Pop Fabius_Sever
FILS 1231B
CN HW7

OSA [Running] - Oracle VM VirtualBox

Activities   🖹 Text Editor ▾

Open   ▾   🗗

```bash
1 #!/bin/bash
2
3 bin_dir=~/bin
4 lib_dir=~/lib
5 src_dir=~/src
6 inc_dir=~/inc
7 log_file=~/organize.log
8
9 prompt_for_directories() {
10
11 read -t 10 -p "User/input directory for executable or default: " input
12 bin_dir=${input: -$bin_dir}
13
14 read -t 10 -p "User/input directory for library or default: " input
15 lib_dir=${input: -$lib_dir}
16
17 read -t 10 -p "User/input directory for source or default: " input
18 src_dir=${input: -$src_dir}
19
20 read -t 10 -p "User/input directory for includes or default: " input
21 inc_dir=${input: -$inc_dir}
22
23 read -t 10 -p "User/input log file loc or default: " input
24 log_file=${input: -$log_file}
25
26 }
27
28 move_files() {
29
30 local targer_dir=$1
31 shift
32 local files=("$@")
33
34 for file in "${files[@]}"; do
35         if [ -e "$file" ]; then
36                 mv "$file" "$target_dir"
37                 echo "Moved $file to $target_dir" | tee -a "$log_file"
38         fi
39 done
40
41 }
42
43 prompt_for_directories
44
45 mkdir -p "$bin_dir" "$lib_dir" "$src_dir" "$inc_dir"
46
47 exe_count=0
48 lib_count=0
49 src_count=0
50 inc_count=0
51 start_time=$(date +%s)
52
53 if [ $# -eq 0 ]; then
54         echo "No arguments provided, enter directory names:"
55         while IFS= read -r -t 10 line; do
56                 directories+=("$line")
57         done
58 else
59         directories=("$@")
60 fi
61
62 for dir in "${directories[@]}"; do
63         if [ -d "$dir" ]; then
64
65                 executables=($(find "$dir" -maxdepth 1 -type f -executable))
66                 move_files "$bin_dir" "${executables[@]}"
67                 ((exe_count+=${#executables[@]}))
68
69                 libraries=($(find "$dir" -maxdepth 1 -type f -name "lib*.*"))
70                 move_files "$lib_dir" "${libraries[@]}"
71                 ((lib_count+=${#libraries[@]}))
72
73                 sources=($(find "$dir" -maxdepth 1 -type f \( -name "*.c" -o -name "*.cc" -o -name "*.cxx" \))
74                 move_files "$src_dir" "${sources[@]}"
75                 ((src_count+=${#sources[@]}))
76
77                 includes=($(find "$dir" -maxdepth 1 -type f \( -name "*.h" -o -name "*.hxx" \))
78                 move_files "$inc_dir" "${includes[@]}"
79                 ((inc_count+=${#includes[@]}))
80         else
81                 echo "Directory $dir does not exist"
82         fi
83 done
84
85 end_time=$(date +%s)
86 duration=$((end_time - start_time))
87
88 echo "Directories: ${#directories[@]}"
89 echo "Executables: $exe_count"
90 echo "Libraries: $lib_count"
91 echo "Sources: $src_count"
92 echo "Includes: $inc_count"
```