
LISPUSERS PACKAGES SUMMARIES

ACTIVEREGIONS

Specifies that certain regions of a window be sensitive to button activity of the mouse. Regions are highlighted when mouse button is down and associated function for an active region is invoked when mouse button is released.

ANIMATE

This small package contains functions for moving a non-rectangular bitmap smoothly around the screen, ways of using these to get big cursors, and bitmaps for a large arrow and a hand to be used as large cursors.

BIZGRAFIX

Pie & bar chart, line graph creation.

BLACKOUT

(Blackout text interval) makes a back window the size of the screen and bounces a square around on it, like DMT, etc. Good for servers. Text and interval default to "Type Key" and NIL (= forever) if not given.

BLTDEMO

Implements Smalltalk graphics demo in Interlisp. Spinning star, bouncing ring & box. Call: (BOUNCE X Y) where X and Y are velocities defaulting to 3. Box shows whatever is near cursor. Interesting recursive effects can be seen if you move the cursor near the box.

BQUOTE

Backquote punctuation. Enables backquote (character 96) and commas to be used to construct lists similar to CLISP's <, !, !!, and > operators only better. Readmacros and prettyprintmacros make backquote easy to use. Also offers PQUOTE's functionality.

CALENDAR

A calendar/appointment-reminder program. Displays any year, month or day. Messages alert you at predetermined time, or can optionally be mailed (via Lafite) to any desired recipients. CALL:(CALENDAR).

CHUNK-MENU

Permits the creation and use of pop-up menus for long lists of items. User sees one "chunk" of the list at a time. Menu items at top and bottom allow user to move forward and backward to other chunks.

COLORUTILITIES

Functions to aid color programming. Allows for color windows, color menus (pop-up and active), and interactive color bitmap editing. Must have COLOR.DCOM and COLORPATCH.DCOM loaded first.

COMHACK

Advises CLISPIF and CLISPFOR to allow comments anywhere in ifs and for loops. Can be used to provide similar facility for other CLISP words.

COMPILEFORMSLIST

Compiles a list of forms bound to a variable as a single function and then changes the binding of the variable to call that function. Useful for compiling long list of forms on a global var which would otherwise be interpreted. (Example: (COMPILEFORMSLIST 'AFTERSYSOUTFORMS).)

CROCK

Function for creating and manipulating an analog face clock. Menu allows user to change style of clock. Call: (CROCK REGION).

DEDITK

Adds single button method for combining the most frequently combined pairs of BI/BO and BEFORE/AFTER/DELETE/REPLACE in DEDIT - Load and call (DEDITK).

EDITFONT

Gives the user functions for creating and editing DISPLAY fonts which can be read and written as STRIKE font files. Includes: EDITFONT, BLANKFONTCREATE, READSTRIKEFONTFILE, and WRITESTRIKEFONTFILE.

EDITHIST

An extension to Interlisp's file package that permanently preserves the history of new versions of files. Every time a file is remade, a new entry containing DATE, AUTHOR, FILE, CHANGES, & COMMENTS info is added.

EDITMACROS

Some useful (tty-based) editor macros.

EMACS

A very small subset of EMACS (text editor developed at MIT) built on top of TEDIT. Will probably grow into greater completion when the demise of MAXC becomes imminent. Call: (EMACS FILE).

EMACUSER

Package defines a variety of functions amenable to creating a programming environment where the user does his coding in EMACS (the MACLISP/EMACS style of coding versus the Interlisp file package style of coding). Loads BQUOTE & SETF.

EXEC

This small package allows the user to create extra EXEC windows in which to do EVALQTing. A new EXEC window may be created in either of two ways. The user may either do (EXEC) or button the EXEC menu item added to the background menu.

EXECFNS

Package emulates TOPS-20-style "logical names". Instead of typeing {RED}<FOODIRECTORY> you can use the DEF lispmacro to define FOO: as {RED}<FOODIRECTORY>. Lispmacros TY, CONN & KD and fns INFILE, OUTFILE, INFILEP, OUTFILEP, & COPYFILE are modified/advised to expand logical names. The lispmacro DEF? can be used to see what logical defs are currently defined.

FACEINVADER

A game. The object of the game is to shoot the bouncing 'face' before it overruns your base. Call: (FI INSTRUCTIONS?).

FONTN

Contains font definitions for fonts FONT1, FONT2, etc., which are utilized by the printout for commands of the form .FONT 1, .FONT 2, etc.

GRAPHCALLS

Allows fast graphing of the calling hiarchy of both interpreted and compiled code, whether or not the source code is available, thus allowing examination of both user and system functions.

HEADLINE

Three functions for manipulating windows containing headlines: HEADLINE, BILLBOARD, and CLOSEHEADLINES. Useful for titling a screen image or leaving message on screen while away.

HISTMENU

Provides simple way to access Interlisp history list using menu. REDO, UNDO, FIX, and ?? selected items. Call: (HistoryMenu histMenuLength histMenuPosition).

KAL

Kaleidoscope demo. Call: (KAL). Control with middle button menu.

LABEL

Implements Lisp 1.5 LABEL construct. Example: (name a b) appearing in the forms of (LABEL name args . forms) will recursively apply the function specified by the LABEL.

LANDPRESS

Allows landscape printing of ASCII text files on press printers (e.g., Dovers). Function LANDPRESS produces same product as MAKEPRESS, only printed sideways on the page allowing for wider output.

LOADFILES

Function to help in loading groups of files. Call: (LOADFILES DIR FILES EXT LDFLG PRINTFLG). Value of LOADFILES is a list of the files actually loaded.

LSET

List SETs. Functions for operating on sets implemented as lists. Contains functions for union, intersection, and subtraction. Functions to unify an element with a list, setify a list, and test if a list is a subset of another list are also included.

MAKEGRAPH

Package built on GRAPHER which helps user create graphs by walking through them. Each point in the walk (node in the graph) is characterized by a datum/state pair. Motion is defined by a state transition function and checking whether a node has already been visited. Do (MAKE.GRAPH.EXAMPLE) for an example.

MATHFNS

Higher mathematical functions not already provided by Interlisp. Includes additional trigonometric functions, logarithmic functions, hyperbolic functions, mathematical constants, and macros and functions for complex arithmetic.

MULTIMENU

Package which allows user to create a number of menus or windows to be associated with a main window. Example application: an editor whose commands (menu driven) are a function of the item selected in the editor window. Contextually inappropriate menus disappear and appropriate menus are highlighted.

MULTIW

Contains functions necessary for a hierarchical window environment. Windows that belong to other windows will move, close, shrink, and open when their super window does.

MULTIW-DEMO

Demos MULTIW package.

NOTEPAD

Allows user to do artwork at bitmap level in NOTEPAD windows. Trajectories: sketch, line, circle, ellipse, open curve, closed curve. Objects/editing: text, are of screen, shade rectangle, fill, edit area. Style: brush, use mask, mask, use grid, grid, use symmetry, point of symmetry, text font, shade.

NOTEPAD-CORESTYLES

Used by NOTEPAD.

NQUEENS

Solves N Queens problem. How to place N queens on a chess board so that they don't attack each other. Graphics demo. Call: (NQUEENS N).

ODOMETER

Functions for creating and manipulating a horizontal sequence of small windows containing digits resembling a car's odometer (mileage gauge). Digits scroll into place as if digit wheel is turning. Call: (ODOCREATE #DIGITS FONT PLACE) where #DIGITS is the number of digit wheels desired. Fns: ODOCLOSE, ODOCREATE, ODODEC, ODOINC, ODOOPEN, ODOPUT, ODOSET, & ODOVAL.

PATCHUP

Facilitates making patch files when there is multiuser interaction on a system. Designed to allow dumping of a patch file containing changes from a number of files.

PERFORMTRAN

Adds CLISP word perform to record package. Rumored to be described in Interlisp Reference Manual (GKW).

PERMSTATUS

Function used in conjunction with WHENCLOSE package to make a file "permanently" open in the sense that as much of its status as possible will be restored when a sysout is resumed. Described in Interlisp Reference Manual.

PLAY

Offers Interlisp-D users a disciplined way to play simple musical melodies on Xerox 1108 machines. (PLAY.DEMO) demos the PLAY package. Main functions: PLAY.NOTES, PLAY.MELODY, PLAY.KEYBOARD.

PRINTL

Function which prints circular list structures. Described in Interlisp Reference Manual.

PROFILETOOL

Creates a specialized InspectorWindow for enumerating and changing variables, etc. Useful for creating a graphical interface to attributes of any "package" written in Interlisp.

PROMPTREMINDERS

User can be periodically reminded of important things by messages which are aggressively winked and flashed in the PROMPTWINDOW (primary output for non-D machines). Activated by an entry on PROMPTCHARFORMS.

SAMPLER

Graphics demo.

SHOW

Adds a LISPXMACRO SHOW that will prettyprint value of preceding history events with syntax similar to ?? and REDO. Also defines functions SHOW and IT.

SIMPLEFNS

Some simple functions. Fns: COMBINATIONS, DKILL, DKILLQ, FILE, FIRSTPART, IFF, KILL, LEAVES, SEARCH, SINGLES, STRINGSUBST, SUPSETP, UNATTACH.

SOLITAIRE

The card game Solitaire (graphics demo). Call: (SOLO).

SPACEWINDOW

Puts a small "Space Allocation" window on screen. Shows a bar-chart of the amounts of the four types of memory space that have been allocated (fixed data, variable data, atoms, pnames). Display is updated every 60 seconds.

STYLESHEET

Package which allows user to create a block of menus which pop up all at once and don't go away until the user has dealt with all the menus in the block and indicated that he is done.

SYSTAT

Redefines the CONTROL-T interrupt channel to put up a graphic display instead of the usual type out. Leftbuttoning SYSTAT.WINDOW does an immediate Update. Middlebuttoning SYSTAT.WINDOW gives user choice among Quickly mode, Slowly mode, Updating, Deactivating, and Reactivating.

TMENU

Provides: (1) Interactive menus intended for reducing typing. Selected menu items are inserted into the TTY input buffer. (2) Windowshades that make windows "roll up" when not in use. (3) Two functions for managing PROMPTWINDOW.

TRACEIN

Facility for very low level tracing/stepping. Options: step, evaluate, finish, trace, prettyprint form, prettyprint value, retry, exit with value to be returned, break. Evalhook and watch modes of operation.

TRAJECTORY-FOLLOWER

Provides a function which causes a snake to crawl along a trajectory. Trajectory is specified by a set of KNOTS and a CLOSED flag.

TSET

Transor package. LISP-toISP translator intended to help the user who has a program coded in one dialect of LISP and wishes to carry it over to another. Described in Interlisp Reference Manual.

TTY

Simple set of functions, including prompted read, for interacting with the TTY. Easy to create programs that respond to "commands" or sequenced entry with a varied amount of prompting for input.

TTYIO

Selective input fns: ASKFLE, ASKFN, ASKINT, ASKITEM, ASKITEMS, ASKRL, ASKYN.

TWOD

A two-d graphics package. Rather Siggraph-esque.