```
1 Imports Guna.UI2.WinForms
2 Imports System.IO
3 Imports MySql.Data.MySqlClient
4 Imports System.Text.RegularExpressions
 5 Imports System.Windows.Forms.VisualStyles.VisualStyleElement.StartPanel
6
7 Public Class managebooks
8
       Dim myconn As New MySqlConnection("Data
         Source=localhost;userid=root;password=12345678;database = library")
9
       Dim rowNumber = 1
       Private Sub Guna2Button4_Click(sender As Object, e As EventArgs)
10
         Handles Guna2Button4.Click
11
           Guna2GroupBox1.Visible = True
12
       End Sub
       Private Sub UpdateRowNumbers()
13
14
           ' Reset the row number
           Dim rowNumber = 1
15
16
           For Each row As DataGridViewRow In Guna2DataGridView1.Rows
17
               row.Cells("No").Value = rowNumber
18
               rowNumber += 1
19
           Next
20
       End Sub
       Private Sub load_books()
21
           rowNumber = 1
22
23
           Guna2DataGridView1.Rows.Clear()
24
           Try
               myconn.Open()
25
26
               Dim cmd As New MySqlCommand("SELECT * FROM books WHERE
                 Bookname like '%" + Guna2TextBox11.Text + "%' OR AccessionNo >
                  like '%" + Guna2TextBox11.Text + "%' OR Authorname like '%" >
                  + Guna2TextBox11.Text + "%'", myconn)
27
               Dim dr As MySqlDataReader = cmd.ExecuteReader()
28
               Do While dr.Read = True
                   Guna2DataGridView1.Rows.Add(dr("BookNo"), rowNumber, dr
29
                      ("BookName"), dr("Authorname"), dr("Publicationyear"),
                      dr("AccessionNo"), dr("NoCopies"))
30
                   rowNumber += 1
31
               Loop
32
               myconn.Close()
33
           Catch ex As Exception
34
               MsgBox(ex.Message)
35
               myconn.Close()
36
           End Try
37
       End Sub
38
       Private Function BooksFields()
39
           BooksFields = False
           Dim currentYear As Integer = DateTime.Now.Year
40
           If Guna2TextBox1.Text = "" Or String.IsNullOrWhiteSpace
41
             (Guna2TextBox1.Text) Then
```

```
...BATTLE\LIBRARY MANAGEMENT FINAL BATTLE\managebooks.vb
                MsgBox("Bookname cannot be empty.", MsgBoxStyle.Exclamation,
                  "Warning")
                Guna2TextBox1.Focus()
43
44
            ElseIf Guna2TextBox2.Text = "" Or String.IsNullOrWhiteSpace
                                                                                 P
              (Guna2TextBox2.Text) Then
                MsgBox("Authorname cannot be empty.", MsgBoxStyle.Exclamation, >>
45
                    "Warning")
46
                Guna2TextBox2.Focus()
            ElseIf Guna2TextBox3.Text = "" Or String.IsNullOrWhiteSpace
47
                                                                                 P
              (Guna2TextBox3.Text) Then
                MsgBox("Publication year cannot be empty.",
48
                  MsgBoxStyle.Exclamation, "Warning")
49
                Guna2TextBox3.Focus()
50
            ElseIf Guna2TextBox4.Text = "" Or String.IsNullOrWhiteSpace
              (Guna2TextBox4.Text) Then
51
                MsgBox("Accession No. cannot be empty.",
                  MsgBoxStyle.Exclamation, "Warning")
52
                Guna2TextBox4.Focus()
53
            ElseIf Guna2TextBox5.Text = "" Or String.IsNullOrWhiteSpace
              (Guna2TextBox5.Text) Then
                MsgBox("copies cannot be empty.", MsgBoxStyle.Exclamation,
54
                  "Warning")
55
                Guna2TextBox5.Focus()
            ElseIf Guna2TextBox3.Text < 1000 OrElse Guna2TextBox3.Text >
56
              currentYear Then
57
                MsgBox("Publication year must be a valid year between 1000 and >
                   the current year.", MsgBoxStyle.Exclamation, "Warning")
58
                Guna2TextBox3.Focus()
59
            ElseIf Guna2TextBox4.Text <= 0 Then</pre>
                MsgBox("Accession No. must be a positive number greater than
60
                  zero.", MsgBoxStyle.Exclamation, "Warning")
                Guna2TextBox4.Focus()
61
62
            ElseIf Guna2TextBox5.Text <= 0 Then</pre>
63
                MsqBox("Copies must be a positive number greater than zero.", >
                  MsgBoxStyle.Exclamation, "Warning")
64
                Guna2TextBox5.Focus()
65
66
            Else
                Return True
67
            End If
68
        End Function
69
70
        Private Sub Guna2Button1_Click(sender As Object, e As EventArgs)
          Handles Guna2Button1.Click
71
            If BooksFields() = False Then
72
                Exit Sub
73
74
            If MsgBox("Are you sure you want to add this book?",
              MsgBoxStyle.YesNo, "Update Books") = MsgBoxResult.Yes Then
75
                If ValidateTableData("SELECT * FROM books WHERE AccessionNo = >>
```

```
...BATTLE\LIBRARY MANAGEMENT FINAL BATTLE\managebooks.vb
                                                                                  3
                   '" & Guna2TextBox4.Text & "'") = True Then
76
                     MsgBox("Book already added.", MsgBoxStyle.Exclamation,
                       "Warning")
 77
                     Exit Sub
 78
                 Else
 79
                     myconn.Open()
 80
                     Dim cmd As New MySqlCommand("INSERT INTO books (Bookname,
                       Authorname, Publicationyear, AccessionNo, NoCopies)
                       VALUES (@Bookname, @Authorname, @Publicationyear,
                                                                                  P
                       @AccessionNo, @NoCopies)", myconn)
 81
                     Try
 82
                         cmd.Parameters.AddWithValue("@Bookname",
                        Guna2TextBox1.Text)
 83
                         cmd.Parameters.AddWithValue("@Authorname",
                        Guna2TextBox2.Text)
 84
                         cmd.Parameters.AddWithValue("@Publicationyear",
                        Guna2TextBox3.Text)
85
                         cmd.Parameters.AddWithValue("@AccessionNo",
                        Guna2TextBox4.Text)
86
                         cmd.Parameters.AddWithValue("@NoCopies",
                        Guna2TextBox5.Text)
 87
                         cmd.ExecuteNonQuery()
 88
                         MsgBox("Book Added Successfuly",
                        MsgBoxStyle.Information, "Add Books")
 89
                         myconn.Close()
 90
                     Catch ex As Exception
                         MsgBox(ex.Message)
 91
 92
                         myconn.Close()
 93
                     End Try
 94
                 End If
95
                 Guna2TextBox2.Clear()
 96
                 Guna2TextBox1.Clear()
 97
                 Guna2TextBox3.Clear()
 98
                 Guna2TextBox4.Clear()
99
                 Guna2TextBox5.Clear()
                 Guna2GroupBox1.Visible = False
100
                 load_books()
101
102
            End If
103
104
        End Sub
105
106
        Private Sub managebooks_Load(sender As Object, e As EventArgs) Handles →
           MyBase.Load
107
            load_books()
108
        End Sub
109
110
        Private Sub Guna2DataGridView1_CellContentClick(sender As Object, e As →
           DataGridViewCellEventArgs) Handles
          Guna2DataGridView1.CellContentClick
```

```
...BATTLE\LIBRARY MANAGEMENT FINAL BATTLE\managebooks.vb
111
             If Guna2DataGridView1.CurrentCell.OwningColumn.Name = "dgvEdit"
112
                 Guna2GroupBox2.Visible = True
113
                 Try
114
                     myconn.Open()
115
                     Dim cmd As New MySqlCommand("SELECT * FROM books WHERE
                       BookNo = '" & Guna2DataGridView1.CurrentRow.Cells
                                                                                  P
                       (0).Value.ToString() & "'", myconn)
116
                     Dim dr As MySqlDataReader = cmd.ExecuteReader()
                     If dr.Read Then
117
                         Guna2TextBox6.Text = dr("BookName")
118
                         Guna2TextBox7.Text = dr("Authorname")
119
                         Guna2TextBox8.Text = dr("Publicationyear")
120
121
                         Guna2TextBox9.Text = dr("AccessionNo")
                         Guna2TextBox10.Text = dr("NoCopies")
122
123
                     End If
                     myconn.Close()
124
125
                 Catch ex As Exception
                     MsgBox(ex.Message)
126
127
                     myconn.Close()
128
                 End Try
129
                 Guna2TextBox6.Enabled = False
130
                 Guna2TextBox7.Enabled = False
                 Guna2TextBox8.Enabled = False
131
                 Guna2TextBox9.Enabled = False
132
133
                 Guna2TextBox10.Enabled = False
                 Guna2Button6.Visible = False
134
135
             End If
136
        End Sub
137
138
139
        Private Sub Guna2Button5_Click(sender As Object, e As EventArgs)
          Handles Guna2Button5.Click
140
             Guna2GroupBox1.Visible = False
             Guna2TextBox1.Clear()
141
             Guna2TextBox2.Clear()
142
             Guna2TextBox3.Clear()
143
144
             Guna2TextBox4.Clear()
             Guna2TextBox5.Clear()
145
146
        End Sub
147
        Private Sub Guna2Button2_Click(sender As Object, e As EventArgs)
148
          Handles Guna2Button2.Click
149
             Guna2GroupBox2.Visible = False
150
        End Sub
151
        Private Sub Guna2Button3_Click(sender As Object, e As EventArgs)
152
          Handles Guna2Button3.Click
             Guna2TextBox6.Enabled = True
153
```

```
...BATTLE\LIBRARY MANAGEMENT FINAL BATTLE\managebooks.vb
                                                                                 5
154
            Guna2TextBox7.Enabled = True
155
            Guna2TextBox8.Enabled = True
156
            Guna2TextBox9.Enabled = True
157
            Guna2TextBox10.Enabled = True
            Guna2Button6.Visible = True
158
159
        End Sub
160
161
        Private Sub Guna2TextBox6_TextChanged(sender As Object, e As
162
          EventArgs) Handles Guna2TextBox6.TextChanged
163
            Guna2Button3.Visible = True
        End Sub
164
165
166
        Private Sub Guna2TextBox7_TextChanged(sender As Object, e As
                                                                                 P
          EventArgs) Handles Guna2TextBox7.TextChanged
167
             Guna2Button3.Visible = True
        End Sub
168
169
170
        Private Sub Guna2TextBox8_TextChanged(sender As Object, e As
          EventArgs) Handles Guna2TextBox8.TextChanged
            Guna2Button3.Visible = True
171
172
        End Sub
173
        Private Sub Guna2TextBox9_TextChanged(sender As Object, e As
174
          EventArgs) Handles Guna2TextBox9.TextChanged
175
            Guna2Button3.Visible = True
        End Sub
176
177
        Private Sub Guna2TextBox10_TextChanged(sender As Object, e As
178
          EventArgs) Handles Guna2TextBox10.TextChanged
            Guna2Button3.Visible = True
179
180
        End Sub
181
        Private Function EditbooksFields()
182
            EditbooksFields = False
183
             Dim currentYear As Integer = DateTime.Now.Year
             If Guna2TextBox6.Text = "" Or String.IsNullOrWhiteSpace
184
               (Guna2TextBox6.Text) Then
185
                 MsgBox("Bookname cannot be empty.", MsgBoxStyle.Exclamation,
                   "Warning")
                 Guna2TextBox6.Focus()
186
            ElseIf Guna2TextBox7.Text = "" Or String.IsNullOrWhiteSpace
187
               (Guna2TextBox7.Text) Then
188
                 MsgBox("Authorname cannot be empty.", MsgBoxStyle.Exclamation, >
                    "Warning")
                 Guna2TextBox7.Focus()
189
            ElseIf Guna2TextBox8.Text = "" Or String.IsNullOrWhiteSpace
190
               (Guna2TextBox8.Text) Then
                 MsgBox("Publication year cannot be empty.",
191
                                                                                 P
                   MsgBoxStyle.Exclamation, "Warning")
```

```
...BATTLE\LIBRARY MANAGEMENT FINAL BATTLE\managebooks.vb
                                                                                    6
192
                 Guna2TextBox8.Focus()
193
             ElseIf Guna2TextBox9.Text = "" Or String.IsNullOrWhiteSpace
                                                                                    P
               (Guna2TextBox9.Text) Then
194
                 MsgBox("Accession No. cannot be empty.",
                                                                                    P
                   MsgBoxStyle.Exclamation, "Warning")
195
                 Guna2TextBox9.Focus()
             ElseIf Guna2TextBox10.Text = "" Or String.IsNullOrWhiteSpace
196
               (Guna2TextBox10.Text) Then
                 MsgBox("copies cannot be empty.", MsgBoxStyle.Exclamation,
197
                   "Warning")
                 Guna2TextBox10.Focus()
198
             ElseIf Guna2TextBox8.Text < 1000 OrElse Guna2TextBox8.Text >
199
               currentYear Then
200
                 MsgBox("Publication year must be a valid year between 1000 and >>
                    the current year.", MsgBoxStyle.Exclamation, "Warning")
201
                 Guna2TextBox8.Focus()
             ElseIf Guna2TextBox9.Text <= 0 Then</pre>
202
203
                 MsgBox("Accession No. must be a positive number greater than
                   zero.", MsgBoxStyle.Exclamation, "Warning")
204
                 Guna2TextBox9.Focus()
             ElseIf Guna2TextBox10.Text < 0 Then</pre>
205
                 MsgBox("Copies must be a positive number greater than zero.", >
206
                   MsgBoxStyle.Exclamation, "Warning")
                 Guna2TextBox10.Focus()
207
208
209
             Else
                 Return True
210
211
             End If
         End Function
212
213
         Private Sub Guna2Button6_Click(sender As Object, e As EventArgs)
214
           Handles Guna2Button6.Click
215
             If EditbooksFields() = False Then
216
                 Exit Sub
             End If
217
218
             Try
219
220
                 If MsgBox("Are you sure you want to edit the selected book?", >
                   MsgBoxStyle.YesNo, "Update Books") = MsgBoxResult.Yes Then
221
                     myconn.Open()
                     Dim strSQL As String
222
                     strSQL = "UPDATE books set BookName = '" &
223
                                                                                    P
                        Guna2TextBox6.Text & "', Authorname = '" &
                       Guna2TextBox7.Text & "', Publicationyear = '" &
Guna2TextBox8.Text & "', AccessionNo = '" &
                                                                                    P
                        Guna2TextBox9.Text & "', NoCopies = '" &
                       Guna2TextBox10.Text & "' WHERE BookNo = '" &
                       Guna2DataGridView1.CurrentRow.Cells(0).Value.ToString()
```

```
...BATTLE\LIBRARY MANAGEMENT FINAL BATTLE\managebooks.vb
                                                                                  7
224
                     Dim cmd As New MySqlCommand(strSQL, myconn)
225
                     If cmd.ExecuteNonQuery = 1 Then
226
                         MsgBox("Book Updated Successfully",
                                                                                  P
                        MsgBoxStyle.Information, "Update Books")
                         mvconn.Close()
227
228
                         load_books()
                         Guna2GroupBox2.Hide()
229
230
                     End If
                 End If
231
232
            Catch ex As Exception
233
                 MsqBox(ex.Message)
234
                 myconn.Close()
235
236
            End Try
        End Sub
237
238
        Private Sub Guna2TextBox11_TextChanged(sender As Object, e As
239
          EventArgs) Handles Guna2TextBox11.TextChanged
240
             load books()
        End Sub
241
242
243
        Private Sub Guna2TextBox4_KeyPress(sender As Object, e As
          KeyPressEventArgs) Handles Guna2TextBox4.KeyPress
             If Not Char.IsDigit(e.KeyChar) AndAlso Not Char.IsControl
244
               (e.KeyChar) Then
245
                 e.Handled = True
246
             End If
247
        End Sub
248
249
        Private Sub Guna2TextBox5_KeyPress(sender As Object, e As
          KeyPressEventArgs) Handles Guna2TextBox5.KeyPress
             If Not Char.IsDigit(e.KeyChar) AndAlso Not Char.IsControl
250
               (e.KevChar) Then
                 e.Handled = True
251
            End If
252
253
        End Sub
254
255
        Private Sub Guna2TextBox3_KeyPress(sender As Object, e As
          KeyPressEventArgs) Handles Guna2TextBox3.KeyPress
             If Not Char.IsDigit(e.KeyChar) AndAlso Not Char.IsControl
256
               (e.KevChar) Then
257
                 e.Handled = True
258
            End If
259
        End Sub
260
        Private Sub Guna2TextBox9_KeyPress(sender As Object, e As
261
          KeyPressEventArgs) Handles Guna2TextBox9.KeyPress
             If Not Char.IsDigit(e.KeyChar) AndAlso Not Char.IsControl
262
               (e.KeyChar) Then
```

```
...BATTLE\LIBRARY MANAGEMENT FINAL BATTLE\managebooks.vb
                                                                                 8
                e.Handled = True
263
264
            End If
265
        End Sub
266
267
        Private Sub Guna2TextBox8_KeyPress(sender As Object, e As
          KeyPressEventArgs) Handles Guna2TextBox8.KeyPress
268
            If Not Char.IsDigit(e.KeyChar) AndAlso Not Char.IsControl
              (e.KeyChar) Then
269
                 e.Handled = True
            End If
270
271
        End Sub
272
273
        Private Sub Guna2TextBox10_KeyPress(sender As Object, e As
          KeyPressEventArgs) Handles Guna2TextBox10.KeyPress
274
            If Not Char.IsDigit(e.KeyChar) AndAlso Not Char.IsControl
               (e.KeyChar) Then
                e.Handled = True
275
276
            End If
        End Sub
277
```

278 End Class