

File created: 4-Feb-2022 14:14:40 {MM}<rooms>ROOMS-NOTES.;2

changes to: (IL:FUNCTIONS EDIT-NOTE-WINDOW-TEXT)

previous date: 5-Dec-2020 16:39:51 {MM}<rooms>ROOMS-NOTES.;1

Read Table: XCL

Package: ROOMS

Format: XCCS

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```
(IL:RPAQQ IL:ROOMS-NOTESCOMS
  ((FILE-ENVIRONMENTS IL:ROOMS-NOTES)
   (IL:P (EXPORT ' (*DEFAULT-NOTE-WINDOW-FONT* MAKE-NOTE-WINDOW))
         (REQUIRE "ROOMS")))
  ;; provides note windows
  (IL:STRUCTURES NOTE)
  (IL:VARIABLES *DEFAULT-NOTE-WINDOW-FONT*)
  (IL:FUNCTIONS MAKE-NOTE-WINDOW NOTE-WINDOW-REPAINTFN PRINT-NOTE-STRING NOTE-WINDOW-BUTTONEVENTFN
    EDIT-NOTE-WINDOW-TEXT SET-NOTE-WINDOW-FONT SET-NOTE-WINDOW-TITLE)
  (IL:WINDOW-TYPES :NOTE-WINDOW)
  (IL:DECLARE\ IL:EVAL@COMPILE IL:DONTCOPY (IL:P (OR (IL:HASDEF 'STREAM 'IL:RECORDS)
    (IL:EVAL (IL:SYSRECLOOK1 'STREAM))))))
  (IL:GLOBALVARS IL:BOLDFONT)))

(DEFINE-FILE-ENVIRONMENT IL:ROOMS-NOTES :COMPILER :COMPILE-FILE
  :PACKAGE "ROOMS"
  :READTABLE "XCL")

(EXPORT ' (*DEFAULT-NOTE-WINDOW-FONT* MAKE-NOTE-WINDOW))

(REQUIRE "ROOMS")

;; provides note windows

(DEFSTRUCT NOTE
  ;; a note for display in a note-window

  (STRING "" :TYPE STRING)
  (FONT NIL :TYPE FONT)
  (TITLE "Note:" :TYPE STRING)
  (READ-ONLY? NIL :TYPE (MEMBER T NIL)))

(DEFVAR *DEFAULT-NOTE-WINDOW-FONT* IL:BOLDFONT)

(DEFUN MAKE-NOTE-WINDOW (&KEY REGION (TITLE "Note:")
  (STRING "")
  (FONT *DEFAULT-NOTE-WINDOW-FONT*)
  (READ-ONLY? NIL))
  (LET ((WINDOW (IL:CREATEW REGION TITLE)))
    (IL:WINDOWPROP WINDOW 'NOTE (MAKE-NOTE :STRING STRING :FONT (IF (SYMBOLP FONT)
      FONT
      (IL:FONTCREATE FONT)))
      :TITLE TITLE :READ-ONLY? READ-ONLY?))
    (IL:WINDOWPROP WINDOW 'IL:REPAINTFN 'NOTE-WINDOW-REPAINTFN)
    (IL:WINDOWPROP WINDOW 'IL:RESHAPEFN 'NOTE-WINDOW-REPAINTFN)
    (IL:WINDOWPROP WINDOW 'IL:BUTTONEVENTFN 'NOTE-WINDOW-BUTTONEVENTFN)
    (IL:WINDOWPROP WINDOW 'IL:BUTTONEVENTFN 'NOTE-WINDOW-BUTTONEVENTFN)
    (NOTE-WINDOW-REPAINTFN WINDOW)
    WINDOW))

(DEFUN NOTE-WINDOW-REPAINTFN (WINDOW &REST IGNORE)
  (LET* ((NOTE (IL:WINDOWPROP WINDOW 'NOTE))
    (DSP (IL:GETSTREAM WINDOW))
    (FONT (NOTE-FONT NOTE)))
    (IL:WINDOWPROP WINDOW 'IL:TITLE (NOTE-TITLE NOTE))
    (IL:DSPFONT (IF (SYMBOLP FONT)
      (SYMBOL-VALUE FONT)
      FONT)
      FONT)
    DSP)
    (IL:CLEARW WINDOW)
    ;; why 8? that's what TEdit uses.
    (PRINT-NOTE-STRING (NOTE-STRING NOTE)
      DSP 8 (- (IL:WINDOWPROP WINDOW 'IL:WIDTH)
        8))))
```

(DEFUN **PRINT-NOTE-STRING** (STRING DSP LEFT-MARGIN RIGHT-MARGIN &OPTIONAL (LINE-LEADING 0))

;;; print STRING to DSP within LEFT-MARGIN & RIGHT-MARGIN, breaking lines at spaces. I shouldn't have to write this, so it's ok if the code is ugly,
;;; right?

```
(CHECK-TYPE DSP (SATISFIES IL:DISPLAYSTREAMP))
(PROG* ((CHAR)
  (FONT (IL:DSPFONT NIL DSP))
  (LINE-HEIGHT (+ (IL:FONTHEIGHT FONT)
                  LINE-LEADING))
  (LENGTH (VECTOR-LENGTH STRING))
  (DD (IL:FETCH (STREAM IL:IMAGEDATA) IL:OF DSP))
  (LAST-SPACE 0)
  (LINE-START 0)
  (I -1)
  (X LEFT-MARGIN)
  (X-AT-LAST-SPACE LEFT-MARGIN)
)
(IL:MOVETO LEFT-MARGIN (- (IL:DSPYPOSITION NIL DSP)
                          LINE-LEADING)
 DSP)
```

```
; offset in string where we'll break
; offset into string where this line starts
; current offset into string
; x position of char at I in pixels
; x position of char at LAST-SPACE in pixels
```

LOOP

```
(INCF I)
(WHEN (>= I LENGTH)
  (SETQ LAST-SPACE LENGTH)
  (GO DUMP-LINE))
(SETQ CHAR (AREF STRING I))
(CASE CHAR
  (#\Space
    (DO ((N (1+ I)
            (1+ N)))
      ;; skip through multiple spaces without checking for line breaks so that line breaks are always forced after a group of spaces
      ((OR (= N LENGTH)
           (NOT (EQL (AREF STRING N)
                    #\Space))))
      (INCF I)
      (INCF X (IL:CHARWIDTH (CHAR-CODE #\Space)
                            FONT)))
    (#\Newline
      (SETQ LAST-SPACE I)
      (SETQ X-AT-LAST-SPACE X)
      (GO DUMP-LINE)))
  (INCF X (IL:CHARWIDTH (CHAR-CODE CHAR)
                        FONT))
  (WHEN (> X RIGHT-MARGIN)
    ;; check if line needs breaking
    (WHEN (AND (<= LAST-SPACE LINE-START))
      ;; if we've had no spaces on this line, just break it where we are. we actually lose a character here, as DUMP-LINE always skips
      ;; the character we're on, presuming it's a space or CR.
      (SETQ LAST-SPACE I)
      (SETQ X-AT-LAST-SPACE X))
    (GO DUMP-LINE))
  (GO LOOP))
DUMP-LINE
```

; force line break

;;; dump chars from LINE-START up to (but not including) LAST-SPACE.

```
(DO ((N LINE-START (1+ N))
    ((OR (= N LAST-SPACE)
         (= N LENGTH))
  ;; move to the next line
  (IL:MOVETO LEFT-MARGIN (- (IL:DSPYPOSITION NIL DSP)
                            LINE-HEIGHT)
   DSP)
  ;; adjust X & LINE-START
  (SETQ X (+ LEFT-MARGIN (- X X-AT-LAST-SPACE)))
  (SETQ LINE-START (1+ LAST-SPACE)))
  ;; this is soooo much faster than calling WRITE-CHAR. the down side is that this code will now only work on display streams.
  (IL:\BLTCHAR (CHAR-CODE (AREF STRING N))
               DSP DD))
(IF (>= I LENGTH)
  (RETURN)
  (GO LOOP)))
```

(DEFUN **NOTE-WINDOW-BUTTONEVENTFN** (WINDOW)
(IL:TOTOPW WINDOW)

```
(WHEN (AND (IL:MOUSESTATE (IL:ONLY IL:MIDDLE))
  (NOT (NOTE-READ-ONLY? (IL:WINDOWPROP WINDOW 'NOTE))))
(CASE (MENU ' ("Edit Text" :EDIT "Edit the text of this note window with TEdit.")
  ("Set Font" :FONT "Set the font of this note window.")
  ("Set Title" :TITLE "Set the title of this note window.")))
(:EDIT (IL:ADD.PROCESS `(EDIT-NOTE-WINDOW-TEXT ',WINDOW)))
(:FONT (IL:ADD.PROCESS `(SET-NOTE-WINDOW-FONT ',WINDOW)))
(:TITLE (IL:ADD.PROCESS `(SET-NOTE-WINDOW-TITLE ',WINDOW))))
```

(DEFUN **EDIT-NOTE-WINDOW-TEXT** (WINDOW) ; Edited 4-Feb-2022 14:14 by rmk

```
(LET ((NOTE (IL:WINDOWPROP WINDOW 'NOTE))
  (IF (FBOUNDP 'IL:TEDIT)
    (LET ((TEXT-STREAM (IL:OPENTEXTSTREAM (IL:OPENSTRINGSTREAM (NOTE-STRING NOTE))
      NIL NIL NIL
        `(IL:FONT ,(NOTE-FONT NOTE)
          IL:NOTITLE T IL:PROMPTWINDOW ,IL:PROMPTWINDOW IL:MENU
          (IL:|Find| IL:|Substitute| IL:|Quit|)
          IL:QUITFN
          ,#' (LAMBDA (WINDOW STREAM TEXTOBJ IL:PROPS)
            (IL:|replace| IL:EDITFINISHEDFLG IL:|of| TEXTOBJ IL:|with| T)
            'IL:DON\`T)
          IL:AFTERQUITFN
          ,#' (LAMBDA (WINDOW STREAM)
            (IL:OPENW WINDOW))))))
      (IL:TTY.PROCESS (IL:THIS.PROCESS))
      (SETF (NOTE-STRING NOTE)
        (IL:TEDIT TEXT-STREAM WINDOW T))
      (IL:BLOCK 200)
      (IL:WINDOWPROP WINDOW 'IL:REPAINTFN 'NOTE-WINDOW-REPAINTFN)
      (IL:WINDOWPROP WINDOW 'IL:RESHAPEFN 'NOTE-WINDOW-REPAINTFN)
      (IL:WINDOWPROP WINDOW 'IL:BUTTONEVENTFN 'NOTE-WINDOW-BUTTONEVENTFN)
      (NOTE-WINDOW-REPAINTFN WINDOW))))))
```

(DEFUN **SET-NOTE-WINDOW-FONT** (WINDOW)

```
(LET* ((NOTE (IL:WINDOWPROP WINDOW 'NOTE))
  (OLD-FONT (NOTE-FONT NOTE))
  (NEW-FONT (SEDI::SEDITE (IF (SYMBOLP OLD-FONT)
    OLD-FONT
    (EXTERNALIZE-FONT OLD-FONT))
  NIL NIL NIL NIL ' (:CLOSE-ON-COMPLETION))))
  (SETF (NOTE-FONT NOTE)
    (IF (SYMBOLP NEW-FONT)
      NEW-FONT
      (IL:FONTCREATE NEW-FONT)))
  (NOTE-WINDOW-REPAINTFN WINDOW)))
```

(DEFUN **SET-NOTE-WINDOW-TITLE** (WINDOW)

```
(LET* ((NOTE (IL:WINDOWPROP WINDOW 'NOTE))
  (TITLE (PROMPT-USER "Title:" "Type title (CR to abort)")))
  (WHEN TITLE
    (SETF (NOTE-TITLE NOTE)
      TITLE)
    (NOTE-WINDOW-REPAINTFN WINDOW))))
```

(DEF-WINDOW-TYPE **:NOTE-WINDOW** :RECOGNIZER (LAMBDA (WINDOW) (NOTE-P (IL:WINDOWPROP WINDOW 'NOTE)))

```
:ABSTRACTER (LAMBDA (WINDOW)
  (LET* ((NOTE (IL:WINDOWPROP WINDOW 'NOTE))
    (FONT (NOTE-FONT NOTE))
    ` (:REGION ,(EXTERNALIZE-REGION (WINDOW-REGION WINDOW))
      :TITLE
      ,(NOTE-TITLE NOTE)
      :STRING
      ,(NOTE-STRING NOTE)
      :FONT
      ,(IF (SYMBOLP FONT)
        FONT
        (EXTERNALIZE-FONT FONT))
      :READ-ONLY?
      ,(NOTE-READ-ONLY? NOTE))))
  :RECONSTITUTER (LAMBDA (ARGS)
    (LET ((REST (COPY-LIST ARGS))
      (REMF REST :REGION)
      (APPLY #'MAKE-NOTE-WINDOW :REGION (INTERNALIZE-REGION (GETF ARGS :REGION)
        ' (0 0 100 100)))
      REST)))
  :TITLE (LAMBDA (PLACEMENT REGION DSP)
    (LET ((NOTE (IL:WINDOWPROP (PLACEMENT-WINDOW PLACEMENT)
      'NOTE)))
      (PRINT-PEP-TITLE-STRING (IF (AND NOTE (NOTE-TITLE NOTE))
        (STRING (NOTE-TITLE NOTE))
        "Note:"))
      REGION DSP :NO-TITLE-BAR? (PLACEMENT-SHRUNKEN? PLACEMENT))))))
```

{MEDLEY}<rooms>ROOMS-NOTES.;1

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(IL:DECLARE\ : IL:EVAL@COMPILE IL:DONTCOPY

(OR (IL:HASDEF 'STREAM 'IL:RECORDS)
(IL:EVAL (IL:SYSRECLOOK1 'STREAM)))
)

(IL:DECLARE\ : IL:DOEVAL@COMPILE IL:DONTCOPY

(IL:GLOBALVARS IL:BOLDFONT)
)

(IL:PUTPROPS **IL:ROOMS-NOTES IL:COPYRIGHT** ("Venue & Xerox Corporation" 1987 1988 1990 2020))

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