

Assignment 1: Simple Shell: XDD

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Assumptions:

1. The Syntax for each command has been mentioned below with their respective descriptions.
2. In the ls command, Assuming only the mentioned type of commands
3. In date external command the time will be according to the time in the system.

Error:

1. Error cases regarding Forking have been taken into account.
2. If a Wrong command has been entered, the shell shows the gracefully handled message.
3. The rest of the errors have been handled in their code sections.

EXTERNAL COMMANDS:

1. mkdir

Implementation: mkdir [Option] [directoryName]

Options used: -v, --verbose

Errors

handled:

1.
File has been created or not?
2.
The command does not exist (the wrong command was entered).

2. cat

Implementation: cat [Option] [fileName]

Any number of files can be given as an input there is no limit on that.

Options: -n, --help

Errors handled:

- If file correctly opened or not.
- If entered command is wrong.

3. date

Implementation: date [OPTION]...

Options: -u, --universal

Errors handled:

- If entered command is wrong.

4. ls

Implementation: ls

[options][dir] *Options :*

-1, -a

Assumptions:

1. One directory is given at a time

Errors handled:

- If entered command is wrong.

5. rm

Implementation: rm [option] [file]

Options: -i, -r

Errors handled:

- If the given file doesn't exist then an error will be thrown.
- If wrong command has been given there will be an error.

INTERNAL COMMANDS:

1. cd

Implementation: cd [option][dir]

Options: ~ , ..

Assumptions: if directory has been changed to home using the cd command, The shell is to be run again, as The sample testing was done only on replit.com.

Errors handled:

- if directory has not been changed correctly.
- If entered command was wrong.

2. Pwd

Implementation: pwd [option]

Options:

-P, -L

Assumptions: No symbolic links will be printed. The physical address will be printed.

Errors Handled:

1. If wrong command was entered.

3. Echo

Usage: echo [OPTION][text]

Options: -E, --help

Assumptions: no echo "string" cases are considered. Echo will simply display the text that has been provided.

