

File Handling

Reading Files

File handling is an important aspect of programming, as many programs need to be able to interact with different file types, whether this is to save content or to load content. In VB.NET, this can be achieved by using pre-built objects called **StreamReader** to read, and **StreamWriter** to write.

The example below will read the content from a text file (in this case 'test.txt') and display the content in the console window. Note that the variable **File** is used to contain the directory of the file to be read; this is then passed to the **StreamReader** when it is created. The keyword **New** is used to create a new instance of the **StreamReader** before it can be used; the new instance is called **RDR**. The **StreamReader**'s method **ReadToEnd()** is then called to read the content of the text file and display it to the console window. The method **Close()** is then called to destroy the object as it is no longer needed.

Shared Sub Main()
Dim File As String = "U:\test.txt"
Dim RDR As New System.IO.StreamReader(File)
WriteLine(RDR.ReadToEnd)
RDR.Close()
End Sub

Writing Files

Writing content to a text file is similar to reading it, except that we use the **StreamWriter** object as opposed to the **StreamReader**. The example below will write the line 'I Like Pie' twice to the text file 'test.txt'. Note that, similarly to **StreamReader**, to use **StreamWriter** a new instance is required as well as the directory of the text file. The **Write()** method is used to write the content to the text file. The instruction '**System.IO.File.Exists(FILE)**' is used to determine if the file exists first, because if it did not it would cause a runtime error.

Shared Sub Main()
Dim FILE As String = "U:\test.txt"
If System.IO.File.Exists(FILE) = True Then
Dim objWriter As New System.IO.StreamWriter(FILE)
objWriter.Write("I Like Pie" & vbNewLine)
objWriter.Write("I Like Pie" & vbNewLine)
objWriter.Close()
MsgBox("Text written to file")
Else
MsgBox("File Does Not Exist")
End If
End Sub