
Trajectory-Follower

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INTRODUCTION

Trajectory-Follower provides a function which causes a "snake" to crawl along a trajectory. Comments on both interface and functionality are welcomed.

FUNCTIONS

(TRAJECTORY.FOLLOW *KNOTS CLOSED N DELAY BITMAP WINDOW*) [Function]

The trajectory is specified by *KNOTS* (a set of knots) and *CLOSED* (a flag indicating whether it is an open or closed curve). *N* is the length of the snake in points along the curve. *DELAY* is the time (in milliseconds) between each move along the curve; *DELAY* = 0 or NIL means go as fast as you can. *BITMAP* is the brush to be used at each point in creating the snake. *WINDOW* is the window in whose coordinate system the knots are given and in which the snake is to be drawn; if NIL, then the SCREEN bitmap is used. The snake is moved by INVERTing the bitmap at the points along the curve, and then INVERTing the bitmap back out again.

Examples

A demonstration function is also provided with the module:

(TRAJECTORY.FOLLOWER.TEST) [Function]

Interacts with the user through prompting in the promptwindow to gather up arguments for TRAJECTORY.FOLLOW and then carries it out. Closed curves are snaked around repeatedly until the left shift key is found depressed when it reaches the curve's starting point.

Internal Functions

The internal functions used by this module are also available for use. They are:

(TRAJECTORY.FOLLOWER.SETUP *WINDOW N DELAY BITMAP*) [Function]

Initializes drawing variables.

(TRAJECTORY.FOLLOWER.POINT *X Y WINDOW*) [Function]

Defines the next point on the curve. Note that the argument structure of this function is appropriate for use as a BRUSH with the curve drawing functions DRAWCURVE, DRAWCIRCLE, and DRAWELLIPSE. (For an example, see the demonstration function TRAJECTORY.FOLLOWER.TEST)

(TRAJECTORY.FOLLOWER.WRAPUP) [Function]

Finishes the job after all the points have been defined.