

Shell Scripting (File organizer Shell Script)

Code:

```
$ file_organizer.sh X
my_files > $ file_organizer.sh
1  #!/bin/bash
2  if [ -z "$1" ]; then
3      echo "Usage: $0 <directory-path>"
4      exit 1
5  fi
6
7  DIR="$1"
8  if [ ! -d "$DIR" ]; then
9      echo "Error: Directory '$DIR' not found."
10     exit 1
11 fi
12
13 read -p "Enter file extension to organize (e.g., txt, sh, log): " EXT
14
15 TARGET_DIR="$DIR/organized/$EXT"
16 mkdir -p "$TARGET_DIR"
17
18 count=0
19
20 SCRIPT_PATH="$(realpath "$0")"
21
22 for file in "$DIR"/*. "$EXT"; do
23     [ -e "$file" ] || continue
24     FILE_PATH="$(realpath "$file")"
25     if [ "$FILE_PATH" == "$SCRIPT_PATH" ]; then
26         continue
27     fi
28     mv "$file" "$TARGET_DIR/"
29     echo "Moved: $file → $TARGET_DIR/"
30     ((count++))
31 done
32 if [ $count -eq 0 ]; then
33     echo "No .$EXT files found to move."
34 else
35     echo "Total files moved: $count"
36 fi
37
```

Output:

```
master@master-vm:~/mock_foundation_test/shell/my_files$ ls
access.log data.csv debug.log deploy.sh error.log install.sh notes.txt readme.txt report.pdf results.csv setup.sh summary.pdf todo.txt
master@master-vm:~/mock_foundation_test/shell/my_files$ chmod a+x file_organizer.sh
master@master-vm:~/mock_foundation_test/shell/my_files$ ./file_organizer.sh
Usage: ./file_organizer.sh <directory-path>
master@master-vm:~/mock_foundation_test/shell/my_files$ ./file_organizer.sh .
Enter file extension to organize (e.g., txt, sh, log): txt
Moved: ./notes.txt → ./organized/txt/
Moved: ./readme.txt → ./organized/txt/
Moved: ./todo.txt → ./organized/txt/
Total files moved: 3
master@master-vm:~/mock_foundation_test/shell/my_files$ ./file_organizer.sh .
Enter file extension to organize (e.g., txt, sh, log): sh
Moved: ./deploy.sh → ./organized/sh/
Moved: ./install.sh → ./organized/sh/
Moved: ./setup.sh → ./organized/sh/
Total files moved: 3
master@master-vm:~/mock_foundation_test/shell/my_files$ ./file_organizer.sh .
Enter file extension to organize (e.g., txt, sh, log): log
Moved: ./access.log → ./organized/log/
Moved: ./debug.log → ./organized/log/
Moved: ./error.log → ./organized/log/
Total files moved: 3
master@master-vm:~/mock_foundation_test/shell/my_files$ ls
data.csv file_organizer.sh organized report.pdf results.csv summary.pdf
master@master-vm:~/mock_foundation_test/shell/my_files$ ls organized/
log/ sh/ txt/
master@master-vm:~/mock_foundation_test/shell/my_files$ ls organized/
log sh txt
master@master-vm:~/mock_foundation_test/shell/my_files$ ls organized/sh/
deploy.sh install.sh setup.sh
master@master-vm:~/mock_foundation_test/shell/my_files$ ./file_organizer.sh .
Enter file extension to organize (e.g., txt, sh, log): pdf
Moved: ./report.pdf → ./organized/pdf/
Moved: ./summary.pdf → ./organized/pdf/
Total files moved: 2
master@master-vm:~/mock_foundation_test/shell/my_files$
```