

Drew Charter Pi

Linux basics:

- users
 - home folder
 - `/home/[username_here]`
 - Also known as `~/`
 - So `/home/Robin/Desktop` is the same as `~/Desktop` if I am logged in as "Robin"
 - root vs admin vs user
 - creating new users
 - `adduser`
- package manager
- Terminal
 - navigation
 - `pwd`
 - Current working directory
 - `ls`
 - list all files/folders/items
 - `cd`
 - change directory
 - `cd ..`
 - change directory up one
 - `mkdir`
 - make directory
 - `rm`
 - remove
 - `rm -d`
 - remove directory
 - file manipulation
 - `cat`
 - read a file and display contents
 - `mv`
 - move a file
 - `cp`
 - copy a file
 - editing

- *nano* or *pico*
- *less*
 - read a file, with pages and other functions
- *man* [*FOO*]
 - manual for command
- permissions
 - What they are
 - How to read them
 - `rwX rwX rwX`

Folders and locations in the OS that are useful to be aware of

- `/etc` is used for configurations (.conf files etc). here you find all the configs and settings for your system.
- `/usr` is used for "user programs". Usually your package manager installs all the binaries, shared files etc. from all programs here (except config files, which go to `/etc`). You can check `/usr/bin` for binaries, `/usr/share` for shared files (media, etc), `/usr/share/doc` for documentation,...
- There is also an `/opt` folder, where there are "other" programs usually put (mostly binary programs, or programs installed from other sources (not the default package manager). Some programs like that (usually compiled) also go to `/usr/local`
- `/var` is usually used for log files, 'temporary' files (like mail spool, printer spool, etc), databases, and all other data not tied to a specific user. Logs are usually in `/var/log`, databases in `/var/lib` (mysql - `/var/lib/mysql`), etc.

Examples of content:

- <https://sparkfuneducation.com/curriculum.html>
 - SparkFun Education
 - Provides lesson plans, materials, handouts, etc
- <http://www.makerspaceforeducation.com/raspberry-pi.html>
 - Makerspace for Education
- <https://www.raspberrypi.org/resources/learn/>
 - RaspberryPi Organization
 - Direct source!
 - Lots of updated content
 - Very well organized
- <http://www.geekgurldiaries.co.uk/>
 - Geek Gurl Diaries
 - Can be inspirational
 - Not a lot of current content it seems