Text Windowing Interface
Version 1.1

An Advanced Interface System For Turbo Pascal 6.0

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Available through
CompuServe EMAIL
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The Text Windowing Interface (TWI) is a Turbo Pascal 6.0 windowing toolkit that replaces Borland's Turbo Vision. TWI easily incorporates text and windows together in an attractive and consistent interface. TWI is great for new programs, and even better for old programs that need a new look.

Ease Of Use
With TWI you can give your users a consistent, easy to use,   and great looking interface without much work. When users   start to see your great software, you'll start receiving   registrations.

Windowing
In the age of windowing you have to have a comprehensive Windowing system to compete with another product. Even if   your program has more features than a competitor's product,   but his interface is better; You're going to lose out.

Quickly Incorporate TWI Into Your Programs
The Text Windowing Interface has many procedures that can   set the background up, set default colors, and much more.   These features are so easy to use, that even an amateur   Pascal programmer will be able to use them.

Pull Down Menus
The Text Windowing Interface has support for Pull Down Menus. Pull down menus are now standard in almost every program, and are now expected by the computer using public.

TWI is Colorful
TWI has been designed so that users can change the colors of   the interface, you can even hard code colors, or just call the Default Color procedure and don't worry about having to   set the colors.

Support
When you register TWI, you get:

A) on-line support through Compuserve E-Mail,

B) support through RelayNet ShareWare (unofficial support base) message base (Route To Xevious; To: David Pabst),

C) Text Windowing Interface Source Code,

D) A reduced upgrade price for all major upgrades (All   future versions will be totally registered for you by   using your registration code),

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E) notification of all future releases, and

F) A disk with the latest version of TWI.

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Vendors must give a description that treats TWI fairly. It must be an objective and non-biased review. Vendors may not refer to this software as cheap, gaudy, et cetera. Included with TWI is VENDORS.DOC which includes a few sample descriptions for TWI.

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File Listing

These files are included within the Text Windowing Interface archive. The following are a semi complete list (any additions will be in README.DOC).

File Name   **Description**
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TWI.TPU   Text Windowing Interface UNIT variation 1.
TWI2.TPU   Text Windowing Interface UNIT variation 2.
TWIDEMO.PAS   Demo program for TWI. (pull down menu demo)
TWIDEMO.EXE   Compiled demo program for TWI.
TWIDEMO2.PAS   Another demo program for TWI. (windowing demo)
TWIDEMO2.EXE   Compiled demo program for TWI.
MENUS.TPU   Pull down menu unit for TWI.TPU (not TWI2).
AWBDUSER.EXE   Another demo of TWI.
TWI.DOC   DOS Text version of documentation.
TWI.WPF   Word Perfect 5.1 version of documentation.
FILE_ID.DIZ   Upload description for BBSs.
README.DOC   Various notes that didn't make it into the documentation.
HISTORY.DOC   History, upgrade, and improvement documentation file for TWI.
SHAREWRE.DOC   DOS Text file describing Shareware.
ORDER.DOC   Order form.
CATALOG.EXE   A catalog of software from DSP Software.
VENDORS.DOC   File filled with descriptions for vendors.
TWI_DESC.DOC   Description file for posting in message bases.
PRINTDOC.BAT   Batch file that will print documentation on printer.

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Important Information

The documentation for TWI has been written in such a way that it should be easy for a person with basic Turbo Pascal understanding to use. If you need more help, please contact me at any of my support boards or services (Further help section).

The Text Windowing Interface (TWI) is divided into three separate parts. Each part is a unit and has its individual characteristics. The three parts are: TWI.TPU, TWI2.TPU, and MENUS.TPU.

TWI.TPU - Variation 1 of TWI

The First variation of the Text Windowing Interface has two major differences from TWI2.TPU. The first being that if you want to use pull down menus with TWI.TPU, you must put MENUS.TPU in the USES clause at the beginning of your program. The second difference is that all colors for the windows are passed through the procedures themselves.

TWI2.TPU - Variation 2 of TWI

TWI2 includes MENUS.TPU; So if you want to use the menus just call the procedures. Second, all colors are passed to the unit globally. Meaning, all you have to do is type the color variable + := and the color you want; All the windows and menus will have that color.

MENUS.TPU - Menuing toolkit for TWI.TPU

Since TWI.TPU doesn't include MENUS.TPU in it, you must place MENUS.TPU in the USES clause at the beginning of your program.

Basically, if you are using TWI2.TPU then MENUS.TPU does not have to be included in the USES clause. Otherwise you must include both TWI and MENUS in the USES clause of your program.

Descriptions of every procedure and function are included within this documentation; If there is any thing specific to either unit it will be specifically pointed out.

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The Text Windowing Environment

The Text Windowing Interface Environment is very simple to program, but very advanced and integrated! There are three major parts that go into the interface: The Windows, The Colors, and The BackGround. As well as, the optional pull down menuing toolkit.

Important

If you use TWI2.TPU then you CANNOT use MENUS.TPU with it. You cannot use TWI2.TPU and TWI.TPU at the same time. In TWI2.TPU make sure you call DEFAULTCOLORS or carefully define all the color variables before you begin intializing the environment.
Also, make sure you define every variable of text the will be placed on the screen. If you don't you'll get lot's of garbage on the screen.

Colors

You should initialize all the following variables if you do not use the DEFAULT COLOR procedure: FGC, BGC, LC, FCCF, FCCB, HFC(*), HBC(*), and WCOL. You also have to make Fillchar equal a character for filling in the background.

Description of colors:

        FCCF (Foreground Fill Character Color)
                FCCB (Background Fill Character Color)
        WCOL (Word Color)
                 FGC (Overall Foreground Color)
                 BGC (Overall Background Color)
        LC (Line Color For Windows)
        HFC (Highlight Foreground Color) *
        HBC (Highlight Background Color) *
        HC   (Highlight color) *

* These colors are not initialized by DEFAULTCOLORS and are used only by menuing functions.

Setting The Interface Up For The First Time

Your first program using TWI should be kept simple. If you like to learning by immersion then dive into the demonstration code that is included with TWI. If you don't, please carefully read through this manual.

This is the first sample program. Let's call it HELLO.PAS:

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```
Program Hello;
Uses TWI2;
Begin
 QuickBKGDraw('This Is The Top Of The Screen','This isn't!');
 DefaultColors;
 DrawSmallWindow('This is HELLO.PAS','','','',25,8);
 WaitForReturn;
 TwiClose;
End.
```

This is about as simple as writing a program in the Text Windowing Interface is! The output that will result is a box in the middle of the screen, and nothing will happen until you press return.

If you have problems when you are using TWI feel free to contact me, and I'll try to help you out. If you're really having trouble with your program, its always good to print it out, and go through and map the code out in your mind. You should always comment code in your programs by either using {...} or (*...*). Commenting makes it easier for both me (if I have to help you out), and you later on if you want to upgrade and improve upon your program.

The demonstration programs that I have included is only a small potential of what TWI can do. I've included AWBDUSER.EXE that uses a small portion of TWI (It is from one of my other products, Alley-Wall) for its interface. Also, I am developing a full Shareware electronic messaging system that can be used on networks and stand alone computers, and it uses TWI throughout.

The following pages contain a full description of each command. All three units have things that are unique to themselves, and these differences will be pointed out in the following pages.

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Procedure DRAWBACKGROUND - Draw Background
   Variation 1 (TWI.TPU): DrawBackGround(Top,Bottom: String;
                 Fillchar: char; fccf, fccb, wcol:
                 integer);
   Variation 2 (TWI2.TPU): DrawBackGround(Top,Bottom : String);

Example Usage
For TWI.TPU:
DRAWBACKGROUND('HELLO',BOTTOMLINE,'▒',7,1,4);
For TWI2.TPU:
DRAWBACKGROUND(TOPLINE,'HELLO');

Description

Drawing the background is the heart of TWI. You should almost always draw the background as one of the first initialization steps in your program. Also, if the screen becomes cluttered with garbage or messed up, just call up DRAWBACKGROUND and you can redraw the screen.

DRAWBACKGROUND initializes the whole interface. First it paints the background with the fill character (FILLCHAR : CHAR). The FILLCHAR color is defined by FCCF and FCCB. The Fill-In Character Color: Foreground (FCCF) and the Fill-In Character: Background (FCCB) define the color of the FILLCHAR. FCCF and FCCB are used any time you clear a window from the screen, or when the background is effected by a change.

Second, it places the status lines on the top and bottom of the screen. These status lines are referred as TOP,BOTTOM and the color that they are display in is Word Color (WCOL).

Also Refer To: QUICKBKGDRAW, DEFAULTCOLORS, and Setting Colors Up.

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Procedure QUICKBKGDRAW - Quickly Draw Background

Twi var 1 and 2: QUICKBKGDRAW(TOP,BOTTOM : STRING);

Example Usage

QUICKBKGDRAW('THIS IS THE TOP OF THE SCREEN','THIS ISN''T');

Description

This procedure uses hard-coded color defaults to initialize the interface. This procedure should be used if you want to do a quick program with TWI. QUICKBKGDRAW benefits you, because you do not have to initialize and define every color and option.

The color defaults for QUICKBKGDRAW and DEFAULTCOLORS are:
>   FCCF (Foreground Fill Character Color) Blue
>   FCCB (Background Fill Character Color)
>   White
>   WCOL (Word Color)   Red
>   FGC (Overall Foreground Color)   Blue
>   BGC (Overall Background Color)   White
>   LC (Line Color For Windows)   Blue

...also thrown in the default background fill character (FILLCHAR):
>   FILLCHAR (Background Fill-In Character) ⁞

In TWI2 all you have to do is type any one of the above variables and the := plus the value you want to assign to it at any point in your program. Even if you use QUICKBKGDRAW, you should call DEFAULTCOLORS afterwards.

In TWI you can change the colors at any time by modifying the variables in the window procedure. For instance,
DRAWSMALLWINDOW(A,B,C,D,FGC,BGC,LC,X,Y); You have to either enter values into those variables, or place them in the VAR in your program. Then go through and assign values for colors.
So, you can have DRAWSMALLWINDOW('Hello','','','',1,2,3,4,5); or you can have it all variables (even a combination of variables and just sticking the information into the procedure.)

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Procedure CHANGESTATUSLINE; - Change status line without redrawing background

TWI variation 1 (TWI.TPU) - CHANGESTATUSLINE(TOP,Bottom: String; FCCF, FCCB, WCOL : Integer);
TWI variation 2 (TWI2.TPU)- CHANGESTATUSLINE(TOP,BOTTOM: STRING);

Example Usage

TWI variation 1:
CHANGESTATUSLINE('',BOTTOM,1,7,4);

TWI variation 2:
CHANGESTATUSLINE('ON TOP','ON BOTTOM');

Description

Changes the status line on the top and bottom of the screen to whatever you want. *Remember: If you are using the pull down menus then make sure that you don't place anything on the top line.*

Refer: DRAWBACKGROUND, QUICKBKGDRAW, and CHANGEBOTTOMLINE.

Procedure CHANGEBOTTOMLINE; - Changes only the bottom status line

        CHANGEBOTTOMLINE(BOTTOM: STRING; COLOR: INTEGER);

Example Usage

CHANGEBOTTOMLINE('F1 Help ESC Exit',4);

Description

This is very helpful to use instead of CHANGESTATUSLINE when you are using pull down menus. There are two reason that you want to use this procedure when you use pull down menus:

    1) It won't affect the line with the menu bar
                2) It makes it easy for you to change the status line
    when the user moves the cursor from one menu option
    to the next. (take a look at the TP6 pull down menus)

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Basically, all it does is change the status line on the bottom of the screen. Enter in a string, and then a color. To maintain consistency throughout the interface, (if you are using variables to contain the colors) you should use WCOL as the color.

Procedure TWICLOSE; - Shut TWI down, and end program

TWICLOSE;

Description

Shuts the Text Windowing Interface down. This procedure cleans up the screen, stops program execution, and makes a quick check to see if everything is okay.

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Windowing Procedures

Procedure DRAWONELINEWINDOW; - Draws a window with a single space   of text
TWI variation 1 - DrawOneLineWindow(A: String; FGC, BGC, LC, X,
               Y : Integer);
TWI variation 2 - DrawOneLineWindow(A: String; X, Y : Integer);

Example Of Usage

TWI.TPU: DRAWONELINEWINDOW(ALine,2,3,4,1,5);
TWI2.TPU: DRAWONELINEWINDOW(ALine,1,5);

Description

The name says it all. Draws a small (40 char) one line window.

Refer: DRAWFULLWINDOWOUTLINE

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Procedure TWIFILELOAD; - Loads a file and displays it in a window.

TWI.TPU: TWIFILELOAD(FileName, Title : String; FGC, BGC, LC :
              Integer);
TWI2.TPU: TWIFILELOAD(FileName, Title : String);

Example Of Usage

TWI.TPU: TWIFILELOAD('HELP.HLP','TWI HELP',1,2,3);
TWI2.TPU: TWIFILELOAD('HELP.HLP','MORE HELP');

Description

TWIFILELOAD draws a box (40x10) and loads a file. This is very helpful if you have want to have a help system, or you just want to load a small file and view it.

The file can be up to 10 lines long, and 40 characters wide.

For the filename, you might want to make everything consistent. For instance, if your program is BM.EXE then you might have BM01.HLP, BM02.HLP, et cetera.

As for the title, put anything you want.   There is a limited space for the title as well.

FGC, BGC, and LC are still Foreground color, background color, and line color.

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Procedure DRAWSMALLWINDOW; - Draw a small and compact window

TWI Variation 1:
DRAWSMALLWINDOW(A,B,C,D : String; FGC, BGC, LC, X, Y : Integer);
TWI Variation 2:
DRAWSMALLWINDOW(A, B, C, D : STRING; X, Y : INTEGER);

Usage Example

TWI.TPU: DRAWSMALLWINDOW('Yo','Yo','Go','Go',FGC,BGC,LC,1,2);
TWI2.TPU: DRAWSMALLWINDOW('YO','YO','GO','GO',1,2);

Description

DRAWSMALLWINDOW draws a 4 line window at position you put in the procedure (X,Y). The colors that are used by DRAWSMALLWINDOW are FGC, BGC, and LC.

The length of each line in this small window is approximately 35 characters long, and 4 lines long.

Refer: CLEARSMALLWINDOW

Procedure CLEARSMALLWINDOW; - Removes a small window from the   screen

TWI Variation 1:
CLEARSMALLWINDOW(X, Y, FCCF, FCCB : INTEGER);
TWI Variation 2:
CLEARSMALLWINDOW(X,Y : INTEGER);

Example of Usage

TWI.TPU: CLEARSMALLWINDOW(1,2,7,1);
TWI2.TPU: CLEARSMALLWINDOW(1,2);

Description

CLEARSMALLWINDOW removes a small window that was drawn by DRAWSMALLWINDOW by placing the FILLCHAR over each character of the small window.

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X and Y are the coordinates that the window was drawn at, or is at. FCCF and FCCB are the colors that are used on the FILLCHAR.

Refer: DRAWSMALLWINDOW

Procedure DRAWMEDIUMWINDOW; - Draw a medium sized window

TWI Variation 1:
DRAWMEDIUMWINDOW(A,B,C,D,E,F : String; FGC, BGC, LC, X, Y :
          Integer);
TWI Variation 2:
DRAWMEDIUMWINDOW(A, B, C, D, E, F : STRING; X, Y : INTEGER);

Usage Example

TWI.TPU:
DRAWMEDIUMWINDOW('Yo','Yo','Go','Go','','',FGC,BGC,LC,1,2);
TWI2.TPU:
DRAWMEDIUMWINDOW('YO','YO','GO','GO','','',1,2);

Description

DRAWMEDIUMWINDOW draws a 6 line window at the position you put in the procedure (X,Y). The colors that are used by DRAWMEDIUMWINDOW are FGC, BGC, and LC.

The length of each line in this small window is approximately 45 characters long, and 6 lines long.

Refer: CLEARMEDIUMWINDOW

Procedure CLEARMEDIUMWINDOW; - Removes a medium window from the   screen

TWI Variation 1:
CLEARMEDIUMWINDOW(X, Y, FCCF, FCCB : INTEGER);
TWI Variation 2:
CLEARMEDIUMWINDOW(X,Y : INTEGER);

Example of Usage

TWI.TPU: CLEARMEDIUMWINDOW(1,2,7,1);
TWI2.TPU: CLEARMEDIUMWINDOW(1,2);

Description

CLEARMEDIUMWINDOW removes a small window that was drawn by DRAWMEDIUMWINDOW by placing the FILLCHAR over each character of the
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small window.

X and Y are the coordinates that the window was drawn at, or is at. FCCF and FCCB are the colors that are used on the FILLCHAR.

Procedure DRAWLARGEWINDOW; - Draw a large sized window

TWI Variation 1:
DRAWLARGEWINDOW(A,B,C,D,E,F,G,H,I,J : String; FGC, BGC, LC, X, Y
: Integer);
TWI Variation 2:
DRAWLARGEWINDOW(A, B, C, D, E, F, G, H, I, J : STRING; X, Y :
INTEGER);

Usage Example

TWI.TPU:
DRAWLARGEWINDOW('Yo','Yo','Go','Go','','','WOW',h,i,j,
FGC,BGC,LC,1,2);
TWI2.TPU:
DRAWLARGEWINDOW('YO','YO','GO','GO','','','','','','','',1,2);

Description

DRAWLARGEWINDOW draws a 10 line window at the position you put in the procedure (X,Y). The colors that are used by DRAWLARGEWINDOW are FGC, BGC, and LC.

The length of each line in this small window is approximately 45 characters long, and 6 lines long.

Refer: CLEARLARGEWINDOW

Procedure CLEARLARGEWINDOW; - Removes a medium window from the   screen
TWI Variation 1:
CLEARLARGEWINDOW(X, Y, FCCF, FCCB : INTEGER);
TWI Variation 2:
CLEARLARGEWINDOW(X,Y : INTEGER);

Example of Usage

TWI.TPU: CLEARLARGEWINDOW(1,2,7,1);
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TWI2.TPU: CLEARLARGEWINDOW(1,2);

Description

CLEARLARGEWINDOW removes a small window that was drawn by DRAWLARGEWINDOW by placing the FILLCHAR over each character of the small window.

X and Y are the coordinates that the window was drawn at, or is at. FCCF and FCCB are the colors that are used on the FILLCHAR.

Procedure DRAWVERYBIGWINDOW; - Draws a huge window

TWI Variation 1:
DRAWVERYBIGWINDOW(A,B,C,D,E,F,G,H,I,J,K,L,M,N,O : String; FGC, BGC, LC, X, Y : Integer);
TWI Variation 2:
DRAWVERYBIGWINDOW(A, B, C, D, E, F, G, H, I, J, K, L, M ,N, O : STRING; X, Y : INTEGER);

Usage Example

TWI.TPU:
DRAWVERYBIGWINDOW('Yo','Yo','Go','Go','','','WOW',h,i,j, FGC,BGC,LC,1,2);
TWI2.TPU:
DRAWVERYBIGWINDOW('YO','YO','GO','GO','','','','','','','','','','', '','','','',1,2);

Description

DRAWVERYBIGWINDOW draws a 15 line window that takes up 3/4ths of the screen at the position you put in the procedure (X,Y). The colors that are used by DRAWVERYBIGWINDOW are FGC, BGC, and LC.

The length of each line in this small window is approximately 45 characters long, and 6 lines long.

Refer: CLEARVERYBIGWINDOW

Procedure CLEARVERYBIGWINDOW; - Removes a very big window from   the screen
TWI Variation 1:
CLEARVERYBIGWINDOW(X, Y, FCCF, FCCB : INTEGER);
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TWI Variation 2:
CLEARVERYBIGWINDOW(X,Y : INTEGER);

Example of Usage

TWI.TPU: CLEARVERYBIGWINDOW(1,2,7,1);
TWI2.TPU: CLEARVERYBIGWINDOW(1,2);

Description

CLEARVERYBIGWINDOW removes a small window that was drawn by
DRAWVERYBIGWINDOW by placing the FILLCHAR over each character of the
small window.
X and Y are the coordinates that the window was drawn at, or is at. FCCF
and FCCB are the colors that are used on the FILLCHAR.

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Procedure DRAWCOLORBOX; - Puts a window on screen with colors

TWI Variation 1:
DrawColorBox(X, Y, FGC, BGC, LC: Integer);
TWI Variation 2:
DrawColorBox(X, Y : Integer);

Example Of Usage

TWI.TPU: DrawColorBox(1,1,2,3,4);
TWI2.TPU: DrawColorBox(1,1);

Description

DRAWCOLORBOX places a window on the screen that contains every possible combination of colors for IBM text, that ranges from 1-15 in foreground and 1-7 for the background. You can use this window to let users modify the interface colors, but you have to write the actual color changing code and entry system.

Procedure DRAWFULLWINDOWOUTLINE; - Draws a box around the side of   the screen.

TWI Variation 1:
DRAWFULLWINDOWOUTLINE(FGC, BGC, LC : INTEGER);
TWI Variation 2:
DRAWFULLWINDOWOUTLINE;

Example Of Usage:
TWI.TPU: DRAWFULLWINDOWOUTLINE(1, 2, 3);
TWI2.TPU: DRAWFULLWINDOWOUTLINE;

Description

DRAWFULLWINDOWOUTLINE draws an outline of a box around the screen. Anything you want to put on the screen has to be done manually with WRITEXY, WRITEXYI, GOTOXY, WRITELN, and WRITE.

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Pull-Down Menuing Procedures

The following procedures are built into TWI2.TPU. You cannot place both TWI2 and MENUS in the USES statement of your program, but you HAVE TO place both TWI and MENUS in the USES statement.

Basically, if you are using TWI2, there is no need to use MENUS, since it is built into TWI2. On the other hand, since MENUS isn't built in to TWI then you must (if you are going to use menus) place MENUS and TWI in the USES statement.

Procedure DRAWMENUS; - Draw the menu bar on the top of the screen

DRAWMENUS;

Description

DRAWMENUS will draw the "menu bar" on the top of the screen. It reads MENUA..MENUG which is a string of 10 characters. All you have to do is before you call DRAWMENUS, type MENUA := 'Title';
for MENUA all the way to MENUG. These MENU titles for the menu bars are passed to the toolkit, and you don't have to put anything in the VAR statement.

Procedure MOVETOLOCAL; - Moves the highlighted part of the cursor   to one of the menu bar titles

MOVETOLOCAL(MoveToPlace : Integer);

Description

MOVETOLOCAL will highlight a menu bar title. For MoveToPlace type an integer from 1 to 8. If you enter 1, it will make TWI highlight MENUA, which is the first menu bar option.

Refer: CleanOldLocation

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Procecedure CLEANOLDLOCATION; - De-Highlights a menu bar title

CLEANOLDLOCATION(OldLocation : Integer);

Description

CLEANOLDLOCATION will dehighlight a menu title that was highlighted by MOVETOLOCAL. This is done by switching to the original colors, and rewriting the menu title to the screen.

OLDLOCATION is the position you want to dehighlight. It can range from 1 to 8.

Refer: MoveToLocal

Procedure DRAWSUBMENU; - Draws a sub menu

DRAWSUBMENU(var SubA, SubB, SubC, SubD, SubE, SubF, SubG, SubH : String; X, Y, LGTH: Integer);

Example Of Usage

DRAWSUBMENU(SUBA,SUBB,SUBC,SUBD, SUBE, SUBF, SUBG, SUBH, 2, 2, 2);

Description

DRAWSUBMENU is a procedure that draws a sub menu that can have up to 8 options.

Its length is determined by LGTH which is an integer. If you only have one option in the sub menu then set LGth to 1, et cetera.

X and Y determine its position on the screen. I have found that it works best if you place it right below the menu bar. So that would usually be that Y would be 2, and X would be a multiple of 10 up to 80. (10 div 80 equals 8, and there are 8 menu titles).

SUBA..SUBH must be variables or your program will not compile. These variables tells TWI what to put in your submenu.

Refer: WHERECURSORISREWRITE, and OLDPLACEREWRITE

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Procedure WHERECURSORISREWRITE - Highlights an option in the submenu

  WHERECURSORISREWRITE(PLACEX, PLACEY : INTEGER; OPTION : STRING);

Example Of Usage

WHERECURSORISREWRITE(3,3,SUBA);

Description

WHERECURSORISREWRITE will highlight an option in a submenu drawn by using DRAWSUBMENU.

PLACEX and PLACEY are where the option you want to highlight is, and OPTION is the actual string of the option. So if you draw window at 1,1 on the screen, and want to highlight the first option; Then use WHERECURSORISREWRITE(3,2,SUBA);.

Refer: DRAWSUBMENU and OLDPLACEREWRITE

Procedure OLDPLACEREWRITE - De-Highlights an option in the submenu   that was highlighted by WHERECURSORISREWRITE

     OLDPLACEREWRITE(PLACEX, PLACEY: INTEGER; OPTION: STRING);

Example Of Usage

OLDPLACEREWRITE(3,3,SUBA);

Description

OLDPLACEREWRITE will de-highlight an option highlighted by using OLDPLACEREWRITE.

PLACEX and PLACEY tells the menu where the option you want to turn back to normal is. OPTION is the actual string that the option you are de-highlighted is.

Refer: WHERECURSORISREWRITE

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Miscellaneous Commands

Procedure WAITFORRETURN; - Wait for user to press return

WAITFORRETURN;

Description

WAITFORRETURN waits for the user to press return. Nothing is placed on the screen by this procedure. So, you probably should place something on the screen that tells the user that they have to push return.

Procedure DEFAULTCOLORS; - Set colors to defaults

DEFAULTCOLORS;

NOTE: Only available in TWI2.TPU.

Description

DEFAULTCOLORS sets the colors of the interface to preset, hard-coded defaults. These defaults can be changed at any time during program execution by changing the color variable values. You do not have to use this procedure when calling QUICKBKGDRAW, but you must if you want to use any windows. (You can manually initialize and assign values to the color variables)

Color defaults in DEFAULTCOLORS:

FCCF (Foreground Fill Character Color) Blue
FCCB (Background Fill Character Color) White
WCOL (Word Color)   Red
FGC (Overall Foreground Color)   Blue
BGC (Overall Background Color)   White
LC (Line Color For Windows)   Blue
...also thrown in the default background fill character (FILLCHAR):
FILLCHAR (Background Fill-In Character) ▓

Refer: QUICKBKGDRAW

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Procedure WRITEXY; - Write to any point on the screen

WRITEXY(X,Y : INTEGER; TEXT : STRING);

Example Of Usage

WriteXY(5,5,'I am at point 5,5 on the screen!');

Description

WRITEXY is a simple screen writing procedure that I wrote for one simple reason: save a couple of lines of space. Originally, every time I wanted to place something at a particular point on the screen, I would have to use GOTOXY and WRITE. Now I just call WRITEXY.

Refer: WRITEXYI;

Procedure WRITEXYI; - Write an integer to a point on the screen

WRITEXYI(X, Y, TEXT : INTEGER);

Example Of Usage

WriteXYI(5,5,5);

Description

WRITEXYI does what WRITEXY does (write to a point on the screen), but WRITEXYI writes integers instead of strings.

Refer: WRITEXY;

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Further Help

If you need more help with TWI or anything else that is related to the interface, please contact me by mail or electronic mail at any time. I can be contacted on COMPUSERVE, please send mail in the EMAIL (go mail) and post a message to 76547,2643. I can also be contacted on INTERNET: 76547.2643@compuserv.com or david.pabst@channel1.com. I can also be contacted on the RelayNet message bases: SHAREWARE and TURBO PASCAL.

Also, you can directly call)(evious at (508)875-3618 (up to 14400bps), and leave a message in the EMAIL conference to me.

May home address is:
<div align="center">

18 McAdams Road
Framingham, MA 01701
USA
</div>

Getting The Latest Version

The latest version may be found on Compuserve,)(evious (508-875-3618), or your local bulletin board. If you can't find it in a Shareware catalog or on a BBS you can mail away for a shareware evaluation copy ($5).

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Thank you for using and registering TWI.

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