modCoinImages (Code)

Option Compare Database Option Explicit

'Root folder for images, RELATIVE to the database folder (CurrentProject.Path) Public Const IMAGE_ROOT_REL As String = "Folder\CoinImages"

'Return full path to the folder containing the .accdb, with trailing backslash. Public Function DbRootPath() As String DbRootPath = CurrentProject.Path & "" End Function

'Ensure a folder exists. Creates it if missing.

Public Sub EnsureFolderExists(ByVal fullPath As String) Dim fso As Object Dim p As String Dim parts() As String Dim i As Long Dim build As String

```
1   Set fso = CreateObject("Scripting.FileSystemObject")
2
3   'Normalize path
4   p = fullPath
5   If Right$(p, 1) = "\" Then p = Left$(p, Len(p) - 1)
6
7   'If it already exists, done
8   If fso.FolderExists(p) Then Exit Sub
9
10  'If parent exists, create this folder and done
11  If fso.FolderExists(fso.GetParentFolderName(p)) Then
12      fso.CreateFolder p
13      Exit Sub
14  End If
15
16  'Otherwise, create parents step-by-step
17  parts = Split(p, "\")
18  build = parts(0) ' e.g. "C:" or a top folder name
19
20  'Handle drive root like "C:"
21  If Right$(build, 1) = ":" Then build = build & "\"
22
23  For i = 1 To UBound(parts)
24      If build = "" Or Right$(build, 1) = "\" Then
25          build = build & parts(i)
26      Else
27          build = build & "\" & parts(i)
28      End If
29
30      If Not fso.FolderExists(build) Then
31          fso.CreateFolder build
32      End If
33  Next i
34
```

End Sub

'Return the full path to IMAGE_ROOT_REL, creating it if needed. Public Function EnsureImageRootFull() As String Dim p As String p = DbRootPath() & IMAGE_ROOT_REL EnsureFolderExists p EnsureImageRootFull = p End Function

'Format CoinID as 6 digits: 42 -> "000042" Public Function CoinFolderName(ByVal CoinID As Long) As String CoinFolderName = Format$(CoinID, "000000") End Function

'Ensure the coin folder exists and return its full path with trailing backslash. Public Function EnsureCoinFolderFull(ByVal CoinID As Long) As String Dim rootFull As String Dim coinFull As String

```SQL
1  rootFull = EnsureImageRootFull()
2  coinFull = rootFull & CoinFolderName(CoinID) & "\"
3  EnsureFolderExists coinFull
4
5  EnsureCoinFolderFull = coinFull
6
```

End Function

'Get file extension without dot, lower-case (e.g. "jpg") Public Function GetFileExt(ByVal filePath As String) As String Dim fso As Object Set fso = CreateObject("Scripting.FileSystemObject") GetFileExt = LCase$(fso.GetExtensionName(filePath)) End Function

'Get filename only (e.g. "IMG_1234.jpg") Public Function GetFileNameOnly(ByVal filePath As String) As String Dim fso As Object Set fso = CreateObject("Scripting.FileSystemObject") GetFileNameOnly = fso.GetFileName(filePath) End Function

'Get file size in KB (rounded) Public Function GetFileSizeKB(ByVal filePath As String) As Long Dim fso As Object, f As Object Set fso = CreateObject("Scripting.FileSystemObject") Set f = fso.GetFile(filePath) GetFileSizeKB = CLng((f.Size + 512) \ 1024) End Function

'Make a safe base filename from the image type name: "Slab Front" -> "slab_front" Public Function SafeBaseName(ByVal s As String) As String s = LCase$(Trim$(s)) s = Replace(s, " ", "") *s = Replace(s, "/", "") s = Replace(s, "", "") s = Replace(s, ":", "") s =* Replace(s, "*", "") *s = Replace(s, "?", "") s = Replace(s, """", "") s = Replace(s, "<", "") s =* Replace(s, ">", "") *s = Replace(s, "|", "")* SafeBaseName = s End Function

'Copy a selected file into the coin folder. 'Returns RELATIVE path to store in tblCoinImages.ImagePath, 'e.g. "Folder\CoinImages\000042\obverse.jpg" Public Function CopyImageToCoinFolderRel(_ ByVal CoinID As Long, _ ByVal sourceFile As String, _ ByVal imageTypeName As String _) As String

```SQL
1   Dim coinFull As String
2   Dim ext As String
3   Dim base As String
4   Dim destFull As String
5   Dim destName As String
6   Dim i As Long
7
8   coinFull = EnsureCoinFolderFull(CoinID)
9   ext = GetFileExt(sourceFile)
10  base = SafeBaseName(imageTypeName)
11
12  If base = "" Then base = "image"
13
14  destName = base & "." & ext
15  destFull = coinFull & destName
16
17  'Ensure unique destination name if file already exists.
18  i = 1
19  Do While Len(Dir$(destFull)) > 0
20      destName = base & "_" & Format$(i, "00") & "." & ext
21      destFull = coinFull & destName
22      i = i + 1
23  Loop
24
25  FileCopy sourceFile, destFull
26
27  CopyImageToCoinFolderRel = IMAGE_ROOT_REL & CoinFolderName(CoinID) & "\" & destName
28
```

End Function

'Copy a selected file into the coin folder. 'Returns FULL path to store in tblCoinImages.ImagePath, 'e.g.

"C:...\CoinCollection\Folder\CoinImages\000042\obverse.jpg" Public Function CopyImageToCoinFolderFull(_ ByVal CoinID As Long, _ ByVal sourceFile As String, _ ByVal imageTypeName As String _) As String

```sql
 1  Dim coinFull As String
 2  Dim ext As String
 3  Dim base As String
 4  Dim destFull As String
 5  Dim destName As String
 6  Dim i As Long
 7
 8  coinFull = EnsureCoinFolderFull(CoinID)    ' <-- this already returns FULL path
 9  ext = GetFileExt(sourceFile)
10  base = SafeBaseName(imageTypeName)
11  If base = "" Then base = "image"
12
13  destName = base & "." & ext
14  destFull = coinFull & destName
15
16  'Ensure unique destination name if file already exists.
17  i = 1
18  Do While Len(Dir$(destFull)) > 0
19      destName = base & "_" & Format$(i, "00") & "." & ext
20      destFull = coinFull & destName
21      i = i + 1
22  Loop
23
24  FileCopy sourceFile, destFull
25
26  CopyImageToCoinFolderFull = destFull
27
```

End Function

'Insert a row into tblCoinImages and enforce "one primary per coin" if needed. Public Sub AddCoinImageFromFile(ByVal CoinID As Long, _ ByVal ImageTypeID As Long, _ ByVal imageTypeName As String, _ ByVal selectedFile As String)

```sql
 1  On Error GoTo ErrHandler
 2
 3  Dim db As DAO.Database
 4  Dim rs As DAO.Recordset
 5  Dim crit As String
 6  Dim nextOrder As Long
 7  Dim fileNameOnly As String
 8  Dim isPrimaryFlag As Boolean
 9
10  If CoinID <= 0 Then
11      Err.Raise vbObjectError + 1000, "AddCoinImageFromFile", "CoinID is required."
12  End If
13
14  Set db = CurrentDb
15
16  'Compute next DisplayOrder for this coin (assigned at insert time)
17  crit = "CoinID=" & CoinID
18  nextOrder = Nz(DMax("DisplayOrder", "tblCoinImages", crit), -1) + 1
19
20  'Use the real filename the user selected
21  fileNameOnly = Dir(selectedFile)
22
23  'Optional: first image becomes primary
24  isPrimaryFlag = (Nz(DCount("*", "tblCoinImages", crit), 0) = 0)
25
26  'Insert record
27  Set rs = db.OpenRecordset("tblCoinImages", dbOpenDynaset, dbAppendOnly)
28  rs.AddNew
```

```
29        rs!CoinID = CoinID
30        rs!ImageTypeID = ImageTypeID
31        rs!ImagePath = selectedFile      'or store relative folder path if you prefer
32        rs!FileName = fileNameOnly
33        rs!DisplayOrder = nextOrder
34        rs!IsPrimary = isPrimaryFlag
35        rs!Active = True
36        rs!Verified = False
37        rs!ImportedDate = Now()
38    rs.Update
39    rs.Close
40
41    Exit Sub
42
```

ErrHandler: On Error Resume Next If Not rs Is Nothing Then If rs.EditMode <> 0 Then rs.CancelUpdate rs.Close End If MsgBox "AddCoinImageFromFile failed." & vbCrLf & _ "Error " & Err.Number & ": " & Err.Description, vbCritical End Sub

Public Function AddCoinImage(_ ByVal parentForm As Form, _ ByVal parentIdControl As String, _ ByVal subformControlName As String, _ ByVal fkFieldName As String, _ ByVal imagePathField As String, _ ByVal pkFieldName As String, _ Optional ByVal imageTypeControlName As String = vbNullString, _ Optional ByVal imageTypeFieldName As String = vbNullString _) As Variant

SQL ⌄

```
 1  On Error GoTo ErrHandler
 2
 3  Dim CoinID As Variant
 4  CoinID = parentForm.Controls(parentIdControl).Value
 5
 6  If IsNull(CoinID) Or CoinID = 0 Then
 7      MsgBox "Save the coin record first (CoinID must exist) before adding images.", vbExclamation
 8      AddCoinImage = Null
 9      Exit Function
10  End If
11
12  Dim filePath As String
13  filePath = PickOneImageFile()   ' <-- keep this in modImageUtils
14  If Len(filePath) = 0 Then
15      AddCoinImage = Null
16      Exit Function
17  End If
18
19  ' Insert directly into tblCoinImages (works regardless of Allow Additions)
20  Dim rs As DAO.Recordset
21  Set rs = CurrentDb.OpenRecordset("tblCoinImages", dbOpenDynaset)
22
23  rs.AddNew
24  rs.Fields(fkFieldName).Value = CoinID
25  rs.Fields(imagePathField).Value = filePath
26
27  ' Optional: image type (read from parent form unless you KNOW it's on the subform)
28  If Len(imageTypeControlName) > 0 And Len(imageTypeFieldName) > 0 Then
29      Dim t As Variant
30      t = parentForm.Controls(imageTypeControlName).Value
31      If Not IsNull(t) Then
32          rs.Fields(imageTypeFieldName).Value = t
33      End If
34  End If
35
36  rs.Update
37  rs.Bookmark = rs.LastModified
38  AddCoinImage = rs.Fields(pkFieldName).Value
39  rs.Close
40
41  ' Refresh the subform display
42  parentForm.Controls(subformControlName).Requery
43
44  Exit Function
```

```
ErrHandler: MsgBox "AddCoinImage failed: " & Err.Number & " - " & Err.Description, vbExclamation AddCoinImage = Null End
Function
```