250,** **253)**

End If

For j As Integer **=** **3** To DataGridView1.Columns.Count **-** **1**

DataGridView1.Rows**(**i**).**Cells**(**j**).**Style.Alignment **=** DataGridViewContentAlignment.MiddleCenter

Next j

Next i

For Each col As DataGridViewColumn In DataGridView1.Columns

col.SortMode **=** DataGridViewColumnSortMode.NotSortable

Next

DataGridView1.ClearSelection**()**

End Sub

Private Sub btnEdit\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnEdit.Click

If CheckField**()** Then

If txtSubject.Text **=** subject.Subject And txtDes.Text **=** subject.Description And Convert.ToDecimal**(**txtBasePrice.Text.Trim**())** **=** subject.basePrice And Convert.ToInt16**(**txtCreditHours.Text.Trim**())** **=** subject.CreditHours Then

MessageBox.Show**(**"មិនមានទិន្ន័យណាត្រូវបានកែប្រែទេ!!!"**)**

Else

subject.Subject **=** txtSubject.Text.Trim**()**

subject.basePrice **=** Convert.ToDecimal**(**txtBasePrice.Text.Trim**())**

subject.CreditHours **=** Convert.ToInt32**(**txtCreditHours.Text.Trim**())**

subject.Description **=** txtDes.Text.Trim**()**

subject.UpdateSubject**()**

MsgBox**(**"មុខវិជ្ជាត្រូវបានកែប្រែដោយជោគជ័យ"**)**

Display**()**

End If

End If

End Sub

End Class

**9.ReportForm**

Imports System.Drawing.Printing

Imports System.IO

Imports CrystalDecisions.CrystalReports.Engine

Imports CrystalDecisions.Shared

Imports CrystalDecisions.Windows.Forms

Imports Org.BouncyCastle.Asn1

Public Class ReportForm

Dim report As New Report**()**

Dim reportDocument As New ReportDocument

Private Sub ReportForm\_Load**(**sender As Object**,** e As EventArgs**)** Handles MyBase.Load

End Sub

Private Sub cbReport\_SelectedIndexChanged**(**sender As Object**,** e As EventArgs**)** Handles cbReport.SelectedIndexChanged

If cbReport.SelectedIndex **=** cbReport.Items.Count **-** **1** Then

crsReport.ReportSource **=** Nothing

Return

ElseIf cbReport.SelectedIndex **=** **0** Then

StudentReport**()**

ElseIf cbReport.SelectedIndex **=** **1** Then

TeacherReport**()**

ElseIf cbReport.SelectedIndex **=** **2** Then

CourseReport**()**

ElseIf cbReport.SelectedIndex **=** **3** Then

SubjectReport**()**

ElseIf cbReport.SelectedIndex **=** **4** Then

PaymentReport**()**

End If

End Sub

Sub TeacherReport**()**

reportDocument.Load**(**Application.StartupPath **&** "\Report\TeacherReport.rpt"**)**

reportDocument.Database.Tables**(**"tblTeacherReport"**).**SetDataSource**(**report.GetTeacherReport**())**

crsReport.ReportSource **=** reportDocument

End Sub

Sub StudentReport**()**

reportDocument.Load**(**Application.StartupPath **&** "\Report\StudentReport.rpt"**)**

reportDocument.Database.Tables**(**"tblStudentReport"**).**SetDataSource**(**report.GetStudentReport**())**

crsReport.ReportSource **=** reportDocument

End Sub

Sub CourseReport**()**

reportDocument.Load**(**Application.StartupPath **&** "\Report\CourseReport.rpt"**)**

reportDocument.Database.Tables**(**"tblCourseReport"**).**SetDataSource**(**report.GetCourseReport**())**

crsReport.ReportSource **=** reportDocument

End Sub

Sub SubjectReport**()**

reportDocument.Load**(**Application.StartupPath **&** "\Report\SubjectReport.rpt"**)**

reportDocument.Database.Tables**(**"tblSubjectReport"**).**SetDataSource**(**report.GetSubjectReport**())**

crsReport.ReportSource **=** reportDocument

End Sub

Sub PaymentReport**()**

reportDocument.Load**(**Application.StartupPath **&** "\Report\PaymentReport.rpt"**)**

reportDocument.Database.Tables**(**"tblPaymentReport"**).**SetDataSource**(**report.GetPaymentReport**())**

crsReport.ReportSource **=** reportDocument

End Sub

Private Sub btnPrint\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnPrint.Click

If cbReport.SelectedIndex **=** cbReport.Items.Count **-** **1** Then

MessageBox.Show**(**"សូមជ្រើសរើរបាយការណ៍ជាមុនសិន!!!!!"**,** "Warning"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Warning**)**

Return

End If

Try

Dim dlg As New PrintDialog**()**

dlg.AllowSomePages **=** True

dlg.PrinterSettings **=** New PrinterSettings**()**

If dlg.ShowDialog**()** **=** DialogResult.OK Then

reportDocument.PrintOptions.PrinterName **=** dlg.PrinterSettings.PrinterName

reportDocument.PrintOptions.PaperSize **=** CrystalDecisions.Shared.PaperSize.PaperA4

reportDocument.PrintOptions.PaperOrientation **=** PaperOrientation.Landscape

reportDocument.PrintToPrinter**(**dlg.PrinterSettings.Copies**,** False**,** **0,** **0)**

End If

Catch ex As Exception

MessageBox.Show**(**"របាយការណ៍័មិនអាចPrintបានទេ"**)**

End Try

End Sub

Private Sub Guna2Button2\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnExport.Click

If cbReport.SelectedIndex **=** cbReport.Items.Count **-** **1** Then

MessageBox.Show**(**"សូមជ្រើសរើសរបាយការណ៍!!!!"**,** "Warrning"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Warning**)**

Return

End If

Dim exportOption As ExportOptions

Dim diskFileDestinationOptions As New DiskFileDestinationOptions**()**

Dim exportPath As String **=** Application.StartupPath **&** "\Export\Report"

If Not Directory.Exists**(**exportPath**)** Then

Directory.CreateDirectory**(**exportPath**)**

End If

Dim sfd As New SaveFileDialog**()**

sfd.InitialDirectory **=** exportPath

sfd.Filter **=** "PDF Files|\*.pdf|Excel Files|\*.xls"

sfd.FileName **=** cbReport.Text **&** "\_" **&** DateTime.Now**().**ToString**(**"dd-MM-yyyy"**)**

If sfd.ShowDialog**()** **=** DialogResult.OK Then

diskFileDestinationOptions.DiskFileName **=** sfd.FileName

Else

Return

End If

exportOption **=** reportDocument.ExportOptions

exportOption.ExportDestinationType **=** ExportDestinationType.DiskFile

exportOption.ExportDestinationOptions **=** diskFileDestinationOptions

Select Case Path.GetExtension**(**sfd.FileName**).**ToLower**()**

Case ".pdf"

exportOption.ExportFormatType **=** ExportFormatType.PortableDocFormat

exportOption.FormatOptions **=** New PdfRtfWordFormatOptions**()**

Case ".xls"

exportOption.ExportFormatType **=** ExportFormatType.Excel

exportOption.FormatOptions **=** New ExcelFormatOptions**()** With **{**

**.**ExcelUseConstantColumnWidth **=** True

**}**

Case ".html"

exportOption.ExportFormatType **=** ExportFormatType.HTML40

exportOption.FormatOptions **=** New HTMLFormatOptions**()** With **{**

**.**HTMLBaseFolderName **=** Path.GetDirectoryName**(**sfd.FileName**),**

**.**HTMLFileName **=** Path.GetFileName**(**sfd.FileName**)**

**}**

Case Else

MessageBox.Show**(**"Unsupported export format."**)**

Return

End Select

reportDocument.Export**()**

Process.Start**(**sfd.FileName**)**

End Sub

End Class

**10.RoomForm**

Imports System.Data.OleDb

Public Class RoomForm

Dim conn As New ConnectionDB**()**

Dim room As New Room

Sub Display**()**

Dim query As String **=** "SELECT tblRoom.\* FROM tblRoom;"

Dim dt As DataTable **=** conn.ExecuteQuery**(**query**)**

DataGridView2.DataSource **=** dt

DataGridView2.Columns**(0).**Width **=** **100** ' ID column width)

DataGridView2.Columns**(1).**HeaderText **=** "ឈ្មោះបន្ទប់"

DataGridView2.ClearSelection**()**

For i As Integer **=** **0** To DataGridView2.Rows.Count **-** **1**

If i Mod **2** **=** **1** Then

DataGridView2.Rows**(**i**).**DefaultCellStyle.BackColor **=** Color.FromArgb**(254,** **254,** **254)** ' Alternate row color

Else

DataGridView2.Rows**(**i**).**DefaultCellStyle.BackColor **=** Color.FromArgb**(245,** **250,** **253)**

End If

Next i

End Sub

Private Sub Panel2\_Paint**(**sender As Object**,** e As PaintEventArgs**)** Handles Panel2.Paint

Display**()**

End Sub

Private Sub btnAdd\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnAdd.Click

If txtRoom.Text.Trim**()** **=** "" Then

MsgBox**(**"សូមបញ្ចូលឈ្មោះបន្ទប់"**)**

Return

End If

Dim query As String **=** "SELECT COUNT(\*) FROM tblRoom WHERE Room = @room;"

Dim cmd As New OleDbCommand**(**query**,** room.GetConnection**())**

cmd.Parameters.AddWithValue**(**"@room"**,** txtRoom.Text.Trim**())**

Dim count As Integer **=** Convert.ToInt16**(**room.ExecuteScalar**(**cmd**))**

If count **>** **0** Then

MessageBox.Show**(**"បន្ទប់សិកស្សានេះមានរួចហើយ"**,** "បន្ទប់មានរួចហើយ"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Warning**)**

Return

End If

query **=** "INSERT INTO tblRoom (Room) VALUES (@RoomName);"

cmd **=** New OleDbCommand**(**query**,** conn.GetConnection**())**

cmd.Parameters.AddWithValue**(**"@RoomName"**,** txtRoom.Text.Trim**())**

conn.ExecuteNonQuery**(**cmd**)**

txtRoom.Text **=** ""

MessageBox.Show**(**"បន្ទប់សិក្សា " **&** txtRoom.Text **&** " នេះត្រូវបានបង្កើតដោយជោគជ័យ"**,** "ជោគជ័យ"**,** MessageBoxButtons.OK**,** MessageBoxIcon.Information**)**

Display**()**

End Sub

Private Sub btnDelete\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnDelete.Click

If DialogResult.Yes **=** MessageBox.Show**(**"តើអ្នកពិតជាចង់លុបបន្ទប់នេះមែនទេ?"**,** "បញ្ជាក់"**,** MessageBoxButtons.YesNo**,** MessageBoxIcon.Question**)** Then

Dim query As String **=** "DELETE FROM tblRoom WHERE ID = @ID;"

Dim cmd As OleDbCommand **=** New OleDbCommand**(**query**,** conn.GetConnection**())**

cmd.Parameters.AddWithValue**(**"@ID"**,** room.id**)**

conn.ExecuteNonQuery**(**cmd**)**

Display**()**

End If

End Sub

Private Sub DataGridView2\_CellClick**(**sender As Object**,** e As DataGridViewCellEventArgs**)** Handles DataGridView2.CellClick

room.GetRoomByID**(**Convert.ToInt16**(**DataGridView2.CurrentRow.Cells**(0).**Value**))**

txtRoom.Text **=** room.room

End Sub

Private Sub btnClear\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnClear.Click

txtRoom.Clear**()**

End Sub

End Class

**11.ScheduleForm**

Imports System.Data.OleDb

Imports Org.BouncyCastle.Bcpg

Public Class Schedule

Dim conn As New ConnectionDB**()**

Dim id As Integer **=** **0**

Private Sub Schedule\_Load**(**sender As Object**,** e As EventArgs**)** Handles MyBase.Load

cbDay.SelectedIndex **=** cbDay.Items.Count **-** **1**

Display**()**

End Sub

Sub Display**()**

Dim query As String **=** "SELECT \* FROM tblSchedule"

Dim dt As DataTable **=** conn.ExecuteQuery**(**query**)**

DataGridView2.DataSource **=** dt

DataGridView2.Columns**(0).**Width **=** **100** ' ID column width

DataGridView2.ClearSelection**()**

For i As Integer **=** **0** To DataGridView2.Rows.Count **-** **1**

If i Mod **2** **=** **1** Then

DataGridView2.Rows**(**i**).**DefaultCellStyle.BackColor **=** Color.FromArgb**(254,** **254,** **254)** ' Alternate row color

Else

DataGridView2.Rows**(**i**).**DefaultCellStyle.BackColor **=** Color.FromArgb**(245,** **250,** **253)**

End If

Next i

End Sub

Private Sub btnAdd\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnAdd.Click

If cbDay.SelectedIndex **=** cbDay.Items.Count **-** **1** Then

MsgBox**(**"សូមជ្រើសរើសវេនសិក្សាជាមុនសិន"**)**

Return

End If

Dim schedule As String **=** cbDay.SelectedItem.ToString**()** **+** " " **+** tpStart.Value.ToString**(**"hh:mm tt"**).**Split**(**" "c**)(0)** **+** "-" **+** tpEnd.Value.ToString**(**"hh:mm tt"**)**

If IsDuplicate**(**schedule**)** Then

MsgBox**(**"សូមអភ័យទោសវេនសិក្សានេះមានរួចហើយ"**)**

Return

End If

Dim query As String **=** "INSERT INTO tblSchedule (Schedule) VALUES (@Schedule);"

Dim cmd As OleDbCommand **=** New OleDbCommand**(**query**,** conn.GetConnection**())**

cmd.Parameters.AddWithValue**(**"@Schedule"**,** schedule**)**

conn.ExecuteNonQuery**(**cmd**)**

Display**()**

End Sub

Private Sub btnDelete\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnDelete.Click

If DataGridView2.SelectedRows.Count **=** **0** Then

MsgBox**(**"សូមជ្រើសរើសទិន្ន័យពីបញ្ជីវេនសិក្សាជាមុនសិន !!!"**)**

Return

End If

Dim id As Integer **=** Convert.ToInt32**(**DataGridView2.CurrentRow.Cells**(0).**Value**)**

Dim query As String **=** "DELETE FROM tblSchedule WHERE ID = @ID;"

Dim cmd As OleDbCommand **=** New OleDbCommand**(**query**,** conn.GetConnection**())**

cmd.Parameters.AddWithValue**(**"@ID"**,** id**)**

conn.ExecuteNonQuery**(**cmd**)**

Display**()**

id **=** **0** ' Reset id after deletion

End Sub

Function IsDuplicate**(**value As String**)**

Dim query As String **=** "SELECT COUNT(\*) FROM tblSchedule WHERE Schedule = @Schedule;"

Dim cmd As OleDbCommand **=** New OleDbCommand**(**query**,** conn.GetConnection**())**

cmd.Parameters.AddWithValue**(**"@Schedule"**,** value**)**

conn.OpenConnection**()**

Dim count As Integer **=** Convert.ToInt32**(**cmd.ExecuteScalar**())**

conn.CloseConnection**()**

Return count **>** **0**

End Function

Private Sub DataGridView2\_CellClick**(**sender As Object**,** e As DataGridViewCellEventArgs**)** Handles DataGridView2.CellClick

Dim schedule**()** As String **=** DataGridView2.CurrentRow.Cells**(1).**Value.ToString**().**Split**(**" "**)**

cbDay.SelectedIndex **=** If**(**schedule**(0)** **=** cbDay.Items**(0).**ToString**(),** **0,** **1)** ' Weekday or Weekend

Dim time**()** As String **=** schedule**(1).**Split**(**"-"**)**

Dim parsedTime As DateTime **=** DateTime.Parse**(**time**(0)** **&** " " **&** schedule**(2))**

tpStart.Value **=** DateTime.Today.AddHours**(**parsedTime.Hour**)**

parsedTime **=** DateTime.Parse**(**time**(1)** **&** " " **&** schedule**(2))**

tpEnd.Value **=** DateTime.Today.AddHours**(**parsedTime.Hour**)**

End Sub

Private Sub btnClear\_Click**(**sender As Object**,** e As EventArgs**)** Handles btnClear.Click

cbDay.SelectedIndex **=** cbDay.Items.Count **-** **1**

DataGridView2.ClearSelection**()**

id **=** **0**

End Sub

End Class

**12.CrouseDetail Form**

Imports System.Data.OleDb

Public Class CourseDetail

Dim course As New Course**()**

Public Sub New**(**classDetail As Course**)**

' This call is required by the designer.

InitializeComponent**()**

' Add any initialization after the InitializeComponent() call.

Me.course **=** classDetail

FillClassDetails**()**

End Sub

Sub FillClassDetails**()**

txtID.Text **=** course.ID

txtCourse.Text **=** course.subject.Subject

txtTeacher.Text **=** course.teacher.KhName

txtStartDate.Text **=** course.startDate.ToString**(**"dd/MM/yyyy"**)**

txtEndDate.Text **=** course.endDate.ToString**(**"dd/MM/yyyy"**)**

txtRoom.Text **=** course.room.room

txtSchedule.Text **=** course.GetSchedule**()**

txtStatus.Text **=** course.GetStatus**()**

End Sub

Sub GetData**()**

Dim query As String **=** "SELECT tblStudent.ID, tblStudent.KhName, tblStudent.Phone, tblStudent.Address, tblPaymentStatus.Status

FROM **(**tblPaymentStatus INNER JOIN tblPayment ON tblPaymentStatus.ID **=** tblPayment.StatusID**)** INNER JOIN **(**tblStudent INNER JOIN tblRegister ON tblStudent.ID **=** tblRegister.StudentID**)** ON tblPayment.RegisterID **=** tblRegister.ID

WHERE **(((**tblRegister.CourseID**)=**" & course.ID & "**));**"

Dim dt As DataTable **=** course.ExecuteQuery**(**query**)**

DataGridView1.DataSource **=** dt

Regonize**()**

End Sub

Sub Regonize**()**

If DataGridView1.Columns.Count **=** **5** Then

DataGridView1.Columns**(0).**Width **=** **100**

DataGridView1.Columns**(0).**HeaderText **=** "StudentID"

DataGridView1.Columns**(0).**DefaultCellStyle.Alignment **=** DataGridViewContentAlignment.MiddleCenter

DataGridView1.Columns**(1).**Width **=** **200**

DataGridView1.Columns**(1).**HeaderText **=** "ឈ្មោះ"

DataGridView1.Columns**(2).**Width **=** **200**

DataGridView1.Columns**(2).**HeaderText **=** "លេខទូរស័ព្ទ"

DataGridView1.Columns**(2).**DefaultCellStyle.Alignment **=** DataGridViewContentAlignment.MiddleCenter

DataGridView1.Columns**(3).**Width **=** **200**

DataGridView1.Columns**(3).**HeaderText **=** "អាស័យដ្ឋាន"

DataGridView1.Columns**(3).**DefaultCellStyle.Alignment **=** DataGridViewContentAlignment.MiddleCenter

DataGridView1.Columns**(4).**Width **=** **150**

DataGridView1.Columns**(4).**HeaderText **=** "ស្ថានភាពបង់ប្រាក់"

DataGridView1.Columns**(4).**DefaultCellStyle.Alignment **=** DataGridViewContentAlignment.MiddleCenter

For Each col As DataGridViewColumn In DataGridView1.Columns

col.SortMode **=** DataGridViewColumnSortMode.NotSortable

Next

End If

DataGridView1.ClearSelection**()**

End Sub

Private Sub CourseDetail\_Load**(**sender As Object**,** e As EventArgs**)** Handles MyBase.Load

GetData**()**

End Sub

End Class

**13.StudentDetail Form**

Imports System.Windows.Controls

Public Class StudentDetail

Dim student As New Student**()**

Public Sub New**(**student As Student**)**

' This call is required by the designer.

InitializeComponent**()**

' Add any initialization after the InitializeComponent() call.

Me.student **=** student

FillStudentDetails**()**

Display**()**

End Sub

Sub FillStudentDetails**()**

txtID.Text **=** student.id

txtkhName.Text **=** student.khName

txtEngName.Text **=** student.engName

txtAddress.Text **=** student.address

txtPhone.Text **=** student.phone

txtDob.Text **=** student.DateOfBirth.ToString**(**"dd/MM/yyyy"**)**

txtGender.Text **=** student.gender

picStudent.ImageLocation **=** student.picture

End Sub

Sub Display**()**

GetData**()**

With DataGridView1

**.**Columns**(0).**HeaderText **=** "លេខកូដវគ្គសិក្សា"

**.**Columns**(0).**Width **=** **60**

**.**Columns**(0).**DefaultCellStyle.Format **=** "000"

**.**Columns**(0).**DefaultCellStyle.Alignment **=** DataGridViewContentAlignment.MiddleCenter

**.**Columns**(1).**Width **=** **220**

**.**Columns**(1).**HeaderText **=** "វគ្គសិក្សា"

**.**Columns**(2).**Width **=** **70**

**.**Columns**(2).**DefaultCellStyle.Alignment **=** DataGridViewContentAlignment.MiddleCenter

**.**Columns**(2).**HeaderText **=** "ប្រាក់មិនទាន់បង"

**.**Columns**(2).**DefaultCellStyle.Format **=** "C2" ' Format as currency

**.**Columns**(3).**HeaderText **=** "ស្ថានភាពវគ្គសិក្សា"

**.**Columns**(3).**Width **=** **180**

**.**Columns**(3).**DefaultCellStyle.Alignment **=** DataGridViewContentAlignment.MiddleCenter

For Each col As DataGridViewColumn In **.**Columns

col.SortMode **=** DataGridViewColumnSortMode.NotSortable

Next

End With

End Sub

Sub GetData**()**

Dim query As String **=** "SELECT tblCourse.ID, tblSubject.Subject, tblPayment.Unpaid, tblCourseStatus.Status

FROM **(**tblCourseStatus INNER JOIN **(**tblSubject INNER JOIN tblCourse ON tblSubject.ID **=** tblCourse.SubjectID**)** ON **(**tblCourseStatus.ID **=** tblCourse.StatusID**)** AND **(**tblCourseStatus.ID **=** tblCourse.StatusID**))** INNER JOIN **(**tblPayment INNER JOIN tblRegister ON tblPayment.RegisterID **=** tblRegister.ID**)** ON tblCourse.ID **=** tblRegister.CourseID

WHERE **(((**tblRegister.StudentID**)=**" & student.id & "**));**"

Dim dt As DataTable **=** student.ExecuteQuery**(**query**)**

DataGridView1.DataSource **=** dt

End Sub

End Class

**14.StudentList Form**

Imports System.Data.OleDb

Imports System.Web.UI.WebControls

Public Class StudentList

Public student As New Student()

Dim startup As Boolean = True

Public Sub GetData() Handles txtSearch.TextChanged

Dim query As String = "SELECT tblStudent.ID, tblStudent.KhName,tblStudent.Gender,

tblStudent.DateOfBirth,tblStudent.Phone FROM tblStudent

WHERE (ID Like @id OR KhName Like @name);"

Dim cmd As New OleDbCommand(query, student.GetConnection())

Dim name As String = txtSearch.Text.Trim()

Dim id As String = If(name = "", "0", If(IsNumeric(name), name, "0")) & "%"

name = If(name = "", "%", "%" & name & "%")

cmd.Parameters.AddWithValue("@id", id)

cmd.Parameters.AddWithValue("@name", name)

DataGridView1.DataSource = student.ExecuteQuery(cmd)

If Not startup Then

Regonize()

End If

End Sub

Sub Regonize()

DataGridView1.Columns(0).HeaderText = "លេខកូដ"

DataGridView1.Columns(0).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleCenter

DataGridView1.Columns(0).Width = 50

DataGridView1.Columns(0).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleCenter

DataGridView1.Columns(1).HeaderText = "គោត្តនាម នាម"

DataGridView1.Columns(1).Width = 250

DataGridView1.Columns(1).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleLeft

DataGridView1.Columns(2).HeaderText = "ភេទ"

DataGridView1.Columns(2).Width = 80

DataGridView1.Columns(2).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleCenter

DataGridView1.Columns(3).HeaderText = "ថ្ងៃខែឆ្នាំកំណើត"

DataGridView1.Columns(3).Width = 100

DataGridView1.Columns(3).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleCenter

DataGridView1.Columns(4).HeaderText = "លេខទូរស័ព្ទ"

DataGridView1.Columns(4).Width = 150

DataGridView1.Columns(4).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleLeft

For i = 0 To DataGridView1.Columns.Count - 1

DataGridView1.Columns(i).SortMode = DataGridViewColumnSortMode.NotSortable

Next i

End Sub

Private Sub DataGridView1\_CellDoubleClick(sender As Object, e As DataGridViewCellEventArgs)

Dim id As Int16 = Convert.ToInt16(DataGridView1.SelectedRows(0).Cells(0).Value)

student.GetStudentByID(id)

Me.DialogResult = 1

Me.Close()

End Sub

Private Sub btnClear\_Click(sender As Object, e As EventArgs)

txtSearch.Clear()

End Sub

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

GetData()

startup = False

Regonize()

End Sub

End Class

**15.SubjectDetail From**

Public Class SubjectDetail

Dim subject As New Subject()

Public Sub New(course As Subject)

' This call is required by the designer.

InitializeComponent()

' Add any initialization after the InitializeComponent() call.

Me.subject = course

FillCourseDetails()

Display()

End Sub

Sub Display()

Dim query As String = "SELECT tblCourse.ID, tblTeacher.KhName AS Teacher, tblRoom.Room AS Room, tblSchedule.Schedule, tblCourse.CurrentEnrollment, tblCourseStatus.Status

FROM tblTeacher INNER JOIN (tblSchedule INNER JOIN (tblRoom INNER JOIN (tblCourseStatus INNER JOIN tblCourse ON tblCourseStatus.ID = tblCourse.StatusID) ON tblRoom.ID = tblCourse.RoomID) ON tblSchedule.ID = tblCourse.ScheduleID) ON tblTeacher.ID = tblCourse.TeacherID

WHERE tblCourse.SubjectID = @ID;"

Dim cmd As New OleDb.OleDbCommand(query, subject.GetConnection())

cmd.Parameters.AddWithValue("@ID", subject.ID)

DataGridView1.DataSource = subject.ExecuteQuery(cmd)

DataGridView1.ColumnHeadersHeight = 40

'DataGridView1.AllowUserToResizeColumns = True

'Customize DataGridView columns

DataGridView1.Columns(0).Width = 75

DataGridView1.Columns(1).Width = 200

DataGridView1.Columns(2).Width = 100

DataGridView1.Columns(3).Width = 200

DataGridView1.Columns(4).Width = 100

DataGridView1.Columns(5).Width = 100

DataGridView1.Columns(0).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleCenter

DataGridView1.Columns(1).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleLeft

DataGridView1.Columns(2).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleCenter

DataGridView1.Columns(3).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleCenter

DataGridView1.Columns(4).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleCenter

DataGridView1.Columns(5).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleCenter

DataGridView1.Columns(0).HeaderText = "ClassID"

DataGridView1.Columns(1).HeaderText = "គ្រូបង្រៀន"

DataGridView1.Columns(2).HeaderText = "បន្ទប់"

DataGridView1.Columns(3).HeaderText = "វេនសិក្សា"

DataGridView1.Columns(4).HeaderText = "សិស្សសរុប"

DataGridView1.Columns(5).HeaderText = "ស្ថានភាព"

For i As Integer = 0 To DataGridView1.Rows.Count - 1

If i Mod 2 = 1 Then

DataGridView1.Rows(i).DefaultCellStyle.BackColor = Color.FromArgb(254, 254, 254) ' Alternate row color

Else

DataGridView1.Rows(i).DefaultCellStyle.BackColor = Color.FromArgb(245, 250, 253)

End If

For j As Integer = 3 To DataGridView1.Columns.Count - 1

DataGridView1.Rows(i).Cells(j).Style.Alignment = DataGridViewContentAlignment.MiddleCenter

Next j

Next i

For Each col As DataGridViewColumn In DataGridView1.Columns

col.SortMode = DataGridViewColumnSortMode.NotSortable

Next

DataGridView1.ClearSelection()

End Sub

Sub FillCourseDetails()

txtSubject.Text = subject.Subject

txtDes.Text = subject.Description.ToString()

txtDuration.Text = subject.CreditHours.ToString()

txtBasePrice.Text = subject.basePrice.ToString("F2")

End Sub

End Class

**16.TeacherDetail Form**

Public Class TeacherDetail

Dim teacher As Teacher = New Teacher()

Public Sub New(teacher As Teacher)

' This call is required by the designer.

InitializeComponent()

' Add any initialization after the InitializeComponent() call.

Me.teacher = teacher

End Sub

Private Sub btnClose\_Click(sender As Object, e As EventArgs)

Me.Close()

End Sub

Private Sub FillData()

txtID.Text = teacher.TeacherID

txtkhName.Text = teacher.KhName

txtEngName.Text = teacher.EngName

txtGender.Text = teacher.Gender

txtAddress.Text = teacher.Address

txtDob.Text = teacher.DoB

txtPhone.Text = teacher.Phone

txtEmail.Text = teacher.Email

picTeacher.ImageLocation = teacher.Picture

End Sub

Sub Display()

Dim query As String = "SELECT tblCourse.ID, tblSubject.Subject, tblSchedule.Schedule, tblRoom.Room, tblCourse.CurrentEnrollment, tblCourseStatus.Status

FROM tblSchedule INNER JOIN (tblRoom INNER JOIN ((tblSubject INNER JOIN (tblCourseStatus INNER JOIN tblCourse ON tblCourseStatus.ID = tblCourse.StatusID) ON tblSubject.ID = tblCourse.SubjectID) INNER JOIN tblRegister ON tblCourse.ID = tblRegister.CourseID) ON tblRoom.ID = tblCourse.RoomID) ON tblSchedule.ID = tblCourse.ScheduleID

GROUP BY tblCourse.ID, tblSubject.Subject, tblSchedule.Schedule, tblRoom.Room, tblCourse.CurrentEnrollment, tblCourseStatus.Status, tblCourse.TeacherID

HAVING (((tblCourse.TeacherID)=[@teacherID]));"

Dim cmd As New OleDb.OleDbCommand(query, teacher.GetConnection())

cmd.Parameters.AddWithValue("@teacherID", teacher.TeacherID)

DataGridView1.DataSource = teacher.ExecuteQuery(cmd)

Regonize()

End Sub

Private Sub Panel3\_Paint(sender As Object, e As PaintEventArgs) Handles Panel3.Paint

FillData()

Display()

End Sub

Sub Regonize()

' Customize DataGridView columns

DataGridView1.ColumnHeadersHeight = 40

DataGridView1.Columns(0).Width = 75

DataGridView1.Columns(0).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleCenter

DataGridView1.Columns(1).Width = 250

DataGridView1.Columns(1).HeaderText = "វគ្គសិក្សា"

DataGridView1.Columns(2).Width = 200

DataGridView1.Columns(2).HeaderText = "វេនសិក្សា"

DataGridView1.Columns(3).Width = 100

DataGridView1.Columns(3).HeaderText = "បន្ទប់"

DataGridView1.Columns(3).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleCenter

DataGridView1.Columns(4).Width = 100

DataGridView1.Columns(4).HeaderText = "សិស្សសរុប"

DataGridView1.Columns(4).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleCenter

DataGridView1.Columns(5).Width = 100

DataGridView1.Columns(5).HeaderText = "ស្ថានភាព"

DataGridView1.Columns(5).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleCenter

For i As Integer = 0 To DataGridView1.Rows.Count - 1

If i Mod 2 = 1 Then

DataGridView1.Rows(i).DefaultCellStyle.BackColor = Color.FromArgb(254, 254, 254) ' Alternate row color

Else

DataGridView1.Rows(i).DefaultCellStyle.BackColor = Color.FromArgb(245, 250, 253)

End If

Next i

For Each col As DataGridViewColumn In DataGridView1.Columns

col.SortMode = DataGridViewColumnSortMode.NotSortable

Next

DataGridView1.ClearSelection()

End Sub

End Class

**17.ConnectionDB Class**

Imports System.Data.OleDb

Public Class ConnectionDB

Private connstring As String = "Provider=Microsoft.ACE.OLEDB.16.0;Data Source=Data\StudentManagementSystem.accdb;Persist Security Info=False;"

Private conn As OleDbConnection

Public Sub New()

conn = New OleDbConnection(connstring)

End Sub

Public Function GetConnection() As OleDbConnection

If conn Is Nothing Then

conn = New OleDbConnection(connstring)

End If

Return conn

End Function

Public Sub OpenConnection()

If conn IsNot Nothing AndAlso conn.State = ConnectionState.Closed Then

conn.Open()

End If

End Sub

Public Sub CloseConnection()

If conn IsNot Nothing AndAlso conn.State = ConnectionState.Open Then

conn.Close()

End If

End Sub

Public Function ExecuteQuery(query As String) As DataTable

Dim dt As New DataTable()

Try

OpenConnection()

Dim cmd As New OleDbCommand(query, conn)

Dim adapter As New OleDbDataAdapter(cmd)

adapter.Fill(dt)

cmd.Dispose()

Catch ex As Exception

MsgBox("Error executing query: " & ex.Message)

Finally

CloseConnection()

End Try

Return dt

End Function

Public Function ExecuteQuery(cmd As OleDbCommand) As DataTable

Dim dt As New DataTable()

Try

OpenConnection()

Dim adapter As New OleDbDataAdapter(cmd)

adapter.Fill(dt)

cmd.Dispose()

Catch ex As Exception

MsgBox("Error executing query: " & ex.Message)

Finally

CloseConnection()

End Try

Return dt

End Function

Public Sub ExecuteNonQuery(query As String)

Try

OpenConnection()

Dim cmd As New OleDbCommand(query, conn)

cmd.ExecuteNonQuery()

cmd.Dispose()

Catch ex As Exception

Throw New Exception("Error executing non-query: " & ex.Message)

Finally

CloseConnection()

End Try

End Sub

Public Function ExecuteScalar(query As String) As Object

Dim result As Object = Nothing

Try

OpenConnection()

Dim cmd As New OleDbCommand(query, conn)

result = cmd.ExecuteScalar()

cmd.Dispose()

Catch ex As Exception

Throw New Exception("Error executing scalar: " & ex.Message)

Finally

CloseConnection()

End Try

Return result

End Function

Public Function ExecuteScalar(cmd As OleDbCommand) As Object

Dim result As Object = Nothing

Try

OpenConnection()

result = cmd.ExecuteScalar()

cmd.Dispose()

Catch ex As Exception

Throw New Exception("Error executing scalar: " & ex.Message)

Finally

CloseConnection()

End Try

Return result

End Function

Public Sub ExecuteNonQuery(cmd As OleDbCommand)

Try

OpenConnection()

cmd.ExecuteNonQuery()

cmd.Dispose()

Catch ex As Exception

MsgBox("Error executing non-query: " & ex.Message)

Finally

CloseConnection()

End Try

End Sub

End Class

**18. User Class**

Imports System.Data.OleDb

Public Class User

Public Shared userID As String

Public Shared userName As String

Public Shared password As String

Public Shared role As String

Public Shared conn As OleDbConnection

Public Shared connString As String = "Provider=Microsoft.ACE.OLEDB.16.0;Data Source=Data\StudentManagementSystem.accdb;Persist Security Info=False;"

Public Shared Function CheckLogin(username As String, password As String) As Boolean

conn = New OleDbConnection(connString)

conn.Open()

Dim query As String = "SELECT \* FROM tblUser WHERE UserName = @UserName;"

Dim cmd As OleDbCommand = New OleDbCommand(query, conn)

cmd.Parameters.AddWithValue("@UserName", username)

cmd.Parameters.AddWithValue("@Password", password)

Dim reader As OleDbDataReader = cmd.ExecuteReader()

If reader.Read() Then

userID = reader("ID").ToString()

username = reader("UserName").ToString()

role = reader("Role").ToString()

If reader("Password") = password Then

Return True

Else

Return False

End If

reader.Close()

conn.Close()

Else

reader.Close()

conn.Close()

Return False

End If

End Function

End Class

**19.Course Class**

Imports System.Data.OleDb

Imports System.Windows.Media.Animation

Public Class Course

Inherits ConnectionDB

Public ID As String

Public subject As Subject

Public teacher As Teacher

Public startDate As Date

Public endDate As Date

Public room As Room

Public scheduleID As Integer

Public statusID As Integer

Public Sub New()

' Constructor for ManageClass class

MyBase.New()

subject = New Subject()

teacher = New Teacher()

room = New Room()

End Sub

Public Function GetCourseData() As DataTable

Dim query As String = "SELECT tblCourse.ID, tblSubject.Subject, tblTeacher.KhName, tblRoom.Room,

tblSchedule.Schedule, tblCourse.CurrentEnrollment, tblCourseStatus.Status

FROM tblSchedule INNER JOIN (tblRoom INNER JOIN (tblTeacher

INNER JOIN (tblSubject INNER JOIN (tblCourseStatus INNER JOIN tblCourse

ON (tblCourseStatus.ID = tblCourse.StatusID) AND (tblCourseStatus.ID = tblCourse.StatusID))

ON tblSubject.ID = tblCourse.SubjectID) ON tblTeacher.ID = tblCourse.TeacherID)

ON tblRoom.ID = tblCourse.RoomID) ON tblSchedule.ID = tblCourse.ScheduleID;"

Dim dt As DataTable = ExecuteQuery(query)

Return dt

End Function

Public Sub GetCourseByID(id As String)

Dim query As String = "SELECT \* FROM tblCourse WHERE ID = @ID;"

OpenConnection()

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

cmd.Parameters.AddWithValue("@ID", id)

Dim reader As OleDbDataReader = cmd.ExecuteReader()

If reader.Read() Then

Me.ID = reader("ID").ToString()

subject.GetSubjectByID(reader("SubjectID").ToString())

teacher.GetTeacherByID(reader("TeacherID").ToString())

startDate = Convert.ToDateTime(reader("StartDate"))

room.GetRoomByID(Convert.ToInt16(reader("RoomID")))

scheduleID = Convert.ToInt32(reader("ScheduleID"))

endDate = If(IsDBNull(reader("EndDate")), Date.Now(), Convert.ToDateTime(reader("EndDate")))

statusID = Convert.ToInt32(reader("StatusID"))

End If

reader.Close()

CloseConnection()

End Sub

Public Sub AddCourse()

Dim query As String = "INSERT INTO tblCourse ( ID, SubjectID, TeacherID, StartDate, EndDate, RoomID, ScheduleID )

VALUES (@ID, @SubjectID, @TeacherID, @StartDate,@EndDate, @RoomID, @ScheduleID) "

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

cmd.Parameters.AddWithValue("@ID", Convert.ToInt16(ID))

cmd.Parameters.AddWithValue("@SubjectID", Convert.ToInt16(subject.ID))

cmd.Parameters.AddWithValue("@TeacherID", Convert.ToInt16(teacher.TeacherID))

cmd.Parameters.AddWithValue("@StartDate", startDate)

cmd.Parameters.AddWithValue("@EndDate", endDate)

cmd.Parameters.AddWithValue("@RoomID", room.id)

cmd.Parameters.AddWithValue("@ScheduleID", scheduleID)

ExecuteNonQuery(cmd)

End Sub

Public Sub UpdateCourse()

Dim query As String = "UPDATE tblCourse

SET SubjectID = @subjectID, TeacherID = @TeacherID, StartDate = @StartDate, EndDate = @EndDate, RoomID = @RoomID, ScheduleID = @ScheduleID , StatusID = @StatusID

WHERE ID = @ID;"

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

cmd.Parameters.AddWithValue("@subjectID", subject.ID)

cmd.Parameters.AddWithValue("@TeacherID", teacher.TeacherID)

cmd.Parameters.AddWithValue("@StartDate", startDate)

cmd.Parameters.AddWithValue("@EndDate", endDate)

cmd.Parameters.AddWithValue("@RoomID", room.id)

cmd.Parameters.AddWithValue("@ScheduleID", scheduleID)

cmd.Parameters.AddWithValue("@StatusID", statusID)

cmd.Parameters.AddWithValue("@ID", ID)

ExecuteNonQuery(cmd)

End Sub

Public Sub DeleteCourse()

Dim query As String = "DELETE FROM tblCourse WHERE ID = @ID;"

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

cmd.Parameters.AddWithValue("@ID", ID)

ExecuteNonQuery(cmd)

End Sub

Public Function GetCurrentEnrollments() As Integer

Dim query As String = "SELECT CurrentEnrollment FROM tblCourse;"

OpenConnection()

Dim cmd As New OleDbCommand(query, GetConnection())

Dim count As Integer = Convert.ToInt32(cmd.ExecuteScalar())

Return count

End Function

'Get Dictionary to insert to Combobox

Public Function GetTimeList() As Dictionary(Of String, Integer)

Dim TimeList As New Dictionary(Of String, Integer)

Dim query As String = "SELECT tblSchedule.Schedule, tblSchedule.ID

FROM tblSchedule;"

OpenConnection()

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

Dim reader As OleDbDataReader = cmd.ExecuteReader()

While reader.Read()

TimeList.Add(reader("Schedule"), Integer.Parse(reader("ID")))

End While

reader.Close()

CloseConnection()

Return TimeList

End Function

Public Function GetRoomList() As Dictionary(Of String, Integer)

Dim RoomList As New Dictionary(Of String, Integer)

Dim query As String = "SELECT tblRoom.Room, tblRoom.ID

FROM tblRoom;"

OpenConnection()

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

Dim reader As OleDbDataReader = cmd.ExecuteReader()

While reader.Read()

RoomList.Add(reader("Room"), Integer.Parse(reader("ID")))

End While

reader.Close()

CloseConnection()

Return RoomList

End Function

Public Function GetClassStatusList() As Dictionary(Of String, Integer)

Dim StatusList As New Dictionary(Of String, Integer)

Dim query As String = "SELECT \* FROM tblCourseStatus;"

OpenConnection()

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

Dim reader As OleDbDataReader = cmd.ExecuteReader()

While reader.Read()

StatusList.Add(reader("Status"), Integer.Parse(reader("ID")))

End While

reader.Close()

CloseConnection()

Return StatusList

End Function

Public Function GetTeacherList() As Dictionary(Of String, String)

Dim TeacherList As New Dictionary(Of String, String)

Dim query As String = "SELECT tblTeacher.ID, tblTeacher.KhName FROM tblTeacher;"

OpenConnection()

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

Dim reader As OleDbDataReader = cmd.ExecuteReader()

While reader.Read()

TeacherList.Add(reader("KhName"), reader("ID"))

End While

reader.Close()

CloseConnection()

Return TeacherList

End Function

Public Function GetCourseList() As Dictionary(Of String, Integer)

Dim CourseList As New Dictionary(Of String, Integer)

Dim query As String = "SELECT tblSubject.Subject, tblSubject.ID FROM tblSubject;"

OpenConnection()

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

Dim reader As OleDbDataReader = cmd.ExecuteReader()

While reader.Read()

CourseList.Add(reader("Subject"), Integer.Parse(reader("ID")))

End While

reader.Close()

CloseConnection()

Return CourseList

End Function

Function GetSchedule() As String

Dim query As String = "SELECT Schedule FROM tblSchedule WHERE ID = @ScheduleID;"

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

cmd.Parameters.AddWithValue("@ScheduleID", scheduleID)

OpenConnection()

Dim scheduleName As String = String.Empty

Dim reader As OleDbDataReader = cmd.ExecuteReader()

If reader.Read() Then

scheduleName = reader("Schedule").ToString()

End If

reader.Close()

CloseConnection()

Return scheduleName

End Function

Function GetStatus() As String

Dim query As String = "SELECT Status FROM tblCourseStatus WHERE ID = @StatusID;"

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

cmd.Parameters.AddWithValue("@StatusID", statusID)

OpenConnection()

Dim statusName As String = String.Empty

Dim reader As OleDbDataReader = cmd.ExecuteReader()

If reader.Read() Then

statusName = reader("Status").ToString()

End If

reader.Close()

CloseConnection()

Return statusName

End Function

End Class

**20.Dashboard Class**

Imports System.Data.OleDb

Public Class Dashboard

Inherits ConnectionDB

Public totalStudent As Int16

Public completeStudent As Int16

Public totalCourse As Int16

Public completeCourse As Int16

Public totalTeacher As Int16

Public TotalSubject As Int16

Public CourseList As New Dictionary(Of String, Int16)

Public SubjectList As New Dictionary(Of String, Int16)

Public Sub New()

GetData()

End Sub

Public Sub GetData()

Dim query As String = "SELECT COUNT(\*) FROM tblRegister;"

totalStudent = Int16.Parse(ExecuteScalar(query))

query = "SELECT Count(\*) AS TotalStudent FROM tblRegister INNER JOIN tblCourse ON tblRegister.CourseID = tblCourse.ID GROUP BY tblCourse.StatusID HAVING (((tblCourse.StatusID)=3));"

Dim result = ExecuteScalar(query)

completeStudent = If(result IsNot Nothing, Convert.ToInt16(result), 0)

query = "SELECT COUNT(\*) FROM tblCourse;"

totalCourse = Int16.Parse(ExecuteScalar(query))

query = "SELECT COUNT(\*) FROM tblCourse WHERE StatusID = 3 ;"

completeCourse = Int16.Parse(ExecuteScalar(query))

query = "SELECT COUNT(\*) FROM tblTeacher;"

totalTeacher = Int16.Parse(ExecuteScalar(query))

query = "SELECT COUNT(\*) FROM tblSubject"

TotalSubject = Int16.Parse(ExecuteScalar(query))

query = "SELECT tblSubject.Subject, SUM(tblCourse.CurrentEnrollment) AS TotalStudent FROM tblCourse INNER JOIN tblSubject ON tblCourse.SubjectID = tblSubject.ID GROUP BY tblSubject.Subject;"

Dim cmd As New OleDbCommand(query, GetConnection())

OpenConnection()

Dim reader As OleDbDataReader = cmd.ExecuteReader()

While reader.Read()

CourseList.Add(reader("Subject").ToString(), Convert.ToInt16(reader("TotalStudent")))

End While

reader.Close()

cmd.CommandText = "SELECT tblSubject.Subject, (SELECT COUNT (\*) FROM tblCourse WHERE tblCourse.SubjectID = tblSubject.ID) AS TotalCourse FROM tblSubject"

reader = cmd.ExecuteReader()

While reader.Read()

SubjectList.Add(reader("Subject").ToString(), Convert.ToInt16(reader("TotalCourse")))

End While

reader.Close()

End Sub

'Courses DataTable

Public Function GetCourseDataTable() As DataTable

Dim query As String = "SELECT tblSubject.Subject, tblTeacher.KhName, (SELECT COUNT(\*) FROM tblRegister WHERE tblRegister.CourseID = tblCourse.ID) AS TotalStudent, tblCourse.StartDate, tblCourse.EndDate, tblCourseStatus.Status

FROM tblTeacher INNER JOIN (tblSubject INNER JOIN (tblCourseStatus INNER JOIN tblCourse ON (tblCourseStatus.ID = tblCourse.StatusID) AND (tblCourseStatus.ID = tblCourse.StatusID)) ON tblSubject.ID = tblCourse.SubjectID) ON tblTeacher.ID = tblCourse.TeacherID

WHERE (((tblCourse.StatusID)<=2));"

Dim dt = ExecuteQuery(query)

Return dt

End Function

Public Function GetNewRegister() As DataTable

Dim query As String = "SELECT \* FROM

(SELECT TOP 10 \*

FROM qtyRegister

ORDER BY ID DESC)

ORDER BY ID ASC;"

Dim dt = ExecuteQuery(query)

Return dt

End Function

Public Function CourseCoomingSoon() As DataTable

Dim query As String = "SELECT DCount( '\*','tblCourse','StartDate >= #' & Format([StartDate],'yyyy-mm-dd hh:nn : ss') & '#') AS [No], tblSubject.Subject, tblCourse.StartDate, tblCourse.CurrentEnrollment

From tblSubject INNER Join tblCourse On tblSubject.ID = tblCourse.SubjectID

Where (((tblCourse.StartDate) > Now()));"

Dim dt = ExecuteQuery(query)

Return dt

End Function

Public Function GetSubjectList() As DataTable

Dim query As String = " SELECT

tblSubject.ID,

tblSubject.Subject, COUNT(tblCourse.ID) AS TotalCourse,

SUM(IIf(tblCourse.StatusID = 3, 1, 0)) AS CompleteCourse,

SUM(tblCourse.CurrentEnrollment) AS SumOfCurrentEnrollment

FROM tblSubject INNER JOIN tblCourse ON tblSubject.ID = tblCourse.SubjectID

GROUP BY tblSubject.ID, tblSubject.Subject;"

Dim dt = ExecuteQuery(query)

Return dt

End Function

End Class

**21.Payment Class**

Imports System.Data.OleDb

Public Class Payment

Inherits ConnectionDB

Public paymentID As String

Public registerID As String

Public amount As Decimal

Public unpaid As Decimal

Public statusID As String

'Method

Public Sub NewPayment(registerID As String, amount As Decimal, unpaid As Decimal)

Dim statusID As String = If(unpaid > 0, "1", "2")

Dim query As String = "INSERT INTO tblPayment(RegisterID, Amount, Unpaid ,StatusID) VALUES(@registerID, @amount, @unpaid ,@statusID);"

OpenConnection()

Dim cmd As New OleDbCommand(query, GetConnection())

cmd.Parameters.AddWithValue("@registerID", registerID)

cmd.Parameters.AddWithValue("@amount", amount)

cmd.Parameters.AddWithValue("@unpaid", unpaid)

cmd.Parameters.AddWithValue("@statusID", statusID)

cmd.ExecuteNonQuery()

cmd.CommandText = "SELECT @@IDENTITY;"

Dim id As String = cmd.ExecuteScalar().ToString()

paymentID = id

Me.amount = amount

Me.unpaid = unpaid

Me.registerID = registerID

Me.statusID = statusID

cmd.Dispose()

CloseConnection()

End Sub

Public Sub GetPaymentByID(registerID As String)

Dim query As String = "SELECT \* FROM tblPayment WHERE RegisterID = @id;"

OpenConnection()

Dim cmd As New OleDbCommand(query, GetConnection())

cmd.Parameters.AddWithValue("@id", registerID)

Dim reader As OleDbDataReader = cmd.ExecuteReader()

If reader.Read() Then

paymentID = reader("ID")

registerID = reader("RegisterID")

amount = Convert.ToDecimal(reader("Amount"))

unpaid = Convert.ToDecimal(reader("Unpaid"))

statusID = reader("StatusID")

End If

reader.Close()

cmd.Dispose()

CloseConnection()

End Sub

Public Sub UpdatePayment(registerID As String)

Dim query As String = "UPDATE tblePayment SET Unpaid = @unpaid WHERE RegisterID = @id;"

Dim cmd As New OleDbCommand(query, GetConnection())

cmd.Parameters.AddWithValue("@id", registerID)

ExecuteNonQuery(cmd)

UpdateStatus(registerID)

End Sub

Private Sub UpdateStatus(registerID As String)

Dim query As String = "UPDATE tblPayment SET StatusID = IIf(Unpaid > 0, 2, 1) WHERE REgisterID = @id;"

Dim cmd As New OleDbCommand(query, GetConnection())

cmd.Parameters.AddWithValue("@id", registerID)

ExecuteNonQuery(cmd)

End Sub

End Class

**22.Register Class**

Imports System.Data.OleDb

Imports System.Web.UI

Public Class Register

Inherits ConnectionDB

Public registerID As String

Public course As Course

Public student As Student

Public discount As Decimal

Public payment As Payment

'Method to register a student for a subject

Public Function GetRegisterData() As DataTable

Dim query As String = "SELECT tblCourse.ID, tblSubject.Subject, tblTeacher.EngName, tblCourse.StartDate, tblSchedule.Schedule, tblRoom.Room, (SELECT COUNT(\*) FROM tblRegister WHERE tblCourse.ID = tblRegister.CourseID) AS TotalStudent

FROM tblTeacher INNER JOIN (tblSchedule INNER JOIN (tblRoom INNER JOIN (tblSubject INNER JOIN (tblCourseStatus INNER JOIN tblCourse ON tblCourseStatus.ID = tblCourse.StatusID) ON tblSubject.ID = tblCourse.SubjectID) ON tblRoom.ID = tblCourse.RoomID) ON tblSchedule.ID = tblCourse.ScheduleID) ON tblTeacher.ID = tblCourse.TeacherID

WHERE (((tblCourse.StatusID)<=2))

ORDER BY tblCourse.ID;"

Dim dt As DataTable = ExecuteQuery(query)

Return dt

End Function

Public Sub New()

' Constructor for Register class

MyBase.New()

course = New Course()

student = New Student()

payment = New Payment()

End Sub

'Register a student for a class

Public Sub RegisterStudent()

Dim query As String = "INSERT INTO tblRegister (CourseID, StudentID, Discount) VALUES (@CourseID, @StudentID, @Discount);"

OpenConnection()

Dim cmd As New OleDbCommand(query, GetConnection())

cmd.Parameters.AddWithValue("@CourseID", course.ID)

cmd.Parameters.AddWithValue("@StudentID", student.id)

cmd.Parameters.AddWithValue("@Discount", discount)

cmd.ExecuteNonQuery()

cmd.CommandText = "SELECT @@IDENTITY;"

Dim id As String = cmd.ExecuteScalar().ToString()

query = "UPDATE tblCourse SET CurrentEnrollment = CurrentEnrollment + 1 WHERE ID = @id"

cmd.CommandText = query

cmd.Parameters.AddWithValue("@id", course.ID)

ExecuteNonQuery(cmd)

GetRegisterByID(id)

End Sub

'Get register by ID

Public Sub GetRegisterByID(id As String)

Dim query As String = "SELECT \* FROM tblRegister WHERE ID = @RegisterID;"

OpenConnection()

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

cmd.Parameters.AddWithValue("@RegisterID", id)

Dim reader As OleDbDataReader = cmd.ExecuteReader()

If reader.Read() Then

registerID = reader("ID").ToString()

course.GetCourseByID(reader("CourseID").ToString())

student.GetStudentByID(reader("StudentID").ToString())

discount = Convert.ToByte(reader("Discount"))

payment.GetPaymentByID(registerID)

End If

reader.Close()

CloseConnection()

End Sub

'Update register information

Public Sub UpdateRegister(id As String)

Dim query As String = "UPDATE tblRegister SET CourseID = @CourseID, StudentID = @StudentID, Discount = @Discount WHERE RegisterID = @RegisterID;"

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

cmd.Parameters.AddWithValue("@CourseID", course.ID)

cmd.Parameters.AddWithValue("@StudentID", student.id)

cmd.Parameters.AddWithValue("@Discount", discount)

cmd.Parameters.AddWithValue("@RegisterID", id)

ExecuteNonQuery(cmd)

End Sub

'Delete a register entry by ID

Public Sub DeleteRegister(id As String)

Dim query As String = "DELETE FROM tblRegister WHERE RegisterID = @RegisterID;"

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

cmd.Parameters.AddWithValue("@RegisterID", id)

ExecuteNonQuery(cmd)

query = "UPDATE tblCourse SET CurrentEnrollment = CurrentEnrollment - 1 WHERE ID IN (SELECT ClassID FROM tblRegister WHERE ID = @id"

cmd.CommandText = query

cmd.Parameters.AddWithValue("@id", id)

ExecuteNonQuery(cmd)

End Sub

'Insert DATA TO combobox

Public Function GetSubjectList() As Dictionary(Of String, Integer)

Dim subjectList As New Dictionary(Of String, Integer)

Dim query As String = "SELECT DISTINCT tblSubject.Subject, tblSubject.ID

FROM tblSubject INNER JOIN tblCourse ON tblSubject.ID = tblCourse.SubjectID

GROUP BY tblSubject.Subject, tblSubject.ID, tblCourse.StatusID, tblCourse.SubjectID

HAVING (((tblCourse.StatusID)<=2));"

OpenConnection()

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

Dim reader As OleDbDataReader = cmd.ExecuteReader()

While reader.Read()

subjectList.Add(reader("Subject"), Integer.Parse(reader("ID")))

End While

subjectList.Add("ជ្រើសរើសវគ្គសិក្សា", -1)

reader.Close()

CloseConnection()

Return subjectList

End Function

Public Function GetTimeList(subjectID As String) As Dictionary(Of String, Integer)

Dim TimeList As New Dictionary(Of String, Integer)

Dim query As String = "SELECT tblSchedule.Schedule, tblCourse.ID

FROM tblSchedule INNER JOIN tblCourse ON tblSchedule.ID = tblCourse.ScheduleID

WHERE (((tblCourse.SubjectID)=@ID) AND ((tblCourse.StatusID)<=2))

ORDER BY tblSchedule.Schedule;"

OpenConnection()

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

cmd.Parameters.AddWithValue("@ID", subjectID)

Dim reader As OleDbDataReader = cmd.ExecuteReader()

While reader.Read()

TimeList.Add(reader("Schedule"), Integer.Parse(reader("ID")))

End While

TimeList.Add("ជ្រើសរើសម៉ោង", -1)

reader.Close()

CloseConnection()

Return TimeList

End Function

End Class

**23.Report Class**

Imports System.Data.OleDb

Public Class Report

Inherits ConnectionDB

Public Function GetTeacherReport() As DataTable

Dim query As String = "SELECT tblTeacher.ID, tblTeacher.KhName, tblTeacher.engName, tblTeacher.Address, tblTeacher.Phone, tblTeacher.Email, tblTeacher.StartDate, tblTeacher.IsActive FROM tblTeacher;"

OpenConnection()

Dim cmd As New OleDbCommand(query, GetConnection())

Dim reader As OleDbDataReader = cmd.ExecuteReader()

Dim dt As New DataTable()

dt.Columns.Add("ID", GetType(String))

dt.Columns.Add("KhName", GetType(String))

dt.Columns.Add("engName", GetType(String))

dt.Columns.Add("Address", GetType(String))

dt.Columns.Add("Phone", GetType(String))

dt.Columns.Add("Email", GetType(String))

dt.Columns.Add("StartDate", GetType(String)) ' Change to String for formatting

dt.Columns.Add("IsActive", GetType(String))

While reader.Read()

Dim formattedDate As String = Convert.ToDateTime(reader("StartDate")).ToString("dd/MM/yyyy") ' Example format

Dim formattedActive As String = If(reader("IsActive").ToString().ToLower() = "true", "សកម្ម", "អសកម្ម")

dt.Rows.Add(reader("ID"), reader("KhName"), reader("EngName"), reader("Address"),

reader("Phone"), reader("Email"), formattedDate, formattedActive)

End While

Return dt

End Function

Public Function GetStudentReport() As DataTable

Dim query As String = "SELECT tblStudent.ID, tblStudent.KhName, tblStudent.EngName, tblStudent.Gender, tblStudent.DateOfBirth, tblStudent.Address, tblStudent.Phone, tblSubject.Subject

FROM ((tblStudent INNER JOIN tblRegister ON tblStudent.ID = tblRegister.StudentID) INNER JOIN tblCourse ON tblRegister.CourseID = tblCourse.ID) INNER JOIN tblSubject ON tblCourse.SubjectID = tblSubject.ID;"

OpenConnection()

Dim cmd As New OleDbCommand(query, GetConnection())

Dim reader As OleDbDataReader = cmd.ExecuteReader()

Dim dt As New DataTable()

dt.Columns.Add("ID", GetType(Integer))

dt.Columns.Add("KhName", GetType(String))

dt.Columns.Add("EngName", GetType(String))

dt.Columns.Add("Gender", GetType(String))

dt.Columns.Add("Address", GetType(String))

dt.Columns.Add("Phone", GetType(String))

dt.Columns.Add("DateOfBirth", GetType(String)) ' Change to String for formatting

dt.Columns.Add("Subject", GetType(String))

While reader.Read()

Dim formattedDate As String = Convert.ToDateTime(reader("DateOfBirth")).ToString("dd/MM/yyyy") ' Example format

dt.Rows.Add(reader("ID"), reader("KhName"), reader("EngName"), reader("Gender"), reader("Address"),

reader("Phone"), formattedDate, reader("Subject"))

End While

Return dt

End Function

Public Function GetCourseReport() As DataTable

Dim query As String = "SELECT tblCourse.ID, tblSubject.Subject, tblTeacher.KhName, tblSchedule.Schedule, tblRoom.Room, tblCourse.StartDate,

tblCourse.EndDate, tblCourse.CurrentEnrollment, tblCourseStatus.Status

FROM tblCourseStatus INNER JOIN (tblTeacher INNER JOIN (tblSchedule

INNER JOIN (tblRoom INNER JOIN (tblSubject INNER JOIN tblCourse ON tblSubject.ID = tblCourse.[SubjectID])

ON tblRoom.ID = tblCourse.RoomID) ON tblSchedule.ID = tblCourse.ScheduleID) ON tblTeacher.ID = tblCourse.TeacherID)

ON (tblCourseStatus.ID = tblCourse.StatusID) AND (tblCourseStatus.ID = tblCourse.StatusID);"

OpenConnection()

Dim cmd As New OleDbCommand(query, GetConnection())

Dim reader As OleDbDataReader = cmd.ExecuteReader()

Dim dt As New DataTable()

dt.Columns.Add("ID", GetType(Integer))

dt.Columns.Add("Subject", GetType(String))

dt.Columns.Add("KhName", GetType(String))

dt.Columns.Add("Schedule", GetType(String))

dt.Columns.Add("Room", GetType(String))

dt.Columns.Add("StartDate", GetType(String))

dt.Columns.Add("EndDate", GetType(String)) ' Change to String for formatting

dt.Columns.Add("CurrentEnrollment", GetType(Integer))

dt.Columns.Add("Status", GetType(String))

While reader.Read()

Dim startDate As String = Convert.ToDateTime(reader("StartDate")).ToString("dd/MM/yyyy") ' Example format

Dim EndDate As String = Convert.ToDateTime(reader("EndDate")).ToString("dd/MM/yyyy")

dt.Rows.Add(reader(0), reader(1), reader(2), reader(3), reader(4),

startDate, EndDate, reader(7), reader(8))

End While

Return dt

End Function

Public Function GetSubjectReport() As DataTable

Dim query As String = "SELECT tblSubject.ID, tblSubject.Subject, tblSubject.Description,

tblSubject.CreditHours, tblSubject.BasePrice, (SELECT COUNT(\*)

FROM tblCourse WHERE tblCourse.SubjectID = tblSubject.ID) AS TotalCourse,

(SELECT SUM(IIf(IsNull(CurrentEnrollment), 0, CurrentEnrollment))

FROM tblCourse WHERE tblCourse.SubjectID = tblSubject.ID) AS TotalStudent

FROM tblSubject;"

OpenConnection()

Dim cmd As New OleDbCommand(query, GetConnection())

Dim reader As OleDbDataReader = cmd.ExecuteReader()

Dim dt As New DataTable()

dt.Columns.Add("ID", GetType(Integer))

dt.Columns.Add("Subject", GetType(String))

dt.Columns.Add("Description", GetType(String))

dt.Columns.Add("CreditHours", GetType(String))

dt.Columns.Add("BasePrice", GetType(String))

dt.Columns.Add("TotalCourse", GetType(String))

dt.Columns.Add("TotalStudent", GetType(String)) ' Change to String for formatting

While reader.Read()

Dim totalStudent = If(reader("TotalStudent").ToString() = String.Empty, 0, Convert.ToInt16(reader("TotalStudent")))

dt.Rows.Add(reader(0), reader(1), reader(2), reader(3), reader(4),

reader(5), totalStudent)

End While

Return dt

End Function

Public Function GetPaymentReport() As DataTable

Dim query As String = "SELECT tblStudent.ID, tblStudent.KhName, tblSubject.Subject, tblSubject.BasePrice,

tblRegister.Discount,tblPayment.Amount,tblPayment.Unpaid,tblPaymentStatus.Status FROM tblStudent INNER JOIN ((tblSubject INNER JOIN tblCourse ON tblSubject.ID = tblCourse.SubjectID) INNER JOIN ((tblPaymentStatus INNER JOIN tblPayment ON tblPaymentStatus.ID = tblPayment.StatusID) INNER JOIN tblRegister ON tblPayment.RegisterID = tblRegister.ID) ON tblCourse.ID = tblRegister.CourseID) ON tblStudent.ID = tblRegister.StudentID;"

OpenConnection()

Dim cmd As New OleDbCommand(query, GetConnection())

Dim reader As OleDbDataReader = cmd.ExecuteReader()

Dim dt As New DataTable()

dt.Columns.Add("ID", GetType(String))

dt.Columns.Add("KhName", GetType(String))

dt.Columns.Add("Subject", GetType(String))

dt.Columns.Add("BasePrice", GetType(Decimal))

dt.Columns.Add("Discount", GetType(Decimal))

dt.Columns.Add("Amount", GetType(Decimal))

dt.Columns.Add("Unpaid", GetType(Decimal)) ' Change to String for formatting

dt.Columns.Add("Status", GetType(String))

While reader.Read()

dt.Rows.Add(reader(0), reader(1), reader(2), Convert.ToDecimal(reader(3)), Convert.ToDecimal(reader(4)), Convert.ToDecimal(reader(5)), Convert.ToDecimal(reader(6)), reader(7))

End While

Return dt

End Function

End Class

**24.Room Class**

Imports System.Data.OleDb

Imports System.Diagnostics.Eventing.Reader

Public Class Room

Inherits ConnectionDB

Public id As Integer

Public room As String

Public Function GetRoomList() As DataTable

Dim query As String = "SELECT \* FROM tblRoom;"

Dim dt As DataTable = ExecuteQuery(query)

Return dt

End Function

Public Sub GetRoomByID(id As Integer)

Dim query As String = "SELECT \* FROM tblRoom WHERE ID = " & id & ";"

OpenConnection()

Dim cmd As New OleDbCommand(query, GetConnection())

Dim reader As OleDbDataReader = cmd.ExecuteReader()

If reader.Read() Then

Me.id = reader(0)

Me.room = reader(1)

End If

End Sub

End Class

**25.Student Class**

Imports System.ComponentModel

Imports System.Data.OleDb

Public Class Student

Inherits ConnectionDB

Public id As String

Public khName As String

Public engName As String

Public DateOfBirth As Date

Public gender As String

Public phone As String

Public address As String

Public picture As String

Public Sub New()

' Constructor for Student class

MyBase.New()

End Sub

Public Function GetStudentData() As DataTable

Dim query As String = "SELECT tblStudent.ID, tblStudent.KhName, tblStudent.EngName, tblStudent.Gender, tblStudent.DateOfBirth, tblStudent.Address , tblStudent.Phone FROM tblStudent;"

Dim dt As DataTable = ExecuteQuery(query)

Return dt

End Function

Public Sub AddStudent(khName As String, EngName As String, Gender As String, DOB As Date, Address As String, Phone As String, Picture As String)

Dim query As String = "INSERT INTO tblStudent(KhName , EngName ,Gender , DateOfBirth , Address , Phone ,Picture )

VALUES (@KhName, @EngName, @Gender, @DateOfBirth, @Address, @Phone, @Picture)"

OpenConnection()

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

cmd.Parameters.AddWithValue("@KhName", khName)

cmd.Parameters.AddWithValue("@EngName", EngName)

cmd.Parameters.AddWithValue("@Gender", Gender)

cmd.Parameters.AddWithValue("@DateOfBirth", DOB)

cmd.Parameters.AddWithValue("@Address", Address)

cmd.Parameters.AddWithValue("@Phone", Phone)

cmd.Parameters.AddWithValue("@Picter", Picture)

cmd.ExecuteNonQuery()

cmd.CommandText = "SELECT @@IDENTITY;"

Dim id As String = cmd.ExecuteScalar().ToString()

GetStudentByID(Convert.ToInt32(id))

End Sub

Public Sub UpdateStudent(studentID As Integer, khName As String, EngName As String, Gender As String, DOB As Date, Address As String, Phone As String, Picture As String)

Dim query As String = "UPDATE tblStudent

SET KhName = @KhName, EngName = @EngName, Gender = @Gender, DateOfBirth = @DateOfBirth,

Address = @Address, Phone = @Phone, Picture = @Picture

WHERE ID = @StudentID"

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

cmd.Parameters.AddWithValue("@KhName", khName)

cmd.Parameters.AddWithValue("@EngName", EngName)

cmd.Parameters.AddWithValue("@Gender", Gender)

cmd.Parameters.AddWithValue("@DateOfBirth", DOB)

cmd.Parameters.AddWithValue("@Address", Address)

cmd.Parameters.AddWithValue("@Phone", Phone)

cmd.Parameters.AddWithValue("@Picture", Picture)

cmd.Parameters.AddWithValue("@StudentID", studentID) ' Ensure you reference the correct ID field

ExecuteNonQuery(cmd)

End Sub

Public Sub DeleteStudent()

Dim query As String = "DELETE FROM tblStudent WHERE ID = @ID;"

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

cmd.Parameters.AddWithValue("@ID", Me.id)

ExecuteNonQuery(cmd)

MessageBox.Show("Student with ID: " & Me.id & " has been deleted successfully.", "Success", MessageBoxButtons.OK, MessageBoxIcon.Information)

End Sub

Public Sub GetStudentByID(studentID As Integer)

Dim query As String = "SELECT \* FROM tblStudent WHERE ID = @StudentID"

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

cmd.Parameters.AddWithValue("@StudentID", studentID)

OpenConnection()

Dim reader As OleDbDataReader = cmd.ExecuteReader()

While reader.Read()

Me.id = reader("ID").ToString()

Me.khName = reader("KhName").ToString()

Me.engName = reader("EngName").ToString()

Me.DateOfBirth = reader("DateOfBirth").ToString()

Me.gender = reader("Gender").ToString()

Me.phone = reader("Phone").ToString()

Me.address = reader("Address").ToString()

Me.picture = reader("Picture").ToString()

End While

End Sub

Public Function GetAddressData() As ArrayList

Dim addressList As New ArrayList()

Dim query As String = "SELECT \* FROM tblProvince;"

OpenConnection()

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

Dim reader As OleDbDataReader = cmd.ExecuteReader()

While reader.Read()

addressList.Add(reader(0).ToString)

End While

reader.Close()

cmd.Dispose()

CloseConnection()

Return addressList

End Function

End Class

**26.Subject Clas**

Imports System.Data.OleDb

Public Class Subject

Inherits ConnectionDB

Public Sub New()

' Constructor for Course class

MyBase.New()

End Sub

Public ID As String

Public Subject As String

Public Description As String

Public CreditHours As Integer

Public basePrice As Decimal

Public Function GetSubjectData() As DataTable

Dim query As String = "SELECT

tblSubject.ID,

tblSubject.Subject,

tblSubject.Description,

tblSubject.CreditHours,

tblSubject.BasePrice,

(SELECT COUNT(\*) FROM tblCourse WHERE tblCourse.SubjectID = tblSubject.ID) AS AllCourse,

(SELECT COUNT(\*) FROM tblCourse WHERE StatusID = 3 AND tblCourse.SubjectID = tblSubject.ID) AS CompleteClass

FROM tblSubject

GROUP BY

tblSubject.ID,

tblSubject.Subject,

tblSubject.Description,

tblSubject.CreditHours,

tblSubject.BasePrice;"

Dim dt As DataTable = ExecuteQuery(query)

Return dt

End Function

Public Sub GetSubjectByID(courseID As String)

Dim query As String = "SELECT \* FROM tblSubject WHERE ID = @ID"

OpenConnection()

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

cmd.Parameters.AddWithValue("@ID", courseID)

Dim reader As OleDbDataReader = cmd.ExecuteReader()

While reader.Read()

Me.ID = reader("ID").ToString()

Me.Subject = reader("Subject").ToString()

Me.Description = reader("Description").ToString()

Me.CreditHours = Convert.ToInt32(reader("CreditHours"))

Me.basePrice = Convert.ToDecimal(reader("BasePrice"))

End While

reader.Close()

CloseConnection()

End Sub

Public Sub GetSubjectByName(subject As String)

Dim query As String = "SELECT \* FROM tblSubject WHERE Subject = @subject"

OpenConnection()

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

cmd.Parameters.AddWithValue("@subject", Me.Subject)

Dim reader As OleDbDataReader = cmd.ExecuteReader()

While reader.Read()

Me.ID = reader("ID").ToString()

Me.Subject = reader("Subject").ToString()

Me.Description = reader("Description").ToString()

Me.CreditHours = Convert.ToInt32(reader("CreditHours"))

Me.basePrice = Convert.ToDecimal(reader("BasePrice"))

End While

reader.Close()

CloseConnection()

End Sub

Public Sub AddSubject(subject As String, description As String, creditHours As Integer, basePrice As Decimal)

Dim query As String = "INSERT INTO tblSubject (Subject, Description, CreditHours, BasePrice) VALUES (@subject, @Description, @CreditHours, @BasePrice)"

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

cmd.Parameters.AddWithValue("@subject", subject)

cmd.Parameters.AddWithValue("@Description", description)

cmd.Parameters.AddWithValue("@CreditHours", creditHours)

cmd.Parameters.AddWithValue("@BasePrice", basePrice)

ExecuteNonQuery(cmd)

End Sub

Public Sub DeleteSubject()

Dim query As String = "DELETE FROM tblSubject WHERE ID = @ID"

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

cmd.Parameters.AddWithValue("@ID", Me.ID)

ExecuteNonQuery(cmd)

End Sub

Public Sub UpdateSubject()

Dim query As String = "UPDATE tblSubject SET Subject = @subject, Description = @Description, CreditHours = @CreditHours, BasePrice = @BasePrice WHERE ID = @ID"

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

cmd.Parameters.AddWithValue("@subject", Me.Subject)

cmd.Parameters.AddWithValue("@Description", Me.Description)

cmd.Parameters.AddWithValue("@CreditHours", Me.CreditHours)

cmd.Parameters.AddWithValue("@BasePrice", Me.basePrice)

cmd.Parameters.AddWithValue("@ID", Me.ID)

ExecuteNonQuery(cmd)

End Sub

End Class

**27.Teacher Class**

Imports System.Data.OleDb

Public Class Teacher

Inherits ConnectionDB

Public Sub New()

' Constructor for Teacher class

MyBase.New()

End Sub

Public TeacherID As String

Public KhName As String

Public EngName As String

Public Gender As String

Public DoB As Date

Public Address As String

Public Phone As String

Public Email As String

Public Picture As String

Public Function GetTeacherData() As DataTable

Dim query As String = "SELECT tblTeacher.ID, tblTeacher.KhName, tblTeacher.EngName, tblTeacher.DOB, tblTeacher.Address, tblTeacher.Email, tblTeacher.Phone FROM tblTeacher;"

Dim dt As DataTable = ExecuteQuery(query)

Return dt

End Function

Public Sub AddTeacher()

Dim query As String = "INSERT INTO tblTeacher(khName , EngName ,Gender , DOB , Address , Email , Phone ,Picture ,IsActive)

VALUES (@KhName, @EngName, @Gender, @DoB, @Address, @Email, @Phone, @Picture, 1)"

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

cmd.Parameters.AddWithValue("@KhName", Me.KhName)

cmd.Parameters.AddWithValue("@EngName", Me.EngName)

cmd.Parameters.AddWithValue("@Gender", Me.Gender)

cmd.Parameters.AddWithValue("@DoB", Me.DoB)

cmd.Parameters.AddWithValue("@Address", Me.Address)

cmd.Parameters.AddWithValue("@Email", Me.Email)

cmd.Parameters.AddWithValue("@Phone", Me.Phone)

cmd.Parameters.AddWithValue("@Picter", Me.Picture)

ExecuteNonQuery(cmd)

End Sub

Public Sub UpdateTeacher()

Dim query As String = "UPDATE tblTeacher SET KhName = @KhName, EngName = @engName, Gender = @Gender, DOB = @DOB, Address = @Address, Email = @Email, Phone = @Phone, Picture = @Picture WHERE ID = @ID"

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

cmd.Parameters.AddWithValue("@khName", KhName)

cmd.Parameters.AddWithValue("@EngName", EngName)

cmd.Parameters.AddWithValue("@Gender", Gender)

cmd.Parameters.AddWithValue("@DOB", DoB)

cmd.Parameters.AddWithValue("@Address", Me.Address)

cmd.Parameters.AddWithValue("@Email", Email)

cmd.Parameters.AddWithValue("@Phone", Phone)

cmd.Parameters.AddWithValue("@Picture", Picture)

cmd.Parameters.AddWithValue("@ID", TeacherID)

ExecuteNonQuery(cmd)

End Sub

Public Sub DeleteTeacher(teacherID As String)

Dim query As String = "DELETE FROM tblTeacher WHERE ID = @ID;"

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

cmd.Parameters.AddWithValue("@ID", teacherID)

ExecuteNonQuery(cmd)

End Sub

Public Sub GetTeacherByID(ID As String)

Dim query As String = "SELECT \* FROM tblTeacher WHERE ID = @ID;"

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

cmd.Parameters.AddWithValue("@ID", ID)

OpenConnection()

Dim reader As OleDbDataReader = cmd.ExecuteReader()

While reader.Read()

Me.TeacherID = reader("ID").ToString()

Me.KhName = reader("KhName").ToString()

Me.EngName = reader("EngName").ToString()

Me.Address = reader("Address").ToString()

Me.DoB = Convert.ToDateTime(reader("DOB"))

Me.Gender = reader("Gender").ToString()

Me.Phone = reader("Phone").ToString()

Me.Email = reader("Email").ToString()

If Not IsDBNull(reader("Picture")) Then

Me.Picture = reader("Picture").ToString()

Else

Me.Picture = String.Empty

End If

End While

reader.Close()

CloseConnection()

End Sub

Public Sub GetTeacherByName(name As String)

Dim query As String = "SELECT \* FROM tblTeacher WHERE KhName = @khName;"

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

cmd.Parameters.AddWithValue("@khName", name)

OpenConnection()

Dim reader As OleDbDataReader = cmd.ExecuteReader()

While reader.Read()

Me.TeacherID = reader("ID").ToString()

Me.KhName = reader("KhName").ToString()

Me.EngName = reader("EngName").ToString()

Me.Address = reader("Address").ToString()

Me.DoB = Convert.ToDateTime(reader("DOB"))

Me.Gender = reader("Gender").ToString()

Me.Phone = reader("Phone").ToString()

Me.Email = reader("Email").ToString()

If Not IsDBNull(reader("Picture")) Then

Me.Picture = reader("Picture").ToString()

Else

Me.Picture = String.Empty

End If

End While

reader.Close()

CloseConnection()

End Sub

Public Function GetAddressData() As ArrayList

Dim addressList As New ArrayList()

Dim query As String = "SELECT \* FROM tblProvince;"

Dim cmd As OleDbCommand = New OleDbCommand(query, GetConnection())

OpenConnection()

Dim reader As OleDbDataReader = cmd.ExecuteReader()

While reader.Read()

addressList.Add(reader(0).ToString)

End While

reader.Close()

CloseConnection()

Return addressList

End Function

End Class

**28.ThemeColor**

Public Class ThemeColor

Public Shared menuBackColor As Color = Color.FromArgb(5, 43, 80)

Public Shared activeColor As Color = Color.FromArgb(17, 139, 254)

Public Shared DashboardColor As Color = Color.FromArgb(63, 114, 236)

Public Shared CourseColor As Color = Color.FromArgb(143, 135, 241)

'Public Shared btnStudenBackColor As Color =

Public Shared Function ChangeColorBrightness(color As Color, correctionFactor As Double) As Color

Dim red As Double = color.R

Dim green As Double = color.G

Dim blue As Double = color.B

If correctionFactor < 0 Then

correctionFactor += 1

red \*= correctionFactor

green \*= correctionFactor

blue \*= correctionFactor

Else

red = (255 - red) \* correctionFactor + red

green = (255 - green) \* correctionFactor + green

blue = (255 - blue) \* correctionFactor + blue

End If

Return Color.FromArgb(color.A, Math.Round(red), Math.Round(green), Math.Round(blue))

End Function

End Class