

General

1. If there exists an argument that is invalid for a command, an exception will be thrown and the command will not continue execution even if other arguments are valid unless otherwise stated in the application's assumptions.
2. Failed commands (eg. `cat on non-existent file) will not terminate the shell; can continue to execute new commands.
3. File and folder names should not contain any new line characters and spaces unless enclosed by quotes.

Shell

Calling applications

1. Calling a non-existent commands will not terminate the app; new commands can be executed after pressing return key.

IO-redirection

1. Specifying multiple files for redirecting to input or output is done by using two or more instances of the same redirection operator eg. `cat < text1.txt < text2.txt` which will throw an exception

Quoting

1. Quotes and backticks in arguments must come in pairs unless arguments are enclosed by appropriate quotes. Otherwise, unexpected result or `ShellException` will be thrown.

Applications

Ls

1. Options `-d` and `-R` can be used within the same execution, which will return only directories and subdirectories recursively
2. Options `-d` and `-R` cannot used as a single command line word (e.g `-dR`)
3. The order and the number of times options `-d` and `-R` appear does not matter
4. When output is redirected, it will end with a system-dependent line separator

Cat

1. Cat will throw an exception for files that cannot be found but will continue execution until all arguments have been evaluated
2. Ignore all directory. This applies to globbing whereas only files are displayed without throwing exception.

Echo

1. Only accepts input from arguments

Exit

1. Exception is never thrown in System.exit
2. Use `exit` (lowercase) instead of `Exit` (likely a mistake in pdf specification)

Mkdir

1. When an exception is thrown during the creation of folders, the command will terminate.

Grep

1. The grep application can use single asterisk (*) as defined in specs. Client can technically make use of double asterisk (**) for deep recursive and single character matching (?), but the latter two are in beta and might throw exception.
2. When a base directory reference is not explicitly stated (eg: absolute path) then current directory will be assumed using dot syntax (.).

Paste

1. If no files are specified, use stdin. (in project description)
2. When output is redirected, the file will end with a system-dependent line separator
3. Due to 1, mergeFileAndStdin method is left unimplemented and never called.

Diff

1. If more than 2 files are specified, only the first 2 is taken and the rest are ignored.
2. Stdin will only be read if '-' is specified in the input argument.
3. If stdin is used, it will always be used as the second file, irrespective of the position of '-' in the input argument.
4. Duplicate options will be ignored.
5. Options and the 2 filenames can be specified in any order.
6. Diff on directory will not guarantee output in alphabetical order.
7. Simple diff on binary files are not guaranteed, but works most of the time.