

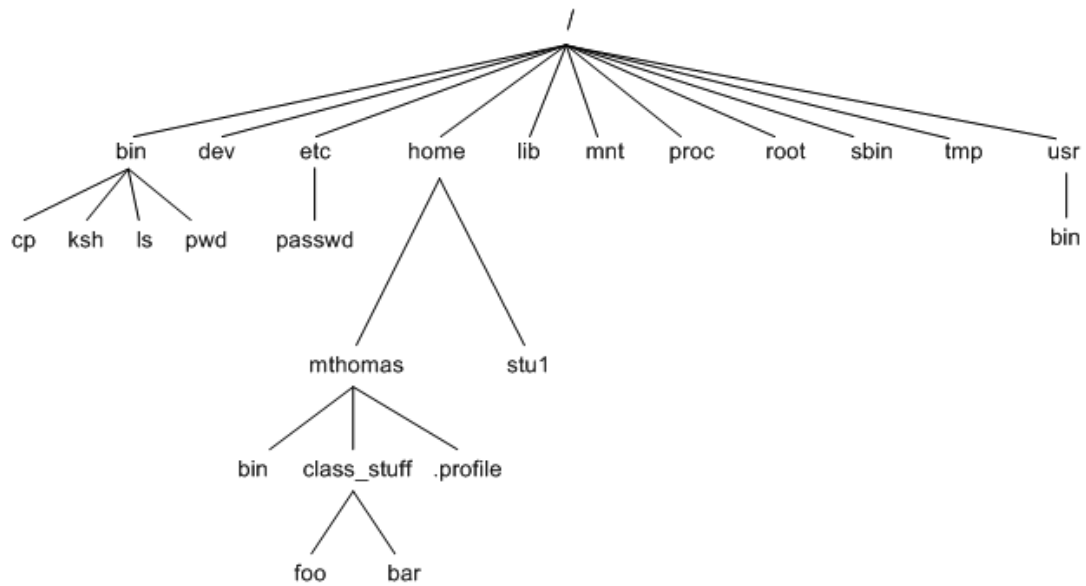
CSC209 Week 7 Notes

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Unix Filesystem 1 of 1

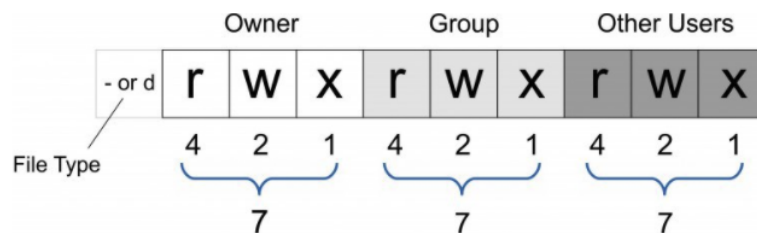
- is a file system supported by many unix and unix-like operating systems
 - i.e. Linux, Mac



- ls and Contents of Inodes (File Attributes)

permission modes	# links	owner	group	size (bytes)	date (modified)		file name
drwxr-xr-x	2	root	root	4096	Mar 21	2002	bin
drwxr-xr-x	17	root	root	77824	Aug 11	14:40	dev
drwxr-xr-x	69	root	root	8192	Sep 25	18:15	etc
drwxr-xr-x	66	root	root	4096	Sep 25	18:15	home
dr-xr-xr-x	46	root	root	0	Aug 11	10:39	proc
drwxr-x---	12	root	root	4096	Aug 7	2002	root
drwxr-xr-x	2	root	root	8192	Mar 21	2002	sbin
drwxrwxrwx	6	root	root	4096	Sep 29	04:02	tmp
drwxr-xr-x	16	root	root	4096	Mar 21	2002	usr
-rw-r--r--	1	root	root	802068	Sep 6	2001	vmlinuz

- **Permission of Modes:** The permissions assigned to the file for the owner, the group and all



Here,

- * **r** means read
- * **w** means write
- * **x** means executable

- **Number of Links:** Number of Symlinks associated to this file
- **Owner:** the owner of the file
- **Group:** associated group for the file
- **Size:** the size of the file in bytes
- **Modification Date:** the date file was last modified
- **File Name:** Name associated to this file

- Symlinks

- **Syntax:** `ln -s <Source> <Destination>`
- is like shortcut in Windows

- can cross filesystems across different users, i.e. \moegu to \mylove

```
1 >>> echo hello > symlink_example_source.txt
2 >>> ln -s symlink_example_source.txt symlink_example_link.txt
3 >>> cat symlink_example_link.txt # <- symlinked file
4 hello
5
```

- Other notes

- Max size of single file is 2GB