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renzok / bash-template

Last active 2 months ago

A template bash script based on google style guide with some little improvements

```
    bash-template

       #!/bin/bash
   1
   2
   3
       # Here short description of this script
       # This is just a template to be used for writing new bash scripts
   4
   5
   6
   7
       # Based on Google Style Guide: https://google.github.io/styleguide/shell.xml
       # General remarks
   8
       # * Executables should have no extension (strongly preferred) or a .sh extension.
  10
       # * Libraries must have a .sh extension and should not be executable
       # * SUID and SGID are forbidden on shell scripts.
  11
       # * All error messages should go to STDERR.
  12
  13
       # * Write todos like this: # TODO(renzok): Handle the unlikely edge cases (bug ####)
  14
       # * Indent 2 spaces. No tabs. 80 chars max per line
       # * Put ; do and ; then on the same line as the while, for or if.
  15
       # * Quoting: https://google.github.io/styleguide/shell.xml#Quoting
  17
       # * Function Names: Lower-case, with underscores to separate words.
       # ** Separate libraries with ::. Parentheses are required after the function name.
  18
       # * prefer shell builtin over separate process
  20
       ##
  21
  22
  23
       ##
  24
       # Coding tips and tricks:
  25
       # http://stackoverflow.com/questions/1167746/how-to-assign-a-heredoc-value-to-a-variabl
  26
       #
  27
  28
       # Exit immediately if a command exits with a non-zero status.
  29
  30
       # This might cause problems e.g. using read to read a heredoc cause
```

```
# read to always return non-zero set -o errexit Treat unset variables
31
     # as an error when substituting.
32
     set -o nounset
33
34
     # 1. section: global constants (all words upper case separated by underscore)
35
     # declare -r CONSTANT_VARIABLE='value'
36
     declare -r TMP_FILE_PREFIX=${TMPDIR:-/tmp}/prog.$$
37
38
     # as per discussion
39
     # http://stackoverflow.com/questions/4774054/reliable-way-for-a-bash-script-to-get-the-
40
     # but use BASH_SOURCE[0]
41
     declare -r SCRIPTPATH=$( cd $(dirname ${BASH_SOURCE[0]}) > /dev/null; pwd -P )
42
43
44
45
     # 2. section: functions
     # Part of a package/library
46
     function mypackage::my_func() {
47
48
49
    }
50
     # all progs need to be given as parameters
51
     # e.g. _check_required_programs md5 xsltproc
52
53
     function _check_required_programs() {
54
         # Required program(s)
55
         #req_progs=(readlink date md5)
56
57
         for p in ${@}; do
             hash "${p}" 2>&- || \
58
                 { echo >&2 " Required program \"${p}\" not installed or in search PATH.";
59
60
61
                 }
         done
62
63
64
     function cleanup() {
65
         rm -f ${TMP_FILE_PREFIX}.*
66
67
         echo "always implement this" && exit 100
68
     }
69
70
71
     function usage() {
72
       cat <<EOF
73
74
75
     Usage: $0
76
77
     TOD0
     EOF
78
```

```
79
      }
 80
 81
      # Single function
 82
      function main() {
 83
 84
        # the optional parameters string starting with ':' for silent errors snd h for help u
 85
        local -r OPTS=':h'
 86
 87
        while builtin getopts ${OPTS} opt "${@}"; do
 88
 89
 90
            case $opt in
                h) usage ; exit 0
 91
 92
                   ;;
 93
                \?)
 94
                    echo ${opt} ${OPTIND} 'is an invalid option' >&2;
 95
 96
                    usage;
 97
                    exit ${INVALID_OPTION}
 98
                    ;;
 99
100
                :)
101
                    echo 'required argument not found for option -'${OPTARG} >&2;
102
                    usage;
                    exit ${INVALID_OPTION}
103
104
                *) echo "Too many options. Can not happen actually :)"
105
106
                    ;;
107
108
            esac
        done
109
110
111
        cleanup
112
113
114
        exit 0
115
      }
116
117
118
      # Always check return values and give informative return values.
      # see https://google.github.io/styleguide/shell.xml#Checking_Return_Values
119
120
121
      # set a trap for (calling) cleanup all stuff before process
      # termination by SIGHUBs
122
123
      trap "cleanup; exit 1" 1 2 3 13 15
      # this is the main executable function at end of script
124
      main "$@"
125
126
```

A template bash script based on google style guide wit...

```
127
128
```

```
bin/generate.sh
bin/generate.sh: line 49: syntax error near unexpected token `}'
bin/generate.sh: line 49: `}'

If something is added to the function on line 49:
bin/generate.sh: line 88: @: unbound variable
```