

```
NoMainWin
WindowWidth = 800 : WindowHeight = 600
statictext #win.Title,
"Find the nth day of any month...", 135, 150, 287, 31
stylebits #win.textbox4, _ES_NUMBER, 0, 0, 0
textbox #win.textbox4, 50, 198, 85, 30
statictext #win.caption, "1901 to 2099", 54, 230, 85, 30
combobox #win.combobox6, MonthArray$, click, 180, 200, 120, 210
combobox #win.combobox7, WeekArray$, click, 340, 200, 120, 210
combobox #win.combobox8, DayArray$, click, 500, 200, 120, 210
button #win.button7, "Find", [find], ul, 650, 200, 100, 30
button #win.button8, "Quit", [quit], ul, 650, 300, 100, 30
statictext #win.Date, "", 350, 350, 97, 75
open "Nth Day of Month" for dialog_nf as #win
#win "TrapClose [quit]"
#win "Font Ariel 12"
#win.caption, "!Font Arial 10"
#win.Title "!Font Arial 14 bold"
#win.Date "!Font Arial 24 bold"
call SetTextLimit hwnd(#win.textbox4), 4
#win.textbox4 "Year (yyyy)"
#win.textbox4 "!SetFocus"
#win.textbox4 "!SelectAll"
call SetUpArrays
wait

[find]
#win.textbox4 "!Contents? Year$": Year=val(Year$)
#win.combobox6 "Selection? Month$": Month=Month(Month$)
#win.combobox7 "Selection? Week$"
#win.combobox8 "Selection? Day$": nDa$=nDa$(Week$, Day$)
x=NthDayOfMonth(Year, Month, nDa$)
if x>0 then #win.Date x else #win.Date ""
wait

[quit]
close #win
end

function NthDayOfMonth(yyyy, mm, nda$)
' nda$ is a two part code. The first character is the occurrence in the
' month -- first, second, third, fourth, or last -- denoted by 1, 2, 3
', 4 or 5.
' The last two characters is the day of the week denoted by Su, Mo, Tu
', We, Th,
' Fr, or Sa.
```

```
if yyyy<1901 or yyyy>2099 or mm<1 or mm>12 then
    NthDayOfMonth=0: exit function
end if
nda$=lower$(trim$(nda$))
if len(nda$)<>3 then NthDayOfMonth=0: exit function
n$=left$(nda$,1)
nC$="1234l"
da$=right$(nda$,2)
daC$="tuwethfrsasumotuwethfrsasumo"
if not(instr(nC$,n$)) or not(instr(daC$,da$)) then
    NthDayOfMonth=0
    exit function
end if
NthDayOfMonth=1
mm$=str$(mm): if mm<10 then mm$="0"+mm$
db$=DayOfDate$(str$(yyyy)+mm$+"01")
if da$<>db$ then
    x=instr(daC$,db$): y=instr(daC$,da$,x):
NthDayOfMonth=1+(y-x)/2
end if
dim MD(12)
MD(1)=31: MD(2)=28: MD(3)=31: MD(4)=30: MD(5)=31: MD(6)=30
MD(7)=31: MD(8)=31: MD(9)=30: MD(10)=31: MD(11)=30: MD(12)=31
if yyyy mod 4 = 0 then MD(2)=29
if n$<>"1" then
    if n$<>"l" then
        NthDayOfMonth=NthDayOfMonth+((val(n$)-1)*7)
    else
        if NthDayOfMonth+28<MD(mm)+1 then
            NthDayOfMonth=NthDayOfMonth+28
        else
            NthDayOfMonth=NthDayOfMonth+21
        end if
    end if
end if
end if
end function

function DayOfDate$(ObjectDate$) 'yyyymmdd format
if ObjectDate$="" then 'today
    DaysSince1900 = date$("days")
else
    DaysSince1900 = date$(mid$(ObjectDate$,5,2)+"/"+right$(
ObjectDate$,2)_
        +"/"+left$(ObjectDate$,4))
end if
DayOfWeek = DaysSince1900 mod 7
```

```
select case DayOfWeek
    case 0: DayOfDate$="tu"
    case 1: DayOfDate$="we"
    case 2: DayOfDate$="th"
    case 3: DayOfDate$="fr"
    case 4: DayOfDate$="sa"
    case 5: DayOfDate$="su"
    case 6: DayOfDate$="mo"
end select
end function
```

```
sub SetUpArrays
dim MonthArray$(12)
MonthArray$(1)="January"
MonthArray$(2)="February"
MonthArray$(3)="March"
MonthArray$(4)="April"
MonthArray$(5)="May"
MonthArray$(6)="June"
MonthArray$(7)="July"
MonthArray$(8)="August"
MonthArray$(9)="September"
MonthArray$(10)="October"
MonthArray$(11)="November"
MonthArray$(12)="December"
```

```
WeekArray$(1)="First"
WeekArray$(2)="Second"
WeekArray$(3)="Third"
WeekArray$(4)="Fourth"
WeekArray$(5)="Last"
```

```
DayArray$(1)="Sunday"
DayArray$(2)="Monday"
DayArray$(3)="Tuesday"
DayArray$(4)="Wednesday"
DayArray$(5)="Thursday"
DayArray$(6)="Friday"
DayArray$(7)="Saturday"
```

```
#win.combobox6 "Reload"
#win.combobox6 "!month"
#win.combobox7 "Reload"
#win.combobox7 "!Occurance"
#win.combobox8 "Reload"
#win.combobox8 "!Day"
```

```
end sub
```

```
function Month(Month$)
  select case Month$
    case "January": Month=1
    case "February": Month=2
    case "March": Month=3
    case "April": Month=4
    case "May": Month=5
    case "June": Month=6
    case "July": Month=7
    case "August": Month=8
    case "September": Month=9
    case "October": Month=10
    case "November": Month=11
    case "December": Month=12
  end select
end function
```

```
function nDa$(Week$, Day$)
  select case Week$
    case "First": n$="1"
    case "Second": n$="2"
    case "Third": n$="3"
    case "Fourth": n$="4"
    case "Last": n$="L"
  end select
  select case Day$
    case "Sunday": Da$="Su"
    case "Monday": Da$="Mo"
    case "Tuesday": Da$="Tu"
    case "Wednesday": Da$="We"
    case "Thursday": Da$="Th"
    case "Friday": Da$="Fr"
    case "Saturday": Da$="Sa"
  end select
  nDa$=n$+Da$
end function
```

```
sub SetTextLimit TextBoxHwnd, Limit
  CallDll #user32, "SendMessageA",_
    TextBoxHwnd as ulong,_
    _EM_SETLIMITTEXT as long,_
    Limit as long,_
    0 as long,_
    SetTextLimit as long
```

end sub

sub click handle\$

end sub