LazyScrollDir

By Paul S. McCarthy and Eric Sunshine
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Overview

This program demonstrates the use of MiscTableScroll object in *lazy* mode by acting as a simple directory browser.   Basic operations such as *open, delete,* 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 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 like fetching a file's icon can be delayed until it is actually needed.   Likewise retrieval of group and owner names from NetInfo (also time-consuming) is delayed until display or sort time.

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.

Icon Display

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

Sorting

A switch on the browser window controls whether or not rows are automatically sorted as columns are rearranged via dragging.   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.

Name Caching
NetInfo is notoriously slow.   Translation of user and group numbers into their text equivalents is sped up by caching the results of calls to *getpwuid* and *getgrgid* (both of which ultimately consult NetInfo).