

Custom Shell

-> A Custom shell written in C language, supporting four internal and 5 external library commands with Multithreaded and Multiprocessor Options.

-> Use of standard C libraries, including Linux system calls such as `fork()` , `exec()` family system calls and `wait()` family of system calls.

-> Use of Linux system thread creation calls such as `pthread_create()`, `pthread_join()` , `pthread_exit()` , `system()` family system calls and `wait()` family of system calls.

Internal Commands Supported

- `pwd`
- `cd`
- `echo`

External Commands Supported

- `ls`
- `cat`
- `date`
- `rm`
- `mkdir`

Installation

```
# clone the repo
$> git clone https://github.com/arnavgupta2003/Custom_Shell_1.git

# change the working directory to src
$> cd src

# run the makefile
$> make -f MakeFile
      OR
$> make
```

Usage

```
$ [COMMAND] -h
Available commands.

    cd                cd &t
    pwd              pwd &t
    echo             echo &t
    ls               ls &t
    cat              cat &t
    date             date &t
    rm               rm &t
    mkdir            mkdir &t
```

cd optional arguments:

-h, --help	show this help
-v, --verbose	display information regarding changes
-f,	force changes

pwd optional arguments:

-h, --help	show this help
-L, --cwd	print the value of \$PWD if it names the current working directory
-P, --physical	print the physical directory, without any symbolic links

echo optional arguments:

-h, --help	show this help
-n,	do not output the trailing new line
-v, --verbose	Describe each event as it occurs

ls optional arguments:

-h, --help	show this help
-d, --directory	list directories themselves, not their contents
-a, --all	do not ignore entries starting with .

cat optional arguments:

-h, --help	show this help
-E, --show-ends	display \$ at end of each line
-n, --number	number all output lines

date optional arguments:

-h, --help	show this help
-t, --show-time	display only time
-d, --show-date	display only date

rm optional arguments:

-h, --help	show this help
-f, --force	ignore nonexistent files and arguments, never prompt
-v, --verbos	Explain what is being done

mkdir optional arguments:

-h, --help	show this help
-p, --parents	no error if existing, make parent directories as needed
-v, --verbos	Explain what is being done

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