

File created: 15-Aug-90 13:17:56 {DSK}<usr>local>Ide>SOURCES>loops>SYSTEM>LOOPSUSERINTERFACE.;2

changes to: (VARS LOOPSUSERINTERFACECOMS)

previous date: 29-Feb-88 10:32:58 {DSK}<usr>local>Ide>SOURCES>loops>SYSTEM>LOOPSUSERINTERFACE.;1

Read Table: INTERLISP

Package: INTERLISP

Format: XCCS

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(RPAQQ **LOOPSUSERINTERFACECOMS**

```
(( * * Support for ?= and methods)
 (FNS GetMethodArgs)
 (VARS (TTYIN?=FN 'GetMethodArgs))
 (* * Add a Loops item to the background menu)
 [ADDVARS (BackgroundMenuCommands ("Loops Icon" '(_Proto ($ LoopsIcon)
                                     Blink)
                                     "Bring the Loops Icon to the top of the screen"
 (SUBITEMS ("Browse Class"
 '(_Proto ($ LoopsIcon)
           BrowseObject)
           "Prompts for a class name and opens a browser on the
           class"
 (SUBITEMS ("Browse Class" '(_Proto ($ LoopsIcon)
                                     BrowseObject)
           "Prompts for a class name and opens
           a browser on the class")
           ("Browse Supers" '(_Proto ($ LoopsIcon)
                                     SupersBrowse)
           "Prompts for a class name and opens a
           browser on the class's supers"))
 ("Browse File" '(_Proto ($ LoopsIcon)
           FileBrowse)
           "Opens a Loops FileBrowser on a selected file"
 (SUBITEMS ("Browse File"
 '(_Proto ($ LoopsIcon)
           FileBrowse)
           "Opens a Loops FileBrowser on a
           selected file")
           ("Edit FileComs" '(_Proto ($ LoopsIcon)
                                     EditFileComs)
           "Edit the FILECOMS of a selected
           file")
           ("Cleanup File" '(_Proto ($ LoopsIcon)
                                     CleanUpFile)
           "Do a CLEANUP on a selected file"]

 (VARS (BackgroundMenu NIL))
 (* * The PPDefault window)
 (VARS (PPDefault \TopLevelTtyWindow))
 (GLOBALVARS PPDefault))

(* * Support for ?= and methods)
```

(DEFINEQ

(GetMethodArgs

[LAMBDA (fn)

; Edited 25-Nov-87 11:57 by Bane

::: Used in the TTYIN function when the user types in ?=

```
(SELECTQ fn
 (( _Super _New _Proto _Process SEND) ;; Try to find the arguments to a message
 (PROG (obj sel class actuals)
 ;; Parse the message
 (SETQ actuals (TTYIN.READ?=ARGS))
 (if (NULL actuals)
 then (RETURN))
 (SETQ obj (CAR actuals))
 (SETQ sel (CADR actuals))
 ;; Try to compute the class of the object that will receive the message
 [SETQ class (LET [(evalObj (COND
 ((Object? obj) ; If the obj form is already any object, the value of the obj form will
 ; still be that object
 obj)
 [(ATOM obj) ; An atom can be evaluated safely with no side effects
 (CAR (NLSETQ (EVAL obj)
 (NOT (LISTP obj))
```

```

; God knows what to do if the form isn't an object, an atom, or a
; list
NIL)
(EQ '$ (CAR obj))
; The form ($ name) can be evaluated safely with no side effects
(EVAL obj)
(AND (EQ '$! (CAR obj))
      (ATOM (CADR obj)))
; The form ($! litatom) can be evaluated safely with no side
; effects
(EVAL obj)
(AND (EQLLENGTH obj 1)
      (EQ (CAR obj)
           'SavedValue))
; The form (SavedValue) can be evaluated safely with no side
; effects
(EVAL obj]
(COND
  ((MEMB fn '(_New
             _Proto))
   evalObj)
  ((AND (Object? evalObj)
        (NEQ ($ Tofu)
              (Class evalObj)))
   (Class evalObj))
  (T (GetClassRec (OR (PromptRead (CONCAT (CHARACTER 7)
                                           (CHARACTER (CHARCODE CR))
                                           "Please type in name of class for
                                           "or type ] to evaluate expression
                                           to find class"))
                  (Class (EVAL obj]
  ((NULL class)
   (RETURN)))
;; If the user has not provided a selector, let her pick one
(COND
  ((NULL sel)
   [SETQ sel
    (MENU
     (LET
      ((selectors! (_ class ListAttribute! 'Selectors NIL T)))
      (COND
       [(LEQ (LENGTH selectors!)
              10)
        (create MENU
                 TITLE _ "Which selector?"
                 ITEMS _ selectors!
                 MENCOLUMNS _ (ADD1 (IQUOTIENT (ITIMES (FONTHEIGHT MENUFONT)
                                                       (LENGTH selectors!))
                                               500]
        (T
         (LET*
          [(localSelectors (_ class ListAttribute! 'Selectors))
           [genericSelectors (LDIFFERENCE selectors! (_ class ListAttribute! 'Selectors)
                                                (inheritedSelectors (LDIFFERENCE selectors! (UNION genericSelectors
                                                                 localSelectors)))
           (columns (ADD1 (IQUOTIENT (ITIMES (FONTHEIGHT MENUFONT)
                                             (PLUS 2 (LENGTH localSelectors)))
                                   500]
          ;; ListAttribute! does the wrong thing in these cases, so swap the two sub-selector menus
          (SELECTQ (ClassName class)
                   ((Class Object Tofu)
                    (CL:PSETQ inheritedSelectors genericSelectors genericSelectors
                              inheritedSelectors))
                   NIL)
                   ; We have to go to some length to make sure that items with
                   ; sub-items are in the right hand column
          (create
           MENU
           TITLE _ "Which selector?"
           ITEMS _
           [if (OR (EQP 1 columns)
                  (AND (NULL genericSelectors)
                       (NULL inheritedSelectors)))
            then `[,@localSelectors ["*generics*" NIL NIL (SUBITEMS ,@(SORT
                                                                    genericSelectors
                                                                    )
                                                                    ]
                  (*inherited*" NIL NIL (SUBITEMS ,@(SORT inheritedSelectors)
                  )
            else (LET ((dummyItem (LIST "" NIL NIL)))
                   `[,@localSelectors ,@(from (ADD1 (REMAINDER (LENGTH localSelectors)
                                                                columns))
                                                to (SUB1 columns) collect dummyItem)
                   [*generics*" NIL NIL (SUBITEMS ,@(SORT genericSelectors)
                   ,@(from 1 to (SUB1 columns) collect dummyItem)
                   (*inherited*" NIL NIL (SUBITEMS ,@(SORT inheritedSelectors)

```

```

MENUCOLUMNS _ columns] ; Save the user the effort of having to type in the selector just
; chosen
(COND
  (sel (BKSYSBUF sel]
(COND
  ((NULL sel)
  (RETURN)))
;; Print out information about the message
[LET ((meth (FetchMethod class sel)))
  (COND
    (meth (PROMPTPRINT (@ ($! meth)
                        doc))
      (LET ((arglist (ARGLIST meth))
            (TTYIN.PRINTARGS fn `,(CAR arglist)
                              Method ., (CDR arglist))
            `,(obj ,meth ., (CDDR actuals))
            0))
        (RETURN T]
      (RETURN NIL)))
((create CREATE Create) ; Tell the user the field names of the record. --- This code is taken from Thomas G. Dieterich,
; tgd@oregon-stant.CSNet --- Thanks, wherever you are Tom.
[PROG (fieldNames recName (soFar (TTYIN.READ?=@ARGS))
      (SETQ recName (CAR soFar))
      (COND
        (recName (SETQ fieldNames (RECORDFIELDNAMES recName))
          (COND
            (fieldNames (RETURN (REVERSE fieldNames)]
          NIL])
)

```

(RPAQQ TTYIN?=FN GetMethodArgs)

(* * Add a Loops item to the background menu)

```

(ADDTTOVAR BackgroundMenuCommands
["Loops Icon" '(_Proto ($ LoopsIcon)
  Blink)
  "Bring the Loops Icon to the top of the screen"
  (SUBITEMS ("Browse Class" '(_Proto ($ LoopsIcon)
    BrowseObject)
    "Prompts for a class name and opens a browser on the class"
    (SUBITEMS ("Browse Class" '(_Proto ($ LoopsIcon)
      BrowseObject)
      "Prompts for a class name and opens a browser on the class")
      ("Browse Supers" '(_Proto ($ LoopsIcon)
        SupersBrowse)
        "Prompts for a class name and opens a browser on the class's
        supers"))
      ("Browse File" '(_Proto ($ LoopsIcon)
        FileBrowse)
        "Opens a Loops FileBrowser on a selected file"
        (SUBITEMS ("Browse File" '(_Proto ($ LoopsIcon)
          FileBrowse)
          "Opens a Loops FileBrowser on a selected file")
          ("Edit FileComs" '(_Proto ($ LoopsIcon)
            EditFileComs)
            "Edit the FILECOMS of a selected file")
          ("Cleanup File" '(_Proto ($ LoopsIcon)
            CleanUpFile)
            "Do a CLEANUP on a selected file"]
)

```

(RPAQQ BackgroundMenu NIL)

(* * The PPDefault window)

(RPAQ PPDefault \TopLevelTtyWindow)

(DECLARE%: DOEVAL@COMPILE DONTCOPY

(GLOBALVARS PPDefault)

)

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FUNCTION INDEX

GetMethodArgs1

VARIABLE INDEX

BackgroundMenu3 BackgroundMenuCommands ..3 PPDefault3 TTYIN?=FN3
