Jan. 26, 2025

Course COMP-2560 Instructor Dr. B. Boufama

Assignment 02

Due date Sunday Feb. 9, 11.59pm

Write a Bash script to organize some files in a given directory according to their extensions.

Synopsis:

```
organize [-t target-directory] [-d destination-directory] <extension-list>
```

Note: [] is used for optional parameters while <> is used for nonoptional parameters.

In the absence of the optional parameters, the current working directory is the target and the destination directory.

However, when

- -t option is present, the files to be organized are located in target-directory.

 If target-directory is not a valid directory, then an error message must be printed before exiting.
- -d option is present, all concerned files will be moved into folders within destination-directory. If destination-directory is not a valid directory, then an error message is printed before exiting.

Some sample runs:

```
Case 1: Organize files from/to current directory
% organize pdf doc

# in this case, 2 subdirecties, named pdf and doc, are created then, all *.pdf are
# moved to the pdf subdirectory while all *.doc files are moved to doc subdirectory.

Case 2: Organize files from current directory to a target directory.
% organize -d ~/archive pdf doc txt jpg
# 4 subdirectories, named pdf, doc, txt and jpg, are created in ~/archive/, then,
# all *.pdf, *.doc, *.txt and *.jpg are moved to their corresponding subdirectory,
# located in ~/archive/
# If ~/archive does not exist, an error message should be displayed before exiting.

Case 3: Organize files from target-directory to desctination-directory
% organize -t /home/users/bigFoot/ -d Jan30-2025 pdf ppt
# 2 subdirecties, named pdf and ppt, are created in ./Jan30-2025/, then,
# all *.pdf and *.ppt are moved to their corresponding subdirectories,
# located in /home/users/bigFoot/
```

Hint: you can copy the script's arguments (\$*) into an array variable, then use an index variable to move in the array, depending on the options.

Notes:

- 1. All issues related to the assignments should be addressed to the TAs of the course.
- 2. Consult the TAs schedule on Brightspace in order to meet with them or email them for appointments.