**Skout**

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Function: File system search engine with arithematic and logical processing capabilities. Designed for fishing relevant log file entries.

Currently supported OS is LINUX (Future: Might add Windows compatibility.)

**USAGE**:

The script has two interfaces, shell-based and GUI (made in PyQt)

GUI USAGE: Run "genloggui.py" for deploying the script in GUI mode.

Shell USAGE: Run "genlog.py" for deplying the script in LINUX shell.

use "$python genlog.py --help" for information on usage.

**Guide to the fields used in the script:**

Search Field: On using this field, the lines of interest are found by searching for the specified string. Available special keywords are

* <<alphas>>: For matching any word.
* <<alphanums>>: For matching all word + number combinations.
* <<int>>: For matching all pure numbers.
* <<decimal>>: For matching decimal numbers.

Regex Field: The lines of interest are found by matching the specified regular expression.

File Path: Specify the log file name/relative path. Default: current directory

Condition Field:Currently supported arithematic operators are: "+" "-" "\*" "/" "<" ">=" "<=" "=" which can be combined with "!" (left assosiative),"&"(and) and "|"(or) logical operators.

* Time format for the log file as well as the rule string is specified in and can be modified from "patterns.cfg" configuration file.
* Time can be accessed using the "time" keyword and all operators work on time objects except for arithematic "\*" "/" "+" "-".
* Example : (time<=11:49:00.000000).
* Use parenthesis only to override the pre-configured standard operator precedence as it slows down the parsing grammar.

**External dependencies**:

* PyParsing - http://pyparsing.wikispaces.com/
* PyQt - http://www.riverbankcomputing.com/software/pyqt/intro