

File created: 12-Feb-87 23:13:02 {FIREFS:CS:UNIV ROCHESTER}<KOOMEN>LISP>BRKDOWNREPORT.;1

changes to: (VARS BRKDOWNREPORTCOMS)  
(FNS BRKDOWNFORM BDR-TYPE BRKDOWN BRKDOWNREPORT)

previous date: 12-Feb-87 23:07:23 {FIREFS:CS:UNIV ROCHESTER}<KOOMEN>LISP>BRKDOWNREPORT.;1

Read Table: OLD-INTERLISP-FILE

Package: INTERLISP

Format: XCCS

(\* \* Copyright (c) 1987 by Johannes A. G. M. Koomen. All rights reserved.)

(RPAQQ **BRKDOWNREPORTCOMS** ((FNS BRKDOWNREPORT BRKDOWNFORM BDR-TYPE BDR-TYPE-SORTED BDR-COL BDR-RPT)))

(DEFINEQ

(**BRKDOWNREPORT**

[LAMBDA (TITLE BRKDOWNSTREAM) (\* Koomen "18-Dec-86 16:11")

(**DECLARE** (GLOBALVARS BRKDOWNLABELS))

(if (NOT (OPENP BRKDOWNSTREAM (QUOTE OUTPUT)))

then (RESETST

(SETQ BRKDOWNSTREAM (OPENSTREAM BRKDOWNSTREAM (QUOTE OUTPUT)))

[RESETSAVE NIL (BQUOTE (CLOSEF? (\, BRKDOWNSTREAM]

(**BRKDOWNREPORT** TITLE BRKDOWNSTREAM))

else (PROG [ENTRYCNT (FIRSTCOL 0)

(TYPE-ENTRIES (for BDTYPE inside BRKDOWNLABELS collect

(\* \* Each entry is a list of three elements: total frequency of calls, total quantity measured, and list of individual contributors,  
each of which is a 3-element list containing name, frequency and quantity measured.)

(LIST 0 0 NIL]  
[for RESULT in (BRKDOWNRESULTS T) as old ENTRYCNT from 0 bind NAME FREQUENCY  
unless (ZEROP (SETQ FREQUENCY (CADR RESULT)))

do (SETQ NAME (CAR RESULT))

(for QUANTITY in (CDDR RESULT) as TYPE-ENTRY in TYPE-ENTRIES unless (ZEROP QUANTITY)

do (add (CAR TYPE-ENTRY)

FREQUENCY)

(add (CADR TYPE-ENTRY)

QUANTITY)

(push (CADDR TYPE-ENTRY)

(LIST NAME FREQUENCY QUANTITY)))

(SETQ FIRSTCOL (MAX FIRSTCOL (NCHARS NAME]

(SETQ FIRSTCOL (IPLUS FIRSTCOL 2))

(printout BRKDOWNSTREAM "Breakdown Report:" 24 (OR TITLE ""))

(printout BRKDOWNSTREAM T T "Breakdown Date:" 24 (DATE))

(printout BRKDOWNSTREAM T T "Functions measured:" 24 ENTRYCNT)

(printout BRKDOWNSTREAM T T "Non-zero entries:" T)

(for BDTYPE inside BRKDOWNLABELS as TYPE-ENTRY in TYPE-ENTRIES bind N

do (SETQ N (LENGTH (CADDR TYPE-ENTRY)))

(printout BRKDOWNSTREAM 6 BDTYPE 24 .I6 N (if (EQ N 1)

then " function"

else " functions")))

(printout BRKDOWNSTREAM T T T)

(for BDTYPE inside BRKDOWNLABELS as TYPE-ENTRY in TYPE-ENTRIES do (BDR-TYPE BRKDOWNSTREAM FIRSTCOL

(L-CASE BDTYPE)

(CAR TYPE-ENTRY)

(CADR TYPE-ENTRY)

(CADDR TYPE-ENTRY)))

(TERPRI BRKDOWNSTREAM])

(**BRKDOWNFORM**

[LAMBDA (**BRKDOWNFORM** BRKDOWNFNS BRKDOWNSTREAM NEWBRKDWNTYPE) (\* Koomen "12-Feb-87 22:58")

(**DECLARE** (GLOBALVARS BRKDWNTYPE BRKDWNTYPES)

(LOCALVARS BRKDOWNFORM BRKDOWNFNS BRKDOWNSTREAM NEWBRKDWNTYPE))

(RESETST

(APPLY (FUNCTION UNBREAK)

BRKDOWNFNS)

(if NEWBRKDWNTYPE

then (RESETSAVE BRKDWNTYPE (if (EQ NEWBRKDWNTYPE T)

then (for BDT in BRKDWNTYPES collect (CAR BDT))

else NEWBRKDWNTYPE)))

(BREAKDOWN)

[RESETSAVE (APPLY (FUNCTION BREAKDOWN)

BRKDOWNFNS)

(BQUOTE (UNBREAK (\,@ BRKDOWNFNS]

(EVAL BRKDOWNFORM)

(**BRKDOWNREPORT** BRKDOWNFORM BRKDOWNSTREAM))])

(**BDR-TYPE**

[LAMBDA (OUTSTREAM FIRSTCOL BDTYPE TOTAL-FREQUENCY TOTAL-QUANTITY ENTRIES)

(\* Koomen "12-Feb-87 23:06")

(if ENTRIES

```

then [SORT ENTRIES (FUNCTION (LAMBDA (x y)
                             (GEQ (CADDR x)
                                   (CADDR y)
                                )
      (printout OUTSTREAM T (U-CASE BDTYPE)
        " -- sorted by cumulative " BDTYPE ":" T)
      (BDR-TYPE-SORTED OUTSTREAM FIRSTCOL BDTYPE TOTAL-FREQUENCY TOTAL-QUANTITY ENTRIES)
      (if (CDR ENTRIES)
          then (SORT ENTRIES T)
              (printout OUTSTREAM T (U-CASE BDTYPE)
                " -- alphabetic sort:" T)
              (BDR-TYPE-SORTED OUTSTREAM FIRSTCOL BDTYPE TOTAL-FREQUENCY TOTAL-QUANTITY ENTRIES)])

```

**(BDR-TYPE-SORTED**

```

[LAMBDA (OUTSTREAM FIRSTCOL BDTYPE TOTAL-FREQUENCY TOTAL-QUANTITY ENTRIES)
      (* Koomen "17-Dec-86 15:10")
      (PROG (COL1-START COL1-WIDTH COL1-FORMAT COL2-START COL2-WIDTH COL2-FORMAT COL3-START COL3-WIDTH COL3-FORMAT
             COL4-START COL4-WIDTH COL4-FORMAT LINE-END)
        (SETQ COL1-START FIRSTCOL)
        (SETQ COL1-WIDTH 11)
        (SETQ COL1-FORMAT (BQUOTE (FIX (\, COL1-WIDTH)
        (SETQ COL2-START (PLUS COL1-START COL1-WIDTH 4))
        (SETQ COL2-WIDTH 7)
        (SETQ COL2-FORMAT (BQUOTE (FIX (\, COL2-WIDTH)
        (SETQ COL3-START (PLUS COL2-START COL2-WIDTH 4))
        (SETQ COL3-WIDTH 9)
        (SETQ COL3-FORMAT (BQUOTE (FLOAT (\, COL3-WIDTH)
        3))))
        (SETQ COL4-START (PLUS COL3-START COL3-WIDTH 4))
        (SETQ COL4-WIDTH 3)
        (SETQ COL4-FORMAT (BQUOTE (FIX (\, COL4-WIDTH)
        (SETQ LINE-END (PLUS COL4-START COL4-WIDTH))
        (BDR-RPT "=" LINE-END OUTSTREAM)
        (TERPRI OUTSTREAM)
        (PRIN1 "Function:" OUTSTREAM)
        (BDR-COL OUTSTREAM COL1-START COL1-WIDTH BDTYPE)
        (BDR-COL OUTSTREAM COL2-START COL2-WIDTH "#calls")
        (BDR-COL OUTSTREAM COL3-START COL3-WIDTH "per call")
        (BDR-COL OUTSTREAM COL4-START COL4-WIDTH "%")
        (TERPRI OUTSTREAM)
        (BDR-RPT "-" LINE-END OUTSTREAM)
        (TERPRI OUTSTREAM)
        (for ENTRY in ENTRIES as N LINES from 1 bind NAME FREQUENCY QUANTITY (LASTLINE _ (IDIFFERENCE
        (LENGTH ENTRIES)
        4))
          do (SETQ NAME (CAR ENTRY))
              (SETQ FREQUENCY (CADDR ENTRY))
              (SETQ QUANTITY (CADDR ENTRY))
              (PRIN1 NAME OUTSTREAM)
              (BDR-COL OUTSTREAM COL1-START COL1-WIDTH QUANTITY COL1-FORMAT)
              (BDR-COL OUTSTREAM COL2-START COL2-WIDTH FREQUENCY COL2-FORMAT)
              (BDR-COL OUTSTREAM COL3-START COL3-WIDTH (FQUOTIENT QUANTITY FREQUENCY)
              COL3-FORMAT)
              (BDR-COL OUTSTREAM COL4-START COL4-WIDTH (FQUOTIENT (FTIMES 100.0 QUANTITY)
              TOTAL-QUANTITY)
              COL4-FORMAT)
              (TERPRI OUTSTREAM)
              (if (AND (ZEROP (IREMAINDER N LINES 10))
                      (ILESSP N LINES LASTLINE))
                  then (BDR-RPT "-" LINE-END OUTSTREAM)
                      (TERPRI OUTSTREAM)))
              (BDR-RPT "-" LINE-END OUTSTREAM)
              (TERPRI OUTSTREAM)
              (PRIN1 "Total:" OUTSTREAM)
              (BDR-COL OUTSTREAM COL1-START COL1-WIDTH TOTAL-QUANTITY COL1-FORMAT)
              (BDR-COL OUTSTREAM COL2-START COL2-WIDTH TOTAL-FREQUENCY COL2-FORMAT)
              (BDR-COL OUTSTREAM COL3-START COL3-WIDTH (FQUOTIENT TOTAL-QUANTITY TOTAL-FREQUENCY)
              COL3-FORMAT)
              (TERPRI OUTSTREAM)
              (BDR-RPT "=" LINE-END OUTSTREAM)
              (TERPRI OUTSTREAM)
              (TERPRI OUTSTREAM])

```

**(BDR-COL**

```

[LAMBDA (OUTSTREAM START WIDTH VALUE FORMAT)
      (* Koomen "16-Dec-86 17:24")
      (if FORMAT
          then (TAB START 1 OUTSTREAM)
              (PRINTNUM FORMAT VALUE OUTSTREAM)
          else (SETQ START (IDIFFERENCE (IPLUS START WIDTH)
              (NCHARS VALUE)))
              (TAB START 1 OUTSTREAM)
              (PRIN1 VALUE OUTSTREAM])

```

**(BDR-RPT**

```

[LAMBDA (STR N OUTSTREAM)
      (* Koomen "17-Dec-86 14:50")

```

```
{MEDLEY}<lispusers>BRKDOWNREPORT.;1  (BDR-RPT cont.)
```

Page 3

```
  (for I from 1 to N do (PRIN1 STR OUTSTREAM])
```

```
)
```

```
(PUTPROPS BRKDOWNREPORT COPYRIGHT ("Johannes A. G. M. Koomen" 1987))
```

---

FUNCTION INDEX

BDR-COL .....	2	BDR-TYPE .....	1	BRKDOWNFORM .....	1
BDR-RPT .....	2	BDR-TYPE-SORTED .....	2	BRKDOWNREPORT .....	1

---