Systems Integration - Assignment 1

Custom Shell

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Install

1. Download assignment.c and place it in the /bin directory.
2. Compile it to generate the output, which will be the shell.
   - gcc -o assignment assignment.c
3. Change the shell for the necessary user.
   - sudo vi /etc/passwd
   - example:x:1001:1001:example,,,:/home/example:/bin/bash
   - example:x:1001:1001:example,,,:/home/example:/bin/assignment
4. To test, log in as the user.

Supported commands

1. pw
   - Unix equivalent: pwd.
   - Displays the current working directory.
   - Any provided tail will be ignored.
   - See References: 4
2. ifc
   - Unix equivalent: ifconfig.
   - Displays network information for a specified interface.
   - Default interface is eth0.
   - No options available (-options).
   - Interface is specified after the command (> ifc eth1).
   - See References: 11
3. dt
   - Displays the current date and time.
   - Format: yyyymmddHHMMSS
   - E.g. 20171024085910
   - See References: 7
4. ud
   - Displays the following user details
     i. User ID, group ID, username, group name, iNode of user's home directory
     ii. E.g. 1001, 1001, example, example, 700
   - See References: 8, 9, 10, 13, 14
5. help
   - Displays supported commands and their functions.
6. exit
   - Logs out of the shell.

Issues

1. The ifc command will not work if it is ran immediately after the ud, dt, or help command. It has to be run again for it to work.

References

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