AI224: OPERATING SYSTEMS

Lab 3

Description. In this lab, the instructor will start by presenting some fundamental mechanisms of GNU/Linux systems. Then, they will walk around to analyze and examine what you have been doing in your previous two labs, i.e., Lab 1 and Lab 2.

Task 1. In this first task, the instructor will:

- Help you understand GNU/Linux directories:

`/bin` `/sbin` `/boot` `/dev` `/etc` `/lib` `/media` `/mnt` `/opt`
`/proc` `/root` `/run` `/srv` `/sys` `/tmp` `/usr` `/var` `/home`

- Show you how to create customized bash commands:

☆ Open a shell terminal and run the command `alias`.
☆ Run `$alias you_new_command="ps -aux"`.
☆ Add the previous command to your user's shell configuration file `~/.bashrc`.
☆ Type command `source ~/.bashrc` inside your home directory.
☆ Try your new customized commands.

- Show you how to run sequential, conditional, and background executions.

☆ Commands can be run sequentially by separating them with `;`. Try this:

```
$mkdir Windows; cd Windows; mkdir WinFolder; touch
./WinFolder/File; cd ..; ps -aux >> ./Windows/WinFolder/File
```

☆ We can run a command `Command-1` under the condition of successfully executing a previous command `Command-2` using `&&`. Try this:

```
$mkdir MyFolder && cd MyFolder
```

☆ Commands can be run in the background using `&`. Try this:

```
$top &
```

Task 2. The instructor will walk around and examine your work in Lab 1 & Lab 2. Make sure that you have everything set up. You can work in groups of 2 or 3.