

Assignment 0 part 2

Internal Commands:

Cd: It is used to change the working directory of the shell.

Echo: It is used to display the parameters that are given to this command.

History: It is used to display a list of all the commands that have been entered by the user

Pwd: It is used to print the present working directory.

Exit: It is used to terminate the shell.

External Commands:

Ls: It lists the directory contents

Cat: Concatenate all the input files and print the result

Rm: Used to remove the files and directories

Date: Prints the system time date

Mkdir: Makes a new directory

Options:

For the external command the option which are available in the real comand are working

Corner cases:

- 1) If you give a blank input, the shell will not execute any command and continue by displaying the next line to allow the user to input the next command.
- 2) This corner case is valid for all the commands. All the extra spaces in the starting or in the middle or in the end of the entered command and the options. Then the shell will ignore the extra space and will not affect the working of the command. EG: " ls -a " will be treated as "ls -a".
- 3) If the entered command not a valid command then the shell will display an error. It will show "NOTaSHELL: command not found: <command>" and continue with the next input.
- 4) For "cd" if the directory does not exist then it will show an error "no such file or directory"
- 5) For "cd" if the user enters more than one parameter, then only the first parameter will be considered and rest will be dropped.
- 6) For "cd" if the user gives the parameter "." then it will go one level above the present working directory.
- 7) If nothing is given as a parameter to "cd", then it will display an error message of "no such file or directory"
- 8) If the user enters "." as parameter for cd. It will refer to the current working directory
- 9) For pwd and exit all the parameters will be dropped
- 10) For the external commands, as they are implemented from binary, hence all the corner cases are handled by the binary itself.
- 11) In history, the blank lines will not be stored.

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Compilation

Go to the directory there shell C code is present

\$ make

\$./NotaShell

Assumption:

There could be maximum 30 parameters for a command and each parameter can have a max length of 40 characters.

History can store at max 500 commands.