```
; ==============================================================================
; ATL2.asm
; Title:  Pahor1.asm
; Author: Pahor.m  @ April 2020
; Version: 1.0.0
; Purpose: Main Assembler of Play Flash Object.
;          Dipersembahkan Untuk Hari Ulang Tahun ku yg KE-47
; ==============================================================================

.386
.model flat, stdcall  ;32 bit memory model
option casemap :none  ;case sensitive

include windows.inc
include user32.inc
include kernel32.inc
include comdlg32.inc
include Comctl32.inc
include shell32.inc
include advapi32.inc
include gdi32.inc
include shlwapi.inc
include D:\masm32\m32lib\masm32.inc


includelib user32.lib
includelib kernel32.lib
includelib comdlg32.lib
includelib Comctl32.lib
includelib shell32.lib
includelib advapi32.lib
includelib gdi32.lib
includelib shlwapi.lib
includelib D:\masm32\m32lib\masm32.lib


DlgProc       PROTO    :HWND,:UINT,:WPARAM,:LPARAM
PlayerWin        PROTO    :HWND
GMalloc       PROTO    :DWord, :DWORD
GMemFree      PROTO    :DWord
Malloc        PROTO    :DWord, :DWORD
MemFree       PROTO    :DWord


Scall Macro Method:Req, Args:VarArg
    LOCAL   ArgList
    ArgList TEXTEQU <>

    IFNB <Args>
        FOR Arg,<Args>
            ArgList CATSTR <Arg>,<,>,ArgList
        ENDM
    ArgList SubStr ArgList, 1, @SizeStr(%ArgList) - 1
    ArgList CATSTR <!<>,ArgList,<!>>

    %FOR parameter,ArgList
        push parameter
    ENDM
    ENDIF

    Call Method
ENDM

Icall Macro pInterface:Req, Method:Req, Args:VarArg
    LOCAL   ArgList
    ArgList TEXTEQU <>

    IFNB <Args>
```

```
        FOR Arg,<Args>
            ArgList CATSTR <Arg>,<,>,ArgList
        ENDM
    ArgList SubStr ArgList, 1, @SizeStr(%ArgList) - 1
    ArgList CATSTR <!<>,ArgList,<!>>

    %FOR parameter,ArgList
        push parameter
    ENDM
    ENDIF

    mov eax,pInterface
    push eax
    mov eax,[eax]
    Call [Eax].Method
    ; call    dword ptr[eax+Method]
ENDM

;IUnknown Methods
IUnknown Struct
    QueryInterface DWord ?
    AddRef         DWord ?
    Release        DWord ?
IUnknown EndS

include OFlash.inc

.const
IDD_DIALOG     equ 1000
;###############################################################################
.data
szDLL              db   "atl.dll",0
szAtlAxWinInit     db   "AtlAxWinInit",0    ; ATL Function
szAtlAxGetControl  db   "AtlAxGetControl",0 ; ATL Function
szAtlAxWin         db   "AtlAxWin",0        ; ATL Window Class Name
szCLSID_Swf        db   "{D27CDB6E-AE6D-11CF-96B8-444553540000}",0 ; ShockwaveFlash ClassID
szCLSID_Calendar   db   "{8E27C92B-1264-101C-8A2F-040224009C02}",0 ; Calendar ClassID
szCLSID_Sound      db   "{22D6F312-B0F6-11D0-94AB-0080C74C7E95}",0 ; Sound ClassID
szCLSID_Graphics   db   "{369303C2-D7AC-11D0-89D5-00A0C90833E6}",0 ; Graphics ClassID

szFileName         db   "biohome2.swf",0 ; File target
szBksl             db   "\",0

IID_IFlash         sIID_IFlash ; from OFlash.inc

AtlAxWinInit       dd  ? ;Pointer "AtlAxWinInit"
AtlAxGetControl    dd  ? ;Pointer "AtlAxGetControl"

pIUnknown          dd  ? ;Pointer IUnknown

pIFlash            dd  ? ;Pointer IFlash

.data?
hInstance     dd ?
hPlayWin      dd ?
hLib          dd ?
Buffer        dd 512 dup (?)
hCurDir       db 512 dup(?)

;###############################################################################

.code
start:

    invoke GetModuleHandle,NULL
    mov    hInstance,eax

    invoke InitCommonControls
```

```asm
        ; Get Handle "atl.dll"
        invoke LoadLibrary,offset szDLL
        .if eax
            mov hLib,eax
            ; Get Pointer "AtlAxWinInit"
            invoke GetProcAddress,hLib,addr szAtlAxWinInit
            mov AtlAxWinInit, eax
            ; Get Pointer "AtlAxGetControl"
            invoke GetProcAddress,hLib,addr szAtlAxGetControl
            mov AtlAxGetControl, eax
            ; Execution Function "AtlAxWinInit" on ATL Initialition
            Scall AtlAxWinInit
                .if eax
                    invoke DialogBoxParam,hInstance,IDD_DIALOG,NULL,addr DlgProc,NULL
                .endif
            Invoke FreeLibrary,hLib
        .endif
        invoke ExitProcess,0

;###############################################################################

DlgProc proc hWnd:HWND,uMsg:UINT,wParam:WPARAM,lParam:LPARAM

    .if uMsg==WM_INITDIALOG
        invoke PlayerWin, hWnd

    .elseif uMsg==WM_CLOSE
        invoke EndDialog, hWnd, 0

    .else
        mov eax,FALSE
        ret

    .endif
    mov eax,TRUE
    ret
DlgProc endp

PlayerWin PROC hWnd:DWORD
    Local lpWideCharStr[512*2]:Byte

    ; Init Directory
    invoke GetCurrentDirectory,sizeof hCurDir,addr hCurDir
    invoke lstrcat,addr hCurDir,addr szBksl
    invoke lstrcat,addr hCurDir,addr szFileName ; nama file tggl rubah

    ;View Flahsh Object
    invoke CreateWindowEx,0,addr szAtlAxWin, addr szCLSID_Swf, WS_CHILD or WS_VISIBLE,
                            0,0,435,299,hWnd,NULL,hInstance,NULL
    mov hPlayWin,eax

    ;menjalankan fungsi "AtlAxGetControl"(hWnd,pIUnknown)
    Scall AtlAxGetControl,  hPlayWin, offset pIUnknown
    .if (eax == 0) && (pIUnknown != 0)
        ;Harus Menambahkan referensi interface dgn Pointer pIUnknown
        Icall pIUnknown, IUnknown.AddRef

        ;mengambil Pointer interface IFlash, inputkan IID_IFlash dan
        ;simpan outputnya ditempat pointer pIFlash
        ;INGAT! Harus mengetahui IID Interface nya, Bukan CLSID nya
        ;       dalam windows terdapat banyak sekali interface dan masing2
        ;       memiliki InterfaceID (IID)
        Icall pIUnknown, IUnknown.QueryInterface, offset IID_IFlash, offset pIFlash
        .if pIFlash
            ;Tahap 1 menggelar interface "IFlash"
            ;tambah referensi interface dgn Pointer pIFlash
            Icall pIFlash, IFlash.AddRef
```

```
            ;Tahap 2 pembebasan interface "IUnknown" sebab tdk digunakan lagi
            ;Bebaskan interface IUnknown dgn Pointer pIUnknown
            Icall pIUnknown, IUnknown.Release

            ;Tahap 3 mengunakan fungsi2 metode interface "IFlash"
            ;Pada interface parameternya berlaku format2 khusus, contoh;
            ;  - String: format tipe BString
            ;  - Bool:   format tipe VARIANT_FALSE/VARIANT_TRUE

            ;Memasukan Target Nama File "biohome2.swf" (BStr) yg juga memiliki EMBED Flash
            Invoke MultiByteToWideChar, CP_ACP, 0, Addr hCurDir, -1, Addr lpWideCharStr, SizeO
            Invoke SysAllocString, Addr lpWideCharStr
            Icall pIFlash, IFlash.put_Movie, eax
            Icall pIFlash, IFlash.put_EmbedMovie, eax
            Invoke SysFreeString, Addr lpWideCharStr

            ;Menghilangkan Menu
            Icall pIFlash, IFlash.put_Menu, VARIANT_FALSE

            ;Memainkan Flash
            Icall pIFlash, IFlash.Play
        .endif
    .endif
    ret
PlayerWin endp

end start
```