Operating Systems Project: mkch

Group 9:

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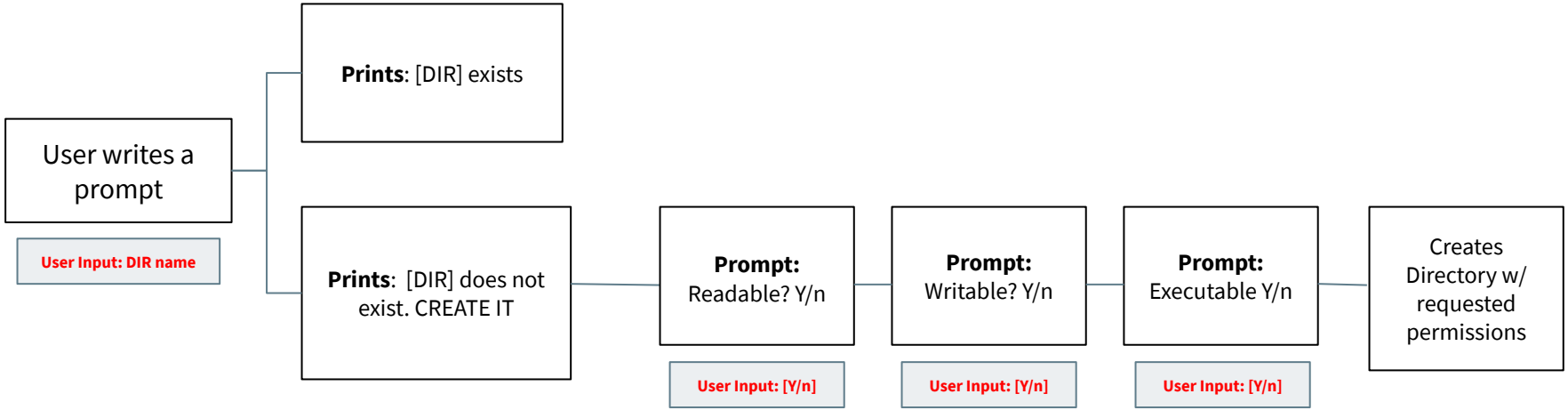
Our Change: mkch

- Combine the mkdir and chmod command that walks the user through a user-friendly experience.
- The person with owner access can customize the permissions of those in the user level.



Why we wanted to do this

- Read-write permissions are confusing and look mysterious ಠ_ಠ
- Convenience

mkch

```
ox:~$ mkdir -m777 newFolder
ox:~$ mkdir -m700 newFolder2
ox:~$
```

Needs Google to understand

Ugly ಥ_ಥ

Why 7?? What does that even mean??

```
root@clarissab-VirtualBox:/home/clarissab/Desktop# mkch test
[DIR] {test} does not exist, CREATE IT

Do you want to make {test} readable? [Y/n]: y

Do you want to make {test} writable? [Y/n]: n

Do you want to make {test} executable for everyone? [Y/n]: n
```

Very clear

Prettier ❀

Knows exactly what it means

Research Done

- GNU - Core Utilities
  - Manual - https://www.gnu.org/software/coreutils/manual/
  - GGSYW
- Kernel Modifications
  - Familiarity with the file structure and its libraries
  - GGSYW
- Kernel Build
  - Professor’s Kernel Build post from April 2020.
  - GGSYW

GGSYW = Google Search, Github, Stack Overflow, Youtube, Wikipedia

Problems Experienced

Building the Kernel

Obsolete Instructions. Extremely time consuming.

Modifying the Kernel

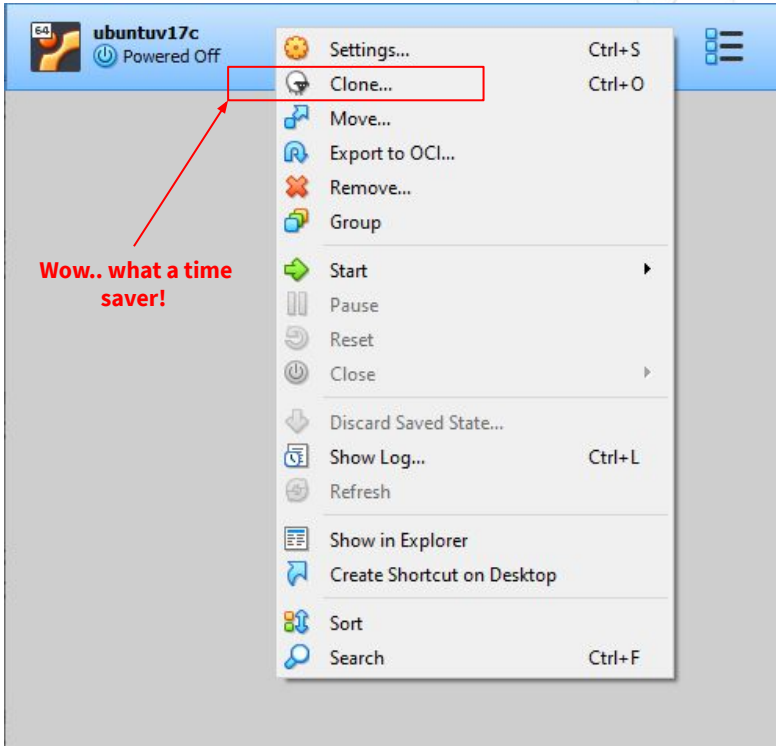
Obsolete Instructions, total path-police, limitations

GNU - coreutils

Explored this a lot later.

How Problems Were Mitigated

- Group 04 - solution to kernel build.
- Cloning the progressing successful VM machines.
- Professor’s post on adding a kernel command (even though we did not use it.)
- Lots of trial and error and Stack Overflow



DEMO

Takeaways

Terminal Familiarity

Kernel

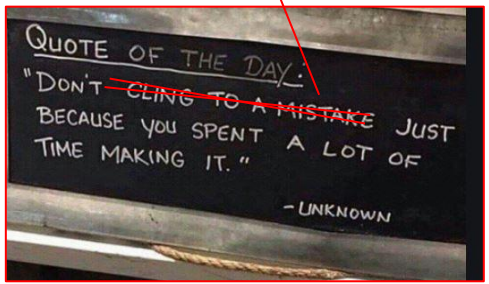
Core Utilities

Kernel

Core Utilities

Embrace the Change

"Don't force the kernel to work"



THANK YOU

QUESTIONS AND COMMENTS