

**OPERATING SYSTEM**

**PROJECT PROPOSAL**

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The terminal, also known as the command-line interface (CLI), is an essential tool for developers and system administrators to interact with their computer's operating system. It allows users to execute commands by typing them directly, offering greater control and flexibility compared to graphical user interfaces (GUIs). As computing needs have evolved, so has the need for customized terminal commands that cater to specific project requirements or personal preferences.

In this report, we will delve into the process of creating custom terminal commands for a project, aimed at simplifying and streamlining tasks, ultimately enhancing productivity.

**TERMINAL RELATED COMMANDS**

* **ls command**

The **ls** command is a common command used in Unix-like operating systems, including Linux and macOS. It stands for "list" and is used to display the contents of a directory.

We can combine the ls command with a path, for example: ls \*.c

This command will print all the files with a .c extension.

* **cd command**

The **cd** command is used to change the current working directory in a command-line interface.

For example: **cd Desktop** will change the directory to desktop.

There are other variations with this command as well. For example: “cd ..” will make the directory to go back to its previous state and “cd ../..” will make the directory go two stages back.

* **greetme command**

The **greetme** command will greet you according to the time of the die. Till 11:59 it will greet with good morning, from 12:00 PM to 3:59 PM it will great with good afternoon, from 4:00 PM to 6:59 PM it will greet with good evening and from 7:00 PM and onwards it will greet with good night.

* **pwd command**

The **pwd** command is used to print the current working directory in a command-line interface. It stands for "print working directory." When you run the **pwd** command, it displays the absolute path of the directory you are currently in.

* **fileage command**

The **fileage** command is a custom command that provides information about the age of a file. It calculates the duration between the current time and the last modification time of the specified file, giving you an indication of how old the file is.

* **cp command**

The **cp** command is used to copy files and directories in Unix-like operating systems, including Linux and macOS. It stands for "copy."

The basic syntax of the **cp** command is as follows:

cp source\_file destination\_file

* **mv command**

The **mv** command is used to move or rename files and directories in Unix-like operating systems, including Linux and macOS. It stands for "move."

The basic syntax of the **mv** command is as follows:

mv text.txt hello.txt

This command will change the filename from text.txt to hello.txt.

* **trash command**

The **trash** command is used to delete files. The deleted files will be moved to the recycle bin.

For example: trash hello.txt

This command will move the hello.txt file into trash.

* **rm command**

The **rm** command is used to remove files and directories in Unix-like operating systems, including Linux and macOS. It stands for "remove."

For example: rm hello.txt

This command will permanently delete the hello.txt file.

* **mkdir command**

The **mkdir** command is used to create directories (folders) in Unix-like operating systems, including Linux and macOS. It stands for "make directory."

For example: mkdir mainfolder

This command will create a directory with the name of mainFolder.

* **rmdir**

The **rmdir** command is used to remove empty directories in Unix-like operating systems, including Linux and macOS. It stands for "remove directory."

For example: rmdir mainFolder

This command will delete the mainFolder directory.

* **restore command**

The **restore** command is used to restore a file which was deleted.

For example: restore hello.txt

This command will restore the hello.txt file along with the content it contained.

Note: only those files will be restored that are present in trash.

* **clear command**

The **clear** command is used to clear the contents of the terminal screen in Unix-like operating systems, including Linux and macOS. It does not remove any commands or output from the history; it simply clears the visible text on the screen, giving you a clean slate.

* **exit command**

The **exit** command is used to exit the terminal

* **shutdown command**

The **shutdown** command will turn the pc off immediately. There is another variation in this command in which we can also specify after how many seconds we the pc to shut down.

For example: shutdown 60

The pc will shut down after exactly 60 seconds.

* **search command**

The **search** command will search for a particular file which the user will input.

For example: search hello.txt

This command will print the location of hello.txt

* **uname command**

The **uname** command is used to retrieve information about the operating system.

* **print command**

The **print** command will print all the content of a file.

For example: print aimal.txt

This command will print all the contents inside the aimal.txt file

* **create command**

The **create** command will create a file. For example: create hello.c

This command will create a hello.c file

* **rename command**

The **rename** command will change the name of an existing file to another name given by the user.

For example: rename hello.c world.c

This command will change the name of the file from hello.c to world.c

* **history command**

The **history** command will print our terminal history.

* **search\_history command**

The **search\_history** command will print the history of a particular command

For example: search\_history mkdir

This command will print the search history related to mkdir

* **bachmove command**

The bachmove command will move files of a particular extension from one directory to another.

For example: bachmove /home/farhan/lab1 /home/farhan/docs cpp

This command will move only the cpp files from lab1 to docs