

File created: 1-Feb-2022 16:36:19 {DSK}<Users>kaplan>Local>medley3.5>my-medley>lispusers>SEARCHMEN
U.;5

changes to: (VARS SEARCHMENUMCOMS)
previous date: 1-Feb-2022 16:35:43 {DSK}<Users>kaplan>Local>medley3.5>my-medley>lispusers>SEARCHMENU.;4
Read Table: INTERLISP
Package: INTERLISP
Format: XCCS

::
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```
(RPAQQ SEARCHMENUMCOMS
  [(COMS * SEARCHMENUMDEPENDENCIES)
   (FILES DICTTOOL ANALYZER FREEMENU)
   ;; RMK: 2022: DICTCLIENT doesn't seem to exist
   (* (FILES DICTCLIENT))
   (INITVARS SearchMenu SearchMenu.Stream (SearchMenu.Cutoff 39))
   (FNS SearchMenu.Create SearchMenu.GetData SearchMenu.PrintData SearchMenu.PrintDef
        SearchMenu.PrintSearch SearchMenu.ToggleKey SearchMenu.ToggleSample SearchMenu.PrintUses
        SearchMenu.Clear SearchMenu.MatchWords SearchMenu.MatchKeys SearchMenu.SearchFn
        SearchMenu.SetDatabase SearchMenu.DeleteKey SearchMenu.DeleteKeys SearchMenu.IconFn)
   (FNS TEdit.MatchWords DictTool.MatchWords)
   (VARS SearchKey SearchDelete SearchMatch SearchPrint SearchDatabase SearchClear SearchUses SearchDef
        SearchSample SearchExamples SearchMatchKeys SearchMenuIcon SearchMenuMask)
   (INITVARS (SearchIcon NIL))
   (DECLARE%: DONTVAL@LOAD DOCOPY (P (SearchMenu.Create]))

(RPAQQ SEARCHMENUMDEPENDENCIES
  [( * * code to make sure that the right versions of everything are loaded. The P must be executed before
    any FILES commands.)
   [E (PUTPROP 'SEARCHMENU 'DEPENDENCIES (for FILE in (FILECOMSLST 'SEARCHMENU 'FILES)
        collect
        (CONS FILE (CAAR (GETPROP FILE 'FILEDATES)

(PROP DEPENDENCIES SEARCHMENU)
(P (for FILE FILEDATE in (GETPROP 'SEARCHMENU 'DEPENDENCIES)
  do
    [SETQ FILEDATE (CAAR (GETPROP (CAR FILE)
        'FILEDATES])
    (COND ([AND FILEDATE (CDR FILE)
        (ILESSP (IDATE FILEDATE)
        (IDATE (CDR FILE)
        (* clear FILEDATES to force FILESLOAD to reload the file.)
        (PUTPROP (CAR FILE)
        'FILEDATES NIL])

(* * code to make sure that the right versions of everything are loaded.
The P must be executed before any FILES commands.)

(PUTPROPS SEARCHMENU DEPENDENCIES ((DICTTOOL . " 1-Mar-94 10:43:44")
  (ANALYZER . " 9-Mar-89 15:24:58")
  (FREEMENU . " 6-Dec-94 10:55:40")))

[for FILE FILEDATE in (GETPROP 'SEARCHMENU 'DEPENDENCIES) do [SETQ FILEDATE (CAAR (GETPROP (CAR FILE)
  'FILEDATES])
  (COND
    ([AND FILEDATE (CDR FILE)
     (ILESSP (IDATE FILEDATE)
     (IDATE (CDR FILE)
     (* clear FILEDATES to force FILESLOAD to reload the file.)
     (PUTPROP (CAR FILE)
     'FILEDATES NIL]

(FILESLOAD DICTTOOL ANALYZER FREEMENU)

;; RMK: 2022: DICTCLIENT doesn't seem to exist
  (* (FILES DICTCLIENT))

(RPAQ? SearchMenu NIL)
(RPAQ? SearchMenu.Stream NIL)
(RPAQ? SearchMenu.Cutoff 39)

(DEFINEQ

(SearchMenu.Create
  [LAMBDA (MATCHES KEYWEIGHTS KEYMENU CLEAR ICON)
    ; Edited 30-Mar-88 14:29 by walj
    (* "w.a.l.johnson" "30-Nov-87 10:02")
```

(* "w.a.l.johnson" "11-Nov-87 17:16")
(* jtm%: "30-Oct-87 15:39")

```
(LET (REGION EXAMPLES SEARCHMENUDATA POSWORDS NEGWORDS NEGKEYS MISSINGWORDS MENUTYPE)
(COND
  (SearchMenu (SETQ REGION (WINDOWPROP SearchMenu 'REGION))
    (SETQ SEARCHMENUDATA (AND (NOT CLEAR)
      (SearchMenu.GetData SearchMenu)))
    [OR KEYWEIGHTS (SETQ KEYWEIGHTS (LISTGET SEARCHMENUDATA 'KEYWEIGHTS))
    [OR MATCHES (SETQ MATCHES (LISTGET SEARCHMENUDATA 'MATCHES))
    (SETQ POSWORDS (LISTGET SEARCHMENUDATA 'POSWORDS))
    (SETQ NEGWORDS (LISTGET SEARCHMENUDATA 'NEGWORDS))
    (SETQ NEGKEYS (LISTGET SEARCHMENUDATA 'NEGKEYS))
    (SETQ EXAMPLES (LISTGET SEARCHMENUDATA 'EXAMPLES))
    (FM.ENDEDIT SearchMenu)
    (CLOSEW SearchMenu))
  [SETQ MENUTYPE (COND
    (KEYMENU 'KEYMENU)
    (T 'SAMPLEMENU)
  (COND
    ((NULL SEARCHMENUDATA)
      (SETQ SEARCHMENUDATA (LIST 'MENUTYPE MENUTYPE)))
    (T (LISTPUT SEARCHMENUDATA 'MENUTYPE MENUTYPE)))
  (LISTPUT SEARCHMENUDATA 'KEYWEIGHTS KEYWEIGHTS)
  (LISTPUT SEARCHMENUDATA 'MATCHES MATCHES)
  (MOVEW (SETQ SearchMenu
    (FREEMENU [APPEND `[(PROPS FORMAT ROW LEFT %, (OR 0 (AND REGION (CAR REGION)))
      BOTTOM %, (OR 0 (AND REGION (CADR REGION))
    [COND
      [KEYMENU `(((LABEL ,SearchSample SELECTEDFN SearchMenu.ToggleSample)
        (LABEL ,SearchMatchKeys SELECTEDFN SearchMenu.MatchKeys)
        (LABEL ,SearchPrint SELECTEDFN SearchMenu.PrintSearch)
        (LABEL ,SearchDatabase SELECTEDFN SearchMenu.SetDatabase)
        (LABEL ,SearchClear SELECTEDFN SearchMenu.Clear)
      (T `(((LABEL ,SearchKey SELECTEDFN SearchMenu.ToggleKey)
        (LABEL ,SearchMatch SELECTEDFN SearchMenu.MatchWords)
        (LABEL ,SearchPrint SELECTEDFN SearchMenu.PrintSearch)
        (LABEL ,SearchDelete SELECTEDFN SearchMenu.DeleteKeys)
        (LABEL ,SearchDatabase SELECTEDFN SearchMenu.SetDatabase)
        (LABEL ,SearchClear SELECTEDFN SearchMenu.Clear))
        ((TYPE EDITSTART LABEL ,SearchExamples LINKS (EDIT EXAMPLES))
        (TYPE EDIT ID EXAMPLES LABEL %, (OR EXAMPLES ""))
      (COND
        [KEYMENU
          (* (TYPE 3STATE LABEL %, (CONCAT
            (CAR KEY) ".") STATE %, (COND
              ((MEMBER (CAR KEY) NEGKEYS) NIL)
              (T (QUOTE NEUTRAL))))))
          (for KEY ID in KEYWEIGHTS
            collect `((LABEL ,SearchUses ID %, (COPYALL (CAR KEY))
              SELECTEDFN SearchMenu.PrintUses)
              (TYPE EDITSTART LABEL %, (CONCAT (CAR KEY)
                ".")
              LINKS %, (LIST 'EDIT (CAR KEY)))
              (TYPE EDIT ID %, (CAR KEY)
              LABEL %, (CADR KEY)
            (T (for MATCH ID inside MATCHES
              collect (SETQ ID (COND
                ((LISTP MATCH)
                  (CAR MATCH))
                (T MATCH)))
              [COND
                ((AND (LISTP MATCH)
                  (NTH (CADDR MATCH)
                    5))
                  (RPLACD (NTH (CADDR MATCH)
                    5)
                    (LIST "...")
                `((LABEL ,SearchDef ID %, (COPYALL ID)
                  SELECTEDFN SearchMenu.PrintDef)
                  (TYPE 3STATE ID %, ID LABEL %, (MKSTRING MATCH)
                  INITSTATE %, (COND
                    ((MEMBER ID POSWORDS)
                      T)
                    ((MEMBER ID NEGWORDS)
                      OFF]
                "Search Menu"))
                (OR (AND REGION (CAR REGION))
                  0)
                (OR (AND REGION (CADR REGION))
                  0))
  (OPENW SearchMenu)
  (COND
    ((SETQ MISSINGWORDS (AND MATCHES (for KEY in POSWORDS when [NOT (COND
      ((LISTP (CAR MATCHES))
      (SASSOC KEY MATCHES))
      (T (MEMBER KEY MATCHES)
    collect KEY)))
    (PROMPTPRINT "Lost keys: " MISSINGWORDS)
```

```

(FLASHWINDOW PROMPTWINDOW)
(SETQ POSWORDS (LDIFFERENCE POSWORDS MISSINGWORDS))
(LISTPUT SEARCHMENUDATA 'POSWORDS POSWORDS))
(WINDOWPROP SearchMenu 'SEARCHMENUDATA SEARCHMENUDATA))
(COND
  ((NULL ICON)
   (WINDOWPROP SearchMenu 'ICONIMAGE SearchMenuIcon)
   (WINDOWPROP SearchMenu 'ICONMASK SearchMenuMask)
   (WINDOWPROP SearchMenu 'ICONFN 'SearchMenu.IconFn))
  (T (WINDOWPROP SearchMenu 'SHRINKFN NIL)
     (WINDOWPROP SearchMenu 'ICON ICON]))

```

(SearchMenu.GetData

; Edited 21-Nov-88 08:16 by Maxwell

```

[LAMBDA (WINDOW)
  (LET (STATE SEARCHMENUDATA KEYWEIGHTS EXAMPLES MATCHES POSWORDS NEGWORDS)
    (SETQ STATE (FM.GETSTATE WINDOW))
    (SETQ SEARCHMENUDATA (WINDOWPROP WINDOW 'SEARCHMENUDATA))
    (COND
      ((EQ 'KEYMENU (LISTGET SEARCHMENUDATA 'MENUTYPE))
       (SETQ KEYWEIGHTS (for TAIL WEIGHT on STATE by (CDDR TAIL)
                             when (AND TAIL (STRINGP (CAR TAIL))
                                       [NUMBERP (SETQ WEIGHT (MKATOM (CADR TAIL]
                                       (NOT (ZEROP WEIGHT))))
                             collect (LIST (CAR TAIL)
                                           WEIGHT))))
       (LISTPUT SEARCHMENUDATA 'KEYWEIGHTS KEYWEIGHTS))
      (T (SETQ EXAMPLES (LISTGET STATE 'EXAMPLES))
         (LISTPUT SEARCHMENUDATA 'EXAMPLES EXAMPLES)
         (SETQ POSWORDS (LISTGET SEARCHMENUDATA 'POSWORDS))
         (for WORD inside (PARSEBYCOLONS EXAMPLES) do (push POSWORDS WORD))
         (SETQ MATCHES (LISTGET SEARCHMENUDATA 'MATCHES))
         (for MATCH KEY in MATCHES do (SETQ KEY (COND
                                           ((LISTP MATCH)
                                            (CAR MATCH))
                                           (T MATCH)))
          (SELECTQ (LISTGET STATE KEY)
                   (T (AND (NOT (MEMBER KEY POSWORDS))
                           (push POSWORDS KEY))
                    [COND
                     ((MEMBER KEY NEGWORDS)
                      (SETQ NEGWORDS (REMOVE KEY NEGWORDS]))
                     (OFF (push NEGWORDS KEY)
                        [COND
                         ((MEMBER KEY POSWORDS)
                          (SETQ POSWORDS (REMOVE KEY POSWORDS]))
                         NIL))
                    (LISTPUT SEARCHMENUDATA 'POSWORDS (INTERSECTION POSWORDS POSWORDS))
                    (LISTPUT SEARCHMENUDATA 'NEGWORDS NEGWORDS)))
          SEARCHMENUDATA]))

```

(SearchMenu.PrintData

(* jtm%: "28-Oct-87 15:17")

```

[LAMBDA (STREAM POSWORDS NEGWORDS KEYS MATCHES)
  (OR STREAM (SETQ STREAM (OPENTEXTSTREAM)))
  (COND
    ((AND (BOUNDP 'SquareSampleFreq)
          (BOUNDP 'InvertedDict.MinimumMatches))
     (printout STREAM "(" InvertedDict.MinimumMatches " min, " (COND
                                                                (SquareSampleFreq "")
                                                                (T "not"))
                  " squared"))))
  (printout STREAM "****" "SEARCH MENU PRINTED ON " (DATE)
             "****" T T)
  (COND
    (POSWORDS (printout STREAM "SELECTED WORDS: ")
              [for TAIL on POSWORDS do (printout STREAM (CAR TAIL)
                                                         (COND
                                                           ((CDDR TAIL)
                                                            "; ")
                                                           (T ""))
              (printout STREAM T)))
    (NEGWORDS (printout STREAM "IGNOREDKEYS: ")
              [for TAIL on NEGWORDS do (printout STREAM (CAR TAIL)
                                                         (COND
                                                           ((CDDR TAIL)
                                                            "; ")
                                                           (T ""))
              (printout STREAM T)))
  (printout STREAM T "KEY WEIGHTS:" T)
  (for KEY in KEYS do (printout STREAM .FR 6 (CADR KEY)
                                     %
                                     (CAR KEY)
                                     T))
  (printout STREAM T "MATCHES:" T)
  (for MATCH in MATCHES do [COND

```



```
(PROMPTPRINT "Search time: " (QUOTIENT (IDIFFERENCE (CLOCK 0)
                                                    STARTTIME)
                                         1000.0)
             " seconds.")
(SearchMenu.Create (CADR MATCHES)
                  (CAR MATCHES])
```

(SearchMenu.MatchKeys

```
[LAMBDA (MENUITEM WINDOW BUTTONS)
  (* "w.a.l.johnson" "11-Nov-87 16:08")
  (* jtm%: "28-Oct-87 14:22")
  (LET (SEARCHMENUDATA MATCHES KEYWEIGHTS NERD WEIGHTSEARCHFN (STARTTIME (CLOCK 0)))
    (SETQ SEARCHMENUDATA (SearchMenu.GetData WINDOW))
    (SETQ KEYWEIGHTS (LISTGET SEARCHMENUDATA 'KEYWEIGHTS))
    (SETQ NERD (SearchMenu.SetDatabase NIL WINDOW))
    (PROMPTPRINT "Searching on keys: " KEYWEIGHTS)
    [SETQ MATCHES (COND
      ((SETQ WEIGHTSEARCHFN (InvertedDict.Prop NERD 'WEIGHTSEARCHFN))
       (APPLY* WEIGHTSEARCHFN NERD KEYWEIGHTS 0 SearchMenu.Cutoff))
      (T (DICTCLIENT.WEIGHTEDSEARCH KEYWEIGHTS 0 SearchMenu.Cutoff (InvertedDict.Prop
                                                                    NERD
                                                                    'RemoteDict]))

    (PROMPTPRINT "Search time: " (QUOTIENT (IDIFFERENCE (CLOCK 0)
                                                    STARTTIME)
                                         1000.0)
             " seconds.")
    (SearchMenu.Create (CADR MATCHES)
                      (CAR MATCHES])
```

(SearchMenu.SearchFn

```
[LAMBDA (MENUITEM WINDOW BUTTONS) ; Edited 25-Mar-88 15:31 by jtm:
  (LET (KEYS SEARCHRESULT)
    (SETQ KEYS (LISTGET (FM.GETSTATE WINDOW)
                       'SearchKeys))
    (SETQ SEARCHRESULT (InvertedDict.WeightedSearch WordNerd KEYS))
    (RPLACD (NTH SEARCHRESULT SearchMenu.Cutoff))
    (SearchMenu.Create SEARCHRESULT])
```

(SearchMenu.SetDatabase

```
[LAMBDA (MENUITEM WINDOW BUTTONS) (* jtm%: "30-Nov-87 11:32")
  [COND
    ((NULL SearchMenu.Stream)
     (SETQ SearchMenu.Stream (OPENTEXTSTREAM))
    (COND
     [(NULL MENUITEM)
      (* called by SearchMenu.MatchWords and
        SearchMenu.MatchKeys)

      (COND
       ((STREAMPROP SearchMenu.Stream 'nerd)
        (T (TEdit.SetNerd SearchMenu.Stream))
        (T (TEdit.SetNerd SearchMenu.Stream))])
```

(SearchMenu.DeleteKey

```
[LAMBDA (MENUITEM WINDOW BUTTONS) (* "w.a.l.johnson" "30-Nov-87 10:27")
  (* jtm%: "30-Oct-87 16:04")
  (LET (SEARCHMENUDATA POSWORDS KEYWEIGHTS NEGKEYS NEGKEY)
    (SETQ SEARCHMENUDATA (SearchMenu.GetData WINDOW))
    (SETQ NEGKEYS (LISTGET SEARCHMENUDATA 'NEGKEYS))
    (SETQ KEYWEIGHTS (LISTGET SEARCHMENUDATA 'KEYWEIGHTS))
    (PROG NIL
      LP (COND
          ((SETQ NEGKEY (MENU (create MENU
                                TITLE _ "key to delete:"
                                ITEMS _ (for KEYWEIGHT in KEYWEIGHTS
                                             unless (MEMBER (CAR KEYWEIGHT)
                                                            NEGKEYS)
                                             collect (LIST (CONCAT (CAR KEYWEIGHT)
                                                                ": " " (" (CADR KEYWEIGHT)
                                                                " " )
                                                                (CAR KEYWEIGHT))))
                                CENTERFLG _ T)))
          (pushnew NEGKEYS NEGKEY)
          (LISTPUT SEARCHMENUDATA 'NEGKEYS NEGKEYS)
          (GO LP]))
```

(SearchMenu.DeleteKeys

```
[LAMBDA (MENUITEM WINDOW BUTTONS) (* "w.a.l.johnson" "30-Nov-87 10:27")
  (* "w.a.l.johnson" "30-Nov-87 10:10")
  (* jtm%: "30-Oct-87 16:04")
  (LET (SEARCHMENUDATA POSWORDS KEYWEIGHTS NEGKEYS NEGKEY)
    (SETQ SEARCHMENUDATA (SearchMenu.GetData WINDOW))
    (SETQ NEGKEYS (LISTGET SEARCHMENUDATA 'NEGKEYS))
    (SETQ KEYWEIGHTS (LISTGET SEARCHMENUDATA 'KEYWEIGHTS))
    (PROG NIL
```

```

LP (COND
  ((SETQ NEGKEY (MENU (create MENU
    TITLE _ "key to delete:"
    ITEMS _ (for KEYWEIGHT in KEYWEIGHTS
      unless (MEMBER (CAR KEYWEIGHT)
        NEGKEYS)
      collect (LIST (CONCAT (CAR KEYWEIGHT)
        ": " "(" (CADR KEYWEIGHT)
        ") ")
        (CAR KEYWEIGHT)))
    CENTERFLG _ T)))
  (pushnew NEGKEYS NEGKEY)
  (LISTPUT SEARCHMENUDATA 'NEGKEYS NEGKEYS)
  (GO LP])

```

(SearchMenu.IconFn

(* "w.a.l.johnson" " 9-Jan-88 14:42")

```

[LAMBDA (one two)
  (COND
    (SearchIcon SearchIcon)
    (two two)
    (T (SETQ SearchIcon (ICONW (WINDOWPROP one 'ICONIMAGE)
      (WINDOWPROP one 'ICONMASK])

```

)

(DEFINEQ

(TEdit.MatchWords

(* jtm%: "28-Sep-87 15:17")

```

[LAMBDA (stream dict words)
  (** prints out the definitions that have a particular phrase in them.)
  (OR stream (SETQ stream (Dict.OutputStream)))
  (DictTool.TEditWrapper (NerdForStream stream)
    (FUNCTION DictTool.MatchWords)
    stream words "Type sample words:" "Searching for words like" 'SAMPLEWORDS])

```

(DictTool.MatchWords

(* jtm%: " 9-Oct-87 13:43")

```

[LAMBDA (dict selection stream)
  (LET (looks words fn pos)
    [SETQ words (CADR (COND
      ((SETQ fn (InvertedDict.Prop dict 'MATCHWORDSFN))
        (APPLY* fn dict selection))
      ((InvertedDict.Prop dict 'RemoteDict)
        (DICTCLIENT.MATCHWORDS (PARSEBYCOLONS selection)
          NIL NIL NIL (InvertedDict.Prop dict 'RemoteDict))
      (SETQ pos (TEDIT.GETPOINT stream))
      (TEDIT.INSERT stream (CONCAT selection ": "))
      (SETQ looks (CONS pos (IDIFFERENCE (TEDIT.GETPOINT stream)
        pos)))
      [for tail on words do (TEDIT.INSERT stream (CONCAT (CAR (CAR tail))
        (COND
          ((CDR tail)
            "; ")
          (T ""))
          (TEDIT.INSERT stream (CHARACTER (CHARCODE CR)))
          (TEDIT.INSERT stream (CHARACTER (CHARCODE CR))) (* do the looks last to avoid messing up the text placement.)
          (TEDIT.LOOKS stream ' (FAMILY TIMESROMAN SIZE 10 FACE STANDARD)
            1
            (TEDIT.GETPOINT stream))
          (TEDIT.LOOKS stream ' (FAMILY HELVETICA SIZE 10 FACE BOLD)
            (CAR looks)
            (CDR looks))
        words])

```

)

(RPAQQ SearchKey



(RPAQQ SearchDelete



(RPAQQ SearchMatch



(RPAQQ SearchPrint



(RPAQQ SearchDatabase

SET DATABASE

(RPAQQ SearchClear

CLEAR

(RPAQQ SearchUses

USES

(RPAQQ SearchDef

DEF

(RPAQQ SearchSample

SAMPLE MENU

(RPAQQ SearchExamples

Enter Examples 

(RPAQQ SearchMatchKeys

MATCH KEYS

(RPAQQ SearchMenuIcon



(RPAQQ SearchMenuMask



(RPAQ? SearchIcon NIL)

(DECLARE%: DONTEVAL@LOAD DOCOPY

(SearchMenu.Create)

(PUTPROPS SEARCHMENU COPYRIGHT ("Xerox Corporation" 1987 1988 1989))

FUNCTION INDEX

DictTool.MatchWords6	SearchMenu.GetData3	SearchMenu.PrintDef4	SearchMenu.ToggleKey4
SearchMenu.Clear4	SearchMenu.IconFn6	SearchMenu.PrintSearch ..4	SearchMenu.ToggleSample .4
SearchMenu.Create1	SearchMenu.MatchKeys5	SearchMenu.PrintUses4	TEdit.MatchWords6
SearchMenu.DeleteKey5	SearchMenu.MatchWords ...4	SearchMenu.SearchFn5	
SearchMenu.DeleteKeys ...5	SearchMenu.PrintData3	SearchMenu.SetDatabase ..5	

VARIABLE INDEX

SearchClear7	SearchIcon7	SearchMenu.Cutoff1	SearchPrint6
SearchDatabase6	SearchKey6	SearchMenu.Stream1	SearchSample7
SearchDef7	SearchMatch6	SEARCHMENUDEPENDENCIES ..1	SearchUses7
SearchDelete6	SearchMatchKeys7	SearchMenuIcon7	
SearchExamples7	SearchMenu1	SearchMenuMask7	

PROPERTY INDEX

SEARCHMENU1
