

DateConversions

COLLABORATORS

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|------------|----------------------------|-------------------|-----------|
| | TITLE : DateConversions | | |
| ACTION | NAME | DATE | SIGNATURE |
| WRITTEN BY | | November 24, 2024 | |

REVISION HISTORY

| | | | |
|--------|------|-------------|------|
| NUMBER | DATE | DESCRIPTION | NAME |
| | | | |

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Chapter 1

DateConversions

1.1 DateConversions

Prozeduren

DateToStr
FromDos
ToTimer

DecodeDate
FromTimer

EncodeDate
ToDos

Konstanten

month

month3

Typ-Deklarationen

DateInfo

1.2 TMP:Modula-2/DateConversions.def

```
DEFINITION MODULE DateConversions;
(*$ NameChk:=FALSE *)
(*
 * This modules handles times and dates in the range of
 * 00:00:00.000000 1 March 1900 - 23:59:59.999999 of the
 * 28 February 2100
 *)

FROM DosD IMPORT  Date ;
FROM Timer IMPORT  TimeVal ;

CONST
  month3="Jan|Feb|Mar|Apr|May|Jun|Jul|Aug|Sep|Oct|Nov|Dec";
  month="January|February|March|April|May|June|July|August|September|October|↔
    November|December";

TYPE
  DateInfo =RECORD
    minutes:LONGINT;
```

```
    micros:LONGINT;
END;
(*
 * Containes the minutes and microseconds passed
 * since 00:00 of the 1. March 1900
 *)

PROCEDURE FromDos(d: Date ; VAR di: DateInfo );
PROCEDURE FromTimer(t: TimeVal ; VAR di: DateInfo );

PROCEDURE ToDos(di: DateInfo ; VAR d: Date );
PROCEDURE ToTimer(di: DateInfo ; VAR t: TimeVal );

PROCEDURE DecodeDate(minutes:LONGINT;
                     VAR day,month,year:INTEGER);
PROCEDURE EncodeDate(day,month,year:INTEGER;
                     VAR minutes:LONGINT);

PROCEDURE  DateToStr (di: DateInfo ; formatString,
                     monthText:ARRAY OF CHAR;
                     VAR output:ARRAY OF CHAR);

(*
 * The formatstring specifies which fields of the should
 * appear in the ouput string. The format string can
 * include normal text as well as format commands, e.g.
 *
 *   "Date: %d. %t %Y   Time: %H:%M:%S.%3"
 *
 * This format would result in a string like
 *
 *   Date: 25 July 1989   Time: 22:33:21.423
 *
 * The format commands are introduced by a % and are:
 *
 * %E   Escape
 * %N   Newline
 * %T   Tab
 * %%   %
 * %d   day as 2 digit number
 * %m   month as 2 digit number
 * %t   month as text
 * %y   year as 2 digit number
 * %Y   year as 4 digit number
 * %H   hour as 2 digit number
 * %M   minute as 2 digit number
 * %S   second as 2 digit number
 * %1   tenth seconds as 1 digit number
 * %2   hundreth seconds as 2 digit number
 * %3   ...
 * .
 * %6   microsecond as 6 digit number
 *)

END DateConversions.
```
