Graphical user interface, application

Description automatically generated

Graphical user interface, text, application, table

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Graphical user interface, application

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Basic book keeping app. Allows you to store name and author of a books and allows keeping the dates when it should be returned and borrowed.

Allows basic file functionality such as saving, opening and creating new data bases

# Form 1

Imports System.IO

Imports System.Windows.Forms.VisualStyles.VisualStyleElement

Public Class Form1

Dim currentFile As String

Public Function UnixToDateTime(ByVal strUnixTime As String) As DateTime

Dim nTimestamp As Double = strUnixTime

Dim nDateTime As System.DateTime = New System.DateTime(1970, 1, 1, 0, 0, 0, 0)

nDateTime = nDateTime.AddSeconds(nTimestamp)

Return nDateTime

End Function

Function DateTimeToUnix(uTime As DateTime)

Return (uTime - New DateTime(1970, 1, 1, 0, 0, 0)).TotalSeconds

End Function

Function clearDB()

DataGridView1.Columns.Clear()

DataGridView1.Columns.Add("BookID", "BookID")

DataGridView1.Columns.Add("Name", "Name")

DataGridView1.Columns.Add("Author", "Author")

DataGridView1.Columns.Add("Is Borrowed", "Is borrowed")

DataGridView1.Columns.Add("Borrow date", "Borrow date")

DataGridView1.Columns.Add("Return date", "Return date")

End Function

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

Dim bookname As String = InputBox("Plese, enter the name of the book you want to add: ", "New book").Trim()

Dim authorname As String = InputBox("Plese, enter the name of the author of the book you want to add: ", "New book").Trim()

If bookname <> Nothing And authorname <> Nothing Then

DataGridView1.Rows.Add(DataGridView1.Rows.Count - 1, bookname, authorname, False, New DateTime(1970, 1, 1, 0, 0, 0), New DateTime(1970, 1, 1, 0, 0, 0))

Else

MessageBox.Show("You did not enter a correct value!!!")

End If

End Sub

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

Dim rowind As Integer = DataGridView1.CurrentCell.RowIndex

DataGridView1.Rows.RemoveAt(rowind)

For index = rowind To DataGridView1.RowCount - 1

DataGridView1.Rows(index).Cells(0).Value = index

Next

End Sub

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

clearDB()

End Sub

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

Dim fileName As String

Dim opDg As New OpenFileDialog

opDg.Filter = "Book database file|\*.bookdb|All files|\*.\*"

opDg.FilterIndex = 1

opDg.DefaultExt = ".bookdb"

opDg.AddExtension = True

If opDg.ShowDialog() = DialogResult.OK Then

fileName = opDg.FileName

Else

Exit Sub

End If

If File.Exists(fileName) Then

currentFile = fileName

clearDB()

Dim objReader As New StreamReader(fileName)

Dim ID As Integer

ID = 0

Do While objReader.Peek() <> -1

Dim objects As String()

objects = objReader.ReadLine().Split("|".ToCharArray)

If objects.Count = 5 Then

DataGridView1.Rows.Add(ID, objects(0), objects(1), Convert.ToBoolean(Convert.ToInt16(objects(2))), UnixToDateTime(objects(3)), UnixToDateTime(objects(4)))

End If

ID += 1

Loop

Else

MessageBox.Show("File " + fileName + " does not exist, plese check again!!!")

End If

End Sub

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

DataGridView1.Rows(DataGridView1.CurrentCell.RowIndex).Cells(3).Value = False

DataGridView1.Rows(DataGridView1.CurrentCell.RowIndex).Cells(4).Value = New DateTime(1970, 1, 1, 0, 0, 0)

DataGridView1.Rows(DataGridView1.CurrentCell.RowIndex).Cells(5).Value = New DateTime(1970, 1, 1, 0, 0, 0)

End Sub

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

FormHelp.Show()

End Sub

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

DataGridView1.MultiSelect = False

End Sub

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

save(currentFile)

End Sub

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

saveAs()

End Sub

Function saveAs()

Dim svDg As New SaveFileDialog

svDg.Filter = "Book database file|\*.bookdb|All files|\*.\*"

svDg.FilterIndex = 1

svDg.DefaultExt = ".bookdb"

svDg.AddExtension = True

If svDg.ShowDialog() = DialogResult.OK Then

save(svDg.FileName)

End If

End Function

Function save(filename)

Try

File.Delete(filename)

Catch ex As Exception

MessageBox.Show("Unable to delete the file", "Error", MessageBoxButtons.OK, MessageBoxIcon.Error)

End Try

For index = 0 To DataGridView1.RowCount - 2

File.AppendAllText(filename, DataGridView1.Rows(index).Cells(1).Value + "|" + DataGridView1.Rows(index).Cells(2).Value + "|" + Convert.ToInt16(DataGridView1.Rows(index).Cells(3).Value).ToString + "|" + DateTimeToUnix(DataGridView1.Rows(index).Cells(4).Value).ToString + "|" + DateTimeToUnix(DataGridView1.Rows(index).Cells(5).Value).ToString + vbNewLine)

Next

End Function

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

DataGridView1.Rows(DataGridView1.CurrentCell.RowIndex).Cells(3).Value = True

DataGridView1.Rows(DataGridView1.CurrentCell.RowIndex).Cells(4).Value = New DateTime().Now

DataGridView1.Rows(DataGridView1.CurrentCell.RowIndex).Cells(5).Value = New DateTime().Now.AddDays(5)

End Sub

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

Dim selIndex As Integer = DataGridView1.CurrentCell.RowIndex

Dim info As New Form2

info.selIndex = selIndex

info.TextBox1.Text = DataGridView1.Rows(selIndex).Cells(1).Value

info.TextBox2.Text = DataGridView1.Rows(selIndex).Cells(2).Value

info.CheckBox1.Checked = DataGridView1.Rows(selIndex).Cells(3).Value

If info.CheckBox1.Checked Then

info.DateTimePicker1.Value = DataGridView1.Rows(selIndex).Cells(4).Value

info.DateTimePicker2.Value = DataGridView1.Rows(selIndex).Cells(5).Value

End If

info.Show()

End Sub

Function Savebookinfo(ind As Integer, name As String, author As String, checked As Boolean, borr As DateTime, ret As DateTime)

DataGridView1.Rows(ind).Cells(1).Value = name

DataGridView1.Rows(ind).Cells(2).Value = author

DataGridView1.Rows(ind).Cells(3).Value = checked

DataGridView1.Rows(ind).Cells(4).Value = borr

DataGridView1.Rows(ind).Cells(5).Value = ret

End Function

End Class

# Form 2

Public Class Form2

Public selIndex As Integer

Private Sub CheckBox1\_CheckedChanged(sender As Object, e As EventArgs) Handles CheckBox1.CheckedChanged

MonthCalendar1.Enabled = CheckBox1.Checked

DateTimePicker1.Enabled = CheckBox1.Checked

DateTimePicker2.Enabled = CheckBox1.Checked

End Sub

Private Sub Form2\_Load(sender As Object, e As EventArgs) Handles MyBase.Load

MonthCalendar1.SelectionStart = DateTimePicker1.Value

MonthCalendar1.SelectionEnd = DateTimePicker2.Value

MonthCalendar1.Enabled = CheckBox1.Checked

DateTimePicker1.Enabled = CheckBox1.Checked

DateTimePicker2.Enabled = CheckBox1.Checked

End Sub

Private Sub DateTimePicker1\_ValueChanged(sender As Object, e As EventArgs) Handles DateTimePicker1.ValueChanged

MonthCalendar1.SelectionStart = DateTimePicker1.Value

End Sub

Private Sub DateTimePicker2\_ValueChanged(sender As Object, e As EventArgs) Handles DateTimePicker2.ValueChanged

MonthCalendar1.SelectionEnd = DateTimePicker2.Value

End Sub

Private Sub MonthCalendar1\_DateChanged(sender As Object, e As DateRangeEventArgs) Handles MonthCalendar1.DateChanged

DateTimePicker1.Value = MonthCalendar1.SelectionStart

DateTimePicker2.Value = MonthCalendar1.SelectionEnd

End Sub

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

Form1.Savebookinfo(selIndex, TextBox1.Text, TextBox2.Text, CheckBox1.Checked, DateTimePicker1.Value, DateTimePicker2.Value)

End Sub

End Class