



*I Wish I Knew How To ...*

*Program Excel 2019*

*with Xojo in Windows*

*June 2021 Edition (4.0)*

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## How to read this information:

*I Wish I Knew How to ... Program Excel 2019 with Xojo* is a reference and self-paced learning material that helps you understand the different methods to program Excel by using Xojo. Programming Excel with Xojo is in the programming area called Object Linking and Embedding (OLE).

Many of the examples are in small simpler code to help the reader understand the code. It is much easier to understand simplified code and make it complicated, than the other way around.

**Note: Most examples do not work with the reader.**

## New to Version 4.0 - June 2021 – Excel 2019

- 1) Over 700 changes to Example code. General categories of changes are listed below
- 2) Update code to Microsoft Excel 2019
- 3) Update all code to API 2
- 4) Uses version Xojo 2021 r1.1
- 5) Updated all project IDE minimum versions
- 6) Update plugin installation instructions
- 7) Fixed numerous grammatical errors
- 8) Changed API MsgBox to API2 MessageDialog.Show (Example 2-1)
- 9) Added filename suffix -API2 to signify change in program
- 10) Updated Example2-2 with multiple changes from API1 to API2
- 11) Changed API1 AbsolutePath to API2 NativePath function
- 12) Converted example xls files to xlsx
- 13) Changed GetFolderItem to FolderItem.Constructor
- 14) Changed Date to DateTime (Example 3-14)(Example 7-4)
- 15) Changed Listbox ListIndex to SelectedRowIndex (Example 3-25)
- 16) Changed Listbox ListCount to RowCount
- 17) Changed Listbox Cell to CellValueAt
- 18) Changed Listbox Heading to HeaderAt
- 19) Changed StrComp to String.Compare (Example 3-26)
- 20) Removed extra and unused variables in Examples

- 21) Example 4-10 (4-12) updated to API 2 code, except for Date – no TotalSeconds option available
- 22) Updated to Microsoft Access Database Engine 2010 Redistributable in Example 11-1
- 23) Updated API1 RecordSet to API2 Rowset
- 24) Updated API1 ErrorMessage to API2 DatabaseException
- 25) Updated API1 Field to API2 Column
- 26) Update API1 Value to API2 StringValue
- 27) Removed API1 MoveNext with API2 For Each Row as DatabaseRow in rs
- 28) Updated API1 Microseconds to API2 System.Microseconds
- 29) Updated API1 SetText to API2 Text
- 30) Updated API1 Split to API2 String.Split
- 31) Updated API1 Ubound to API2 LastIndex
- 32) Changed 1-based arrays to 0-based arrays where needed
- 33) Changed to API2 Picture.Save with Picture.Formats type
- 34) Updated Example Excel files from xls to xlsx format

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## Modifying Numerical Data

One of the most common reasons for using Excel is the ability to perform math. The same type of math functions present in Xojo are also in Excel, with many more to choose from.

A simple example is to multiply 5 times 7. If performed correctly, our answer should be 35.

### Code 12. Simple Multiplication (Example3-4-API2.xojo\_binary\_project)

```
Sub Action() Handles Action
  Var excel As New ExcelApplication
  Var C As String
  excel.visible = True
  excel.Workbooks.add

  excel.Range("B1").value = 5
  excel.Range("B2").value = 7
  excel.Range("B3").value = "= B1 * B2"

  excel = Nil

  Exception err As OLEException
  MessageDialog.Show err.message
End Sub
```

The above code writes the value '5' in cell B1, '7' in cell B2, and cell B3 has the result of  $B1 * B2$ .

Figure 12. Simple Multiplication (Example 3-4)

|   | A | B  | C |
|---|---|----|---|
| 1 |   | 5  |   |
| 2 |   | 7  |   |
| 3 |   | 35 |   |
| 4 |   |    |   |

There are complicated math calculations that are available in Excel. In this example, I will show you how to use Excel's 'Payment' (PMT) function to calculate monthly payments on a loan.

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This is one of many books at Xojo Library. This book can be purchased at <http://xojolibrary.com/> where many great Xojo resources are available.

Happy programming!

Eugene

---

**Eugene Dakin MBA, Ph.D., P.Chem.**, is an author of Xojo reference materials and has many years of experience in the programming industry. Another great reference book is *I Wish I Knew How To ... Program the Canvas Control with Xojo Desktop 3*.

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