fescape

Filter unprintable characters from input stream.

Design Considerations

Short and simple. Follow the original Unix philosophy of a program doing just one thing where both input and output are streamed and are therefore able to function well in a pipe sequence.

File Locations

- Binary executable (fescape) located in ~/bin
- Manpage (fescape.1) located in /usr/local/share/man/man1

Arguments

• file: file(s) to display or stdin if none specified

Switches

- \bullet -c, --count : display a count for repeated characters instead of the characters themselves
- -h, --help: display usage
- -o, --octal : display octal codes instead of default hex codes

Key Functions

main()

- Handle switches
- Handle arguments
- Handle actions

void usage(const char *program)

• Display help to user

fescape(FILE *input_stream, FILE *output_stream, bool repeats,
bool octal)

• Performs the filter function.

Results

Haven't discovered any issues yet.

Lessons

- 1. **##___VA_ARGS___**: GNU macro feature useful for variadic functions.
- 2. **VS Code**: VSC doesn't play nice with make(1) when debugging from within VSC. You gotta pick a lane.

TODO

- \boxtimes First pass of design spec.
- \boxtimes Figure out best way to handle variadic function fronted by macro.
- $\ \, \boxtimes \,$ Optimize functions in system-actions.c.