

# This program is released under the terms of the MiscKit License.

See the History.rtf file to see what this program is all about.

To run, launch it from the Workspace and have it read in a .tree file (format is in ascii, as described in History.rtf). The tree will be displayed graphically. Click on a button to activate a node. When a node gets sent an activation message, it prints it's contents to stdout, which means that you will see feedback in the WorkSpace Console.

And that's all there is. This program mainly serves as a programming example showing the use of the MiscKit MiscTree class. The MiscTree class is particularly useful for building parse trees, and subclasses could easily be made to create a recursive pretty-printer automatically. (I have used the MiscTree class in an optimizing compiler which deals with a subset of Pascal, and the MiscTree did pretty printing and three-address code generation automatically by just sending the appropriate message to the root node. It worked out quite nicely. Each subclass corresponded to a different type of programming construct<sup>1/4</sup>) Also of note is the way I use a List as a display List for the line objects. Any type of object that can render itself could be placed in that list, which is part of how my gamekit deals with multiple types of sprites... and in the file parsing is an example of how a List object can be used as a stack. (It could be used as a queue, too, if you think about it. Quite a nifty object IMHO. Note that the MiscQueue and MiscStack make this more obvious.)

Well I hope that somebody finds this somewhat useful. It only took me an evening to do, so I don't expect it to be particularly useful.

If you have any questions, requests, whatever, feel free to contact me.

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*This is **not** a polished program! Here are some interface things that I would want to clean up if I had the time:*

- Draw the lines differently. Rather than middle of one button to the middle of the next, make the lines go horizontally and connect to a vertical line between tree levels. This should be very easy to do; I leave it as an exercise to the reader.

- Make the window and ScrollViews limit their size so that you can't make them any bigger than the underlying TreeView is.
- Limit the length of the strings used in the button titles so that long titles don't look ugly. Another approach would be to vary the size of the buttons, but that's harder to do...
- Make a proper B&W icon. Amongst other little things¼
- The use of the old String class needs to be removed; we should use the new MiscString class instead. This has only been done for the MiscTree class itself.
- Rather than having links to the MiscTree source, use the actual MiscKit library instead, when linking the executable. This should be done when the old String class is removed.