

LazyScrollDir

By Paul S. McCarthy and Eric Sunshine

Copyright ©1995-1997 by Paul S. McCarthy and Eric Sunshine

July 8, 1997

Overview

This program demonstrates the use of the `MiscTableScroll` object in *lazy* mode by acting as a simple directory browser. Basic operations such as *open*, *delete*, *rename*, and *change directory* can be performed on the listed files and directories.

Notable Features

Lazy Mode

This program illustrates how to use a *lazy* mode `MiscTableScroll`. In *lazy* mode the data-delegate (or the delegate if there is no data-delegate) is responsible for supplying the cells that the `MiscTableScroll` will display. In this example, the data-delegate also supplies information (such as *stringValue*, *intValue*, *tag*, etc.) during sorting as a speed optimization.

This program allocates a single cell for each column. When the `MiscTableScroll` requests a cell for some column and row, the data-delegate takes the cell it allocated for that column, fills it with information from that row, and returns it. As a side-effect of this, time-consuming operations such as fetching a file's icon can be delayed until the information is actually needed.

This contrasts sharply with *eager* mode, in which all cells are created and filled immediately. *Lazy* mode is useful for exceptionally large data sets or data sets for which data retrieval is very time-consuming. *Eager* mode, however, is usually easier to program.

Color

The example shows how to use color with the MiscTableScroll. Color swatches can be dragged from the *Color Panel* and dropped onto the browser window. The background of the MiscTableScroll is set to the color of the dropped swatch.

When the *highlight directories* switch is toggled *on* the rows for directories are highlighted in a color independent of the MiscTableScroll.

Font

When the MiscTableScroll is first-responder, the *Font Panel* can be used to change its font.

Users Preferences

This program demonstrates how to save and restore the user's column order and width preferences. Additionally, all other user preferences -- *font*, *color*, *switch settings*, and *window size* -- are also saved and restored.

Sorting

A switch on the browser window controls whether or not rows are automatically sorted as columns are rearranged. This demonstrates the very powerful built-in sorting capability of MiscTableScroll. Sorting can be fine-tuned right in the *nib* file by adjusting the criteria on a column-by-column basis. For instance, columns may contribute *stringValue*, *title*, *intValue*, *tag*, etc. to the row-wise comparisons.

Icon Display

One column in the browser displays the file's icon. This demonstrates how to use *icon* columns in addition to *text* columns.

Image Dragging

MiscTableScroll allows images to be dragged directly out cells. In this example, the file's icon can be dragged directly from the directory browser into any other application which accepts *dragged filenames*, such as File Viewer, Mail, Edit, etc. A button controls whether or not the scaled or full-size image is used during the dragging operation. This illustrates how the delegate can optionally substitute an image in place of the one already contained in the cell.

Text Editing

MiscTableScroll supports *in-cell* text editing. This example program uses the editing feature to allow the user to rename files. Double-clicking with the mouse on the file name in the *Name* column initiates editing.

Buttons

This example illustrates how to use *ButtonCells* with the MiscTableScroll. One column contains a *ButtonCell* configured as a toggle switch. It displays a padlock in either a locked or unlocked state and clicking on it toggles its state. The padlock indicates whether or not the file can be renamed. When *unlocked*, renaming is allowed, and double-clicking on the file name in the *Name* column initiates an edit session. When *locked*, renaming is not allowed. If you do not have permission to rename a file the browser displays a *locked* icon and disables the *ButtonCell*.

Saving (Exporting)

MiscTableScroll can export its contents in dBASEIII (.dbf) format and also a number of ASCII formats via the *Save* menu item on the *Directory* menu.