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Debugging VB/Win Applications

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DEBUG.ZIP



Overview

Avoid

- Coding style

- Naming conventions

Correct

- Steps

- Breaks

- Watches

Reality check

- Error handling

- Misc. tips

- OLE Automation



Coding Style

Comments, comments, comments

Modular, modular, modular

GLOBAL.BAS

Always use 'Option Explicit'

Avoid the Variant datatype



More Coding Style...

Avoid multi-variable dim statements

Dim x, y As Integer

Use the tightest scoping possible

Declarations at top of procedures

Use lots of white space

Keep procedures short



Naming Conventions

Control naming

- Never accept default names

- Three-letter object prefix

- Make name and caption consistent

Procedure prefixes

Consistent procedure conventions

Use case effectively

- Upper-case constants

- Mixed-case variables

Hungarian notation



Naming Examples

```
Global Const OLE_ACTIVATE = 7

Dim iCounter as Integer
Dim lBigNumber as Long
Dim sUserName as String

txtFirstName.Text = "Scott"
lblFirstName.Caption = "First Name:"

frmUserData.Caption = "User Data"

Sub UserWriteAddress()
End Sub
```



Steps, Breaks, Watches

Single step vs. procedure step

Use break and step together

Watch expressions and watchpoints

Use call stack to step out of procedures

Use F9 and F5 to move by chunks

Shift+F2 and F2 to navigate procs

Consider using debug flags



The Debug Window

Test-drive procedures

Events, Subs, Functions

Command1_Click

InitData

? SquareIt (3)

Evaluate expressions

Properties, Variables, Expressions

? Text1.Text

? iRate

? ((x * 2) ^ 3)

X = 4 'X must be in scope

Debug.Print



Error Handling

Do it early in development cycle

ALL I/O, ALL memory allocation

Indent to clearly show trap area

Only use where necessary - never add

On Error Resume Next to top of
procedure

Check error code before resume -
never assume what the error is

Use 'Case Else'

Use MsgBox to display information



OLE Automation

Know your objects!

Scope is Key!

CreateObject vs. GetObject

Multiple Instances of same application

Passing data between applicaitons



Miscellaneous Tips

Mark and date undone sections

Window positioning

Use multiple modules to see multiple procedures simultaneously

Don't maximize forms

Multiple .MAK files

Save frequently...in ASCII

Write tests before writing code



More tips...

Be careful with replace

Multiple level undo is your friend

WPS utility

\\VB\\CDK\\WPS.EXE

DLL search path (see docs for
LoadModule API)

Current Directory

\\Windows

\\Windows\\System

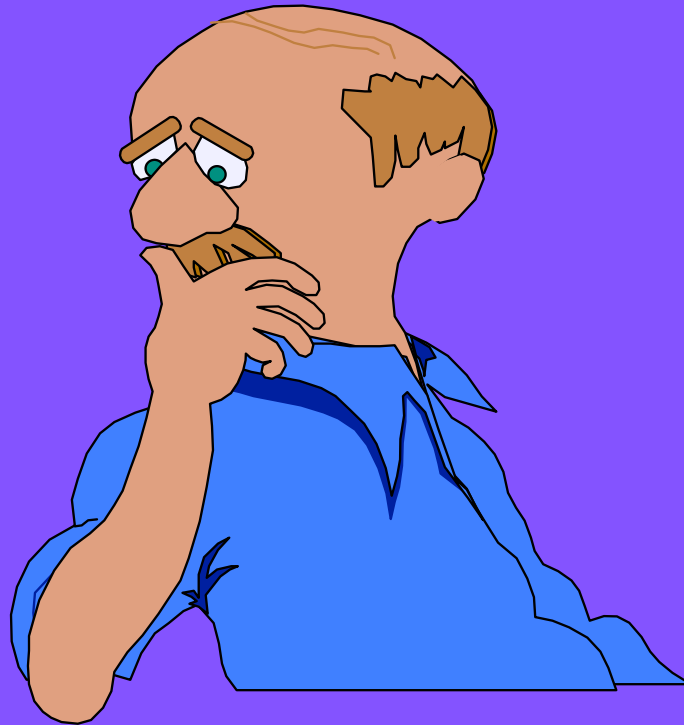
Directory where .EXE is running

DOS Path

Directories mapped by network



Questions?



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