

File created: 12-Jul-88 09:06:28 {MCS:MCS:STANFORD}<LANE>EDITBG.;6

changes to: (FNS EDITBACKGROUND EDITBG.BUTTONFN)
(VARS EDITBGCOMS)

previous date: 9-Sep-87 09:18:10 {MCS:MCS:STANFORD}<LANE>EDITBG.;4

Read Table: INTERLISP

Package: INTERLISP

Format: XCCS

;;
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(RPAQQ EDITBGCOMS

```
((FNS EDITBACKGROUND EDITBG.BUTTONFN)
 (RECORDS EDITBG.RECORD EDITBG.DATA)
 (CONSTANTS (EDITBG.PIXELSIZE 16))
 (ALISTS (BackgroundMenuCommands EditBG))
 (VARS (BackgroundMenu))
 [INITVARS [EDITBG.SHADEREC (create EDITBG.RECORD REGION _ (CREATEREGION 2 2 (LLSH EDITBG.PIXELSIZE 2)
                                                                (LLSH EDITBG.PIXELSIZE 2))
                                                                GRIDSPEC _ (CREATEREGION 2 2 EDITBG.PIXELSIZE EDITBG.PIXELSIZE)
                                                                BITWIDTH _ 4 BITHEIGHT _ 4 DSPREGION _ (CREATEREGION EDITBG.PIXELSIZE
                                                                (TIMES EDITBG.PIXELSIZE
                                                                6)
                                                                (TIMES EDITBG.PIXELSIZE
                                                                11)
                                                                (LLSH EDITBG.PIXELSIZE 1
                                                                ))
                                                                NUMBERREGION _ (CREATEREGION WBorder (PLUS (LLSH EDITBG.PIXELSIZE 2)
                                                                WBorder)
                                                                (DIFFERENCE (LLSH EDITBG.PIXELSIZE 2)
                                                                WBorder)
                                                                (FONTPROP DEFAULTFONT 'HEIGHT])
 [EDITBG.BORDERREC (create EDITBG.RECORD REGION _ (CREATEREGION (PLUS (TIMES EDITBG.PIXELSIZE 5)
                                                                2)
                                                                (LLSH EDITBG.PIXELSIZE 3)
                                                                (LLSH EDITBG.PIXELSIZE 2))
                                                                GRIDSPEC _ (CREATEREGION (PLUS (TIMES EDITBG.PIXELSIZE 5)
                                                                2)
                                                                2 EDITBG.PIXELSIZE (LLSH EDITBG.PIXELSIZE 1))
                                                                BITWIDTH _ 8 BITHEIGHT _ 2 DSPREGION _ (CREATEREGION 1
                                                                (ADD1 (TIMES
                                                                EDITBG.PIXELSIZE
                                                                5))
                                                                (PLUS (TIMES
                                                                EDITBG.PIXELSIZE
                                                                13)
                                                                2)
                                                                (SUB1 (LLSH
                                                                EDITBG.PIXELSIZE
                                                                2)))
                                                                NUMBERREGION _ (CREATEREGION (PLUS (TIMES EDITBG.PIXELSIZE 5)
                                                                WBorder)
                                                                (PLUS (LLSH EDITBG.PIXELSIZE 2)
                                                                WBorder)
                                                                (DIFFERENCE (LLSH EDITBG.PIXELSIZE 3)
                                                                WBorder)
                                                                (FONTPROP DEFAULTFONT 'HEIGHT])
 (EDITBG.BUTTONREGION (CREATEREGION (PLUS 2 (LLSH EDITBG.PIXELSIZE 2))
 (PLUS 2 (LLSH EDITBG.PIXELSIZE 2))
 (SUB1 EDITBG.PIXELSIZE)
 (SUB1 EDITBG.PIXELSIZE]
 (GLOBALVARS EDITBG.BUTTONREGION EDITBG.BORDERREC EDITBG.SHADEREC EDITBG.PIXELSIZE)))
```

(DEFINEQ

(EDITBACKGROUND

```
[LAMBDA NIL
 (DECLARE (GLOBALVARS WBorder))
 (LET ((WINDOW (CREATEW (GETBOXREGION (WIDTHIFWINDOW (CONSTANT (PLUS (TIMES EDITBG.PIXELSIZE 13)
                                                                WBorder))))
 (HEIGHTIFWINDOW (CONSTANT (TIMES EDITBG.PIXELSIZE 9))
 T))
 "Background Texture Edit Tool")))
 (for RECORD in (LIST EDITBG.SHADEREC EDITBG.BORDERREC)
 do (with EDITBG.RECORD RECORD (with REGION REGION (WBOX (CREATEREGION (DIFFERENCE LEFT
                                                                (QUOTIENT WBorder 2))
                                                                (DIFFERENCE BOTTOM (QUOTIENT WBorder 2)
                                                                ))
                                                                (PLUS WIDTH WBorder)
                                                                (PLUS HEIGHT WBorder))
```

; Edited 12-Jul-88 09:05 by cdl

```

(NIL NIL WINDOW))
(GRID GRIDSPEC BITWIDTH BITHEIGHT 'POINT WINDOW)
(CENTERPRINTINREGION 0 NUMBEREGION WINDOW)))
(WBOX EDITBG.BUTTONREGION NIL NIL WINDOW)
(WINDOWPROP WINDOW 'BUTONEVENTFN (FUNCTION EDITBG.BUTTONFN))
(WINDOWPROP WINDOW 'EDITBG.DATA (create EDITBG.DATA))
WINDOW])

```

(EDITBG.BUTTONFN

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```

[LAMBDA (WINDOW)
  (PROG ((DATA (WINDOWPROP WINDOW 'EDITBG.DATA))
    POSITION SHADE LEFTFLG PIXEL BIT GRIDX GRIDY RECORD NEWSHADE)
    (until (MOUSESTATE UP)
      do (SETQ POSITION (CURSORPOSITION NIL WINDOW POSITION))
        (if (INSIDEP EDITBG.BUTTONREGION POSITION)
          then (DSPFILL EDITBG.BUTTONREGION BLACKSHADE 'INVERT WINDOW)
                (with EDITBG.DATA DATA (CHANGEBACKGROUND INTERIOR)
                  (CHANGEBACKGROUND BORDER EXTERIOR))
                (DSPFILL EDITBG.BUTTONREGION BLACKSHADE 'INVERT WINDOW)
                (RETURN))
          (if (INSIDEP (fetch (EDITBG.RECORD REGION) of EDITBG.SHADEREC)
                    POSITION)
            then (SETQ RECORD EDITBG.SHADEREC)
                  (SETQ SHADE (with EDITBG.DATA DATA INTERIOR))
            elseif (INSIDEP (fetch (EDITBG.RECORD REGION) of EDITBG.BORDERREC)
                    POSITION)
            then (SETQ RECORD EDITBG.BORDERREC)
                  (SETQ SHADE (with EDITBG.DATA DATA EXTERIOR))
            else (SETQ RECORD NIL))
          (if RECORD
            then (SETQ LEFTFLG (LASTMOUSESTATE LEFT))
                  [with EDITBG.RECORD RECORD (with POSITION POSITION (SETQ GRIDX (GRIDXCOORD XCOORD
                                                                                          GRIDSPEC))
                                                                 (SETQ GRIDY (GRIDYCOORD YCOORD GRIDSPEC)))
                  (SHADEGRIDBOX GRIDX GRIDY (if LEFTFLG
                    then GRAYSHADE
                    else WHITESHADE)
                    NIL GRIDSPEC 'POINT WINDOW)
                  [SETQ PIXEL (LLSH 1 (PLUS (TIMES GRIDY BITWIDTH)
                    (SUB1 BITWIDTH)
                    (MINUS GRIDX)
                  [SETQ NEWSHADE (if LEFTFLG
                    then (LOGOR SHADE PIXEL)
                    else (LOGAND SHADE (LOGNOT PIXEL)
                    (if (NEQ SHADE NEWSHADE)
                      then (SETQ SHADE NEWSHADE)
                      (DSPFILL NUMBEREGION WHITESHADE 'REPLACE WINDOW)
                      (CENTERPRINTINREGION SHADE NUMBEREGION WINDOW)
                      (with EDITBG.DATA DATA
                        (if (EQ RECORD EDITBG.BORDERREC)
                          then (SETQ BIT (if LEFTFLG
                            then 1
                            else 0))
                          (SETQ GRIDY (LLSH GRIDY 1))
                          (for X from GRIDX to (PLUS GRIDX 8) by 8
                            do (for Y from GRIDY to (ADD1 GRIDY)
                              do (BITMAPBIT BITMAP X Y BIT)))
                          (DSPFILL DSPREGION BITMAP NIL WINDOW)
                          (SETQ EXTERIOR SHADE)
                        else (SETQ INTERIOR SHADE]
                      (DSPFILL (fetch (EDITBG.RECORD DSPREGION) of EDITBG.SHADEREC)
                        (with EDITBG.DATA DATA INTERIOR)
                        NIL WINDOW))
                    (BLOCK])
          )
    )
  (DECLARE%: EVAL@COMPILE
  (RECORD EDITBG.RECORD (REGION GRIDSPEC BITWIDTH DSPREGION NUMBEREGION BITHEIGHT))
  (RECORD EDITBG.DATA (BITMAP INTERIOR EXTERIOR)
    BITMAP _ (BITMAPCREATE 16 4)
    INTERIOR _ 0 EXTERIOR _ 0)
  )
  (DECLARE%: EVAL@COMPILE
  (RPAQQ EDITBG.PIXELSIZE 16)
  (CONSTANTS (EDITBG.PIXELSIZE 16))
  )
  (ADDTovar BackgroundMenuCommands (EditBG ' (EDITBACKGROUND)
    "Opens a Background Texture Edit Tool"))

```

(RPAQQ **BackgroundMenu** NIL)(RPAQ? **EDITBG.SHADEREC**

```

[create EDITBG.RECORD REGION _ (CREATEREGION 2 2 (LLSH EDITBG.PIXELSIZE 2)
                                     (LLSH EDITBG.PIXELSIZE 2))
  GRIDSPEC _ (CREATEREGION 2 2 EDITBG.PIXELSIZE EDITBG.PIXELSIZE)
  BITWIDTH _ 4 BITHEIGHT _ 4 DSPREGION _ (CREATEREGION EDITBG.PIXELSIZE (TIMES EDITBG.PIXELSIZE 6)
                                     (TIMES EDITBG.PIXELSIZE 11)
                                     (LLSH EDITBG.PIXELSIZE 1))
  NUMBERREGION _ (CREATEREGION WBorder (PLUS (LLSH EDITBG.PIXELSIZE 2)
                                     WBorder)
  (DIFFERENCE (LLSH EDITBG.PIXELSIZE 2)
    WBorder)
  (FONTPROP DEFAULTFONT 'HEIGHT])

```

(RPAQ? **EDITBG.BORDERREC**

```

[create EDITBG.RECORD REGION _ (CREATEREGION (PLUS (TIMES EDITBG.PIXELSIZE 5)
  2)
  (LLSH EDITBG.PIXELSIZE 3)
  (LLSH EDITBG.PIXELSIZE 2))
  GRIDSPEC _ (CREATEREGION (PLUS (TIMES EDITBG.PIXELSIZE 5)
  2)
  2 EDITBG.PIXELSIZE (LLSH EDITBG.PIXELSIZE 1))
  BITWIDTH _ 8 BITHEIGHT _ 2 DSPREGION _ (CREATEREGION 1 (ADD1 (TIMES EDITBG.PIXELSIZE 5))
  (PLUS (TIMES EDITBG.PIXELSIZE 13)
  2)
  (SUB1 (LLSH EDITBG.PIXELSIZE 2)))
  NUMBERREGION _ (CREATEREGION (PLUS (TIMES EDITBG.PIXELSIZE 5)
  WBorder)
  (PLUS (LLSH EDITBG.PIXELSIZE 2)
  WBorder)
  (DIFFERENCE (LLSH EDITBG.PIXELSIZE 3)
  WBorder)
  (FONTPROP DEFAULTFONT 'HEIGHT])

```

```

(RPAQ? EDITBG.BUTTONREGION (CREATEREGION (PLUS 2 (LLSH EDITBG.PIXELSIZE 2))
  (PLUS 2 (LLSH EDITBG.PIXELSIZE 2))
  (SUB1 EDITBG.PIXELSIZE)
  (SUB1 EDITBG.PIXELSIZE)))

```

(DECLARE%: DOEVAL@COMPILE DONTCOPY

```

(GLOBALVARS EDITBG.BUTTONREGION EDITBG.BORDERREC EDITBG.SHADEREC EDITBG.PIXELSIZE)
)

```

(PUTPROPS **EDITBG COPYRIGHT** ("Stanford University" 1984 1985 1986 1987 1988))

FUNCTION INDEX

EDITBACKGROUND1 EDITBG.BUTTONFN2

VARIABLE INDEX

BackgroundMenu3 EDITBG.BORDERREC3 EDITBG.SHADEREC3
BackgroundMenuCommands2 EDITBG.BUTTONREGION3

RECORD INDEX

EDITBG.DATA2 EDITBG.RECORD2

CONSTANT INDEX

EDITBG.PIXELSIZE2
