

IList

Display a list in an Ibuffer way.

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1 About

This is a little library package that can *display a list in an Ibuffer fashion*. The core functionality it provides is a function that can accept a list, and produce a string showing the contents of the list according to the specifications of columns, groups, and sorters.

2 Entry point

The one main function this package provides is `ilist-string`. It is called as follows.

```
(ilist-string LIST COLUMNS GROUPS DISCARD-EMPTY-P)
```

LIST This denotes the list that the user wants to display.

COLUMNS

GROUPS They are described in the following sections.

DISCARD-EMPTY-P

This determines whether to display empty groups or not.

SORTER This is either nil, or a function with two arguments which returns non-nil if and only if the first argument should be sorted before the second argument.

NO-TRAILING-SPACE

This is non-nil if the function should not produce trailing whitespaces.

2.1 Columns

Like in `Ibuffer`, the user can specify columns to display. Each column comprises the following specifications:

NAME The name to display in the header.

FUN A function that will be given the elements of the list (one at a time) that should return a string as the representation of that element in this column.

MIN

MAX The minimal (resp. maximal) width this column takes.

ALIGN Either `:left`, `:right`, or `:center`. How the contents of the column are aligned.

ELIDE If the content of an element takes more space than the **MAX**, whether to substitute the last few characters of that content by a fixed *eliding string*. If this **ELIDE** is not a string, then it means not to elide, but to truncate the contents.

2.2 Groups

The first subsection of this section describes the specifications of groups. And the second describes a planned feature that is not yet implemented.

2.2.1 Fixed groups

Like in `Ibuffer`, we can group elements together in the display. One difference with `Ibuffer` is that elements that are not in any group are ignored. If one wants a "default" group, specify that explicitly. The specifications of **GROUPS** are as follows.

NAME The name of the group. This will be enclosed in square brackets and displayed on a separate line.

FUN A function with one argument. If the function returns non-nil, then that element is considered to pertain to the group.

So a default group just uses a function that always returns `t`, and is put at the end of the list `GROUPS`.

Empty groups might or might not be displayed, depending on the value of `DISCARD-EMPTY-P`.

2.2.2 Automatic groups (planned)

I plan to add support for automatic groups. This means that, instead of providing a list of groups, one provides a function with one argument. That argument will be fed the list of elements. Then the function is supposed to return a list of the following form:

```
(list
  (NAME
    (INDEX1 . ELEMENT1)
    (INDEX2 . ELEMENT2)
    ...)
  ...)
```

That is, it should return cons cells of indices and elements, where the indices mean the indices of the corresponding element, in the original list.

Then the user can provide functions to automatically group elements based on the criteria that fit the domain of application.

3 Mapping over lines

For the convenience of package-users, this package also provides some auxiliary functions to operate on the displayed list. One is `ilist-map-lines`. It is called as follows.

`(ilist-map-lines FUN &optional PREDICATE START END NO-SKIP-INVISIBLE)`

FUN The function to execute on each matching line.

PREDICATE

This should be a function with no arguments. It will be executed on each line. If it returns non-nil, that line is considered to be matched.

START

END They limit the range of the mapping.

NO-SKIP-INVISIBLE

If non-nil, then we don't skip invisible lines.

4 Moving

It might be desired to move between the displayed list items in a *cyclic* manner, that is, assuming the top of the buffer is identified with the bottom of the buffer. So the package provides four functions for moving. If the argument `NO-SKIP-INVISIBLE` is non-nil, then we don't skip invisible lines.

`ilist-backward-line`

`ilist-forward-line`

Move between lines. One can control whether to skip group headers or to move cyclicly, through the function parameters.

`ilist-backward-group-header`

`ilist-forward-group-header`

Move between group headers.

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