Operating Systems

Operating Systems

Software that manages a computer's resources

Allocates resources among other programs

Resources include the central processing unit (CPU), computer memory, file storage, input/output (I/O) devices, and network connections

Runs indefinitely and terminates only when the computer is turned off

Application

Disk Drive

Operating System

Monitor

Mouse

Keyboard

Printer
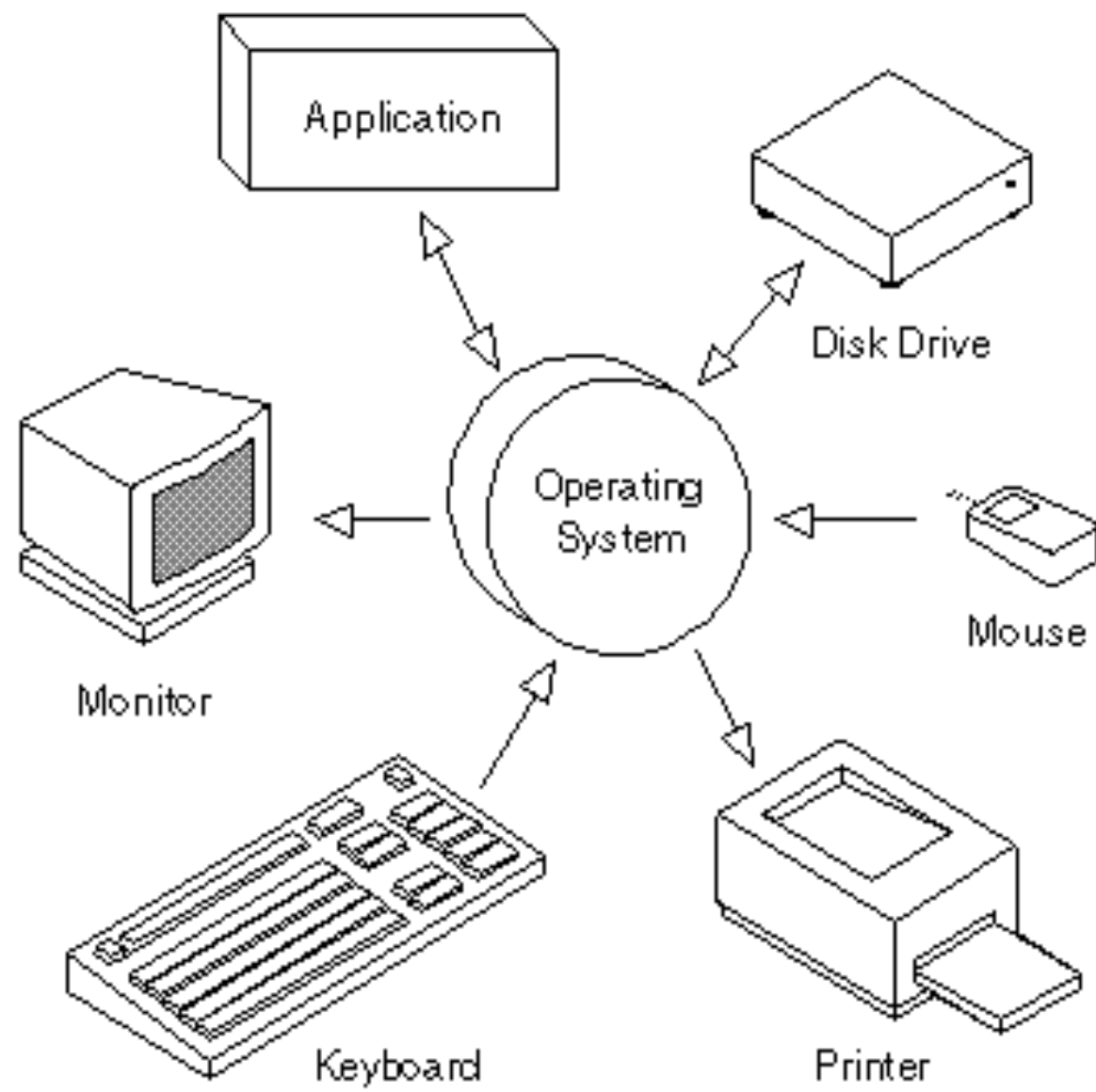
Operating Systems

DOS (Generic term)

Microsoft OS

Mac OS

Linux

iOS

Android Symbian OS

Operating Systems
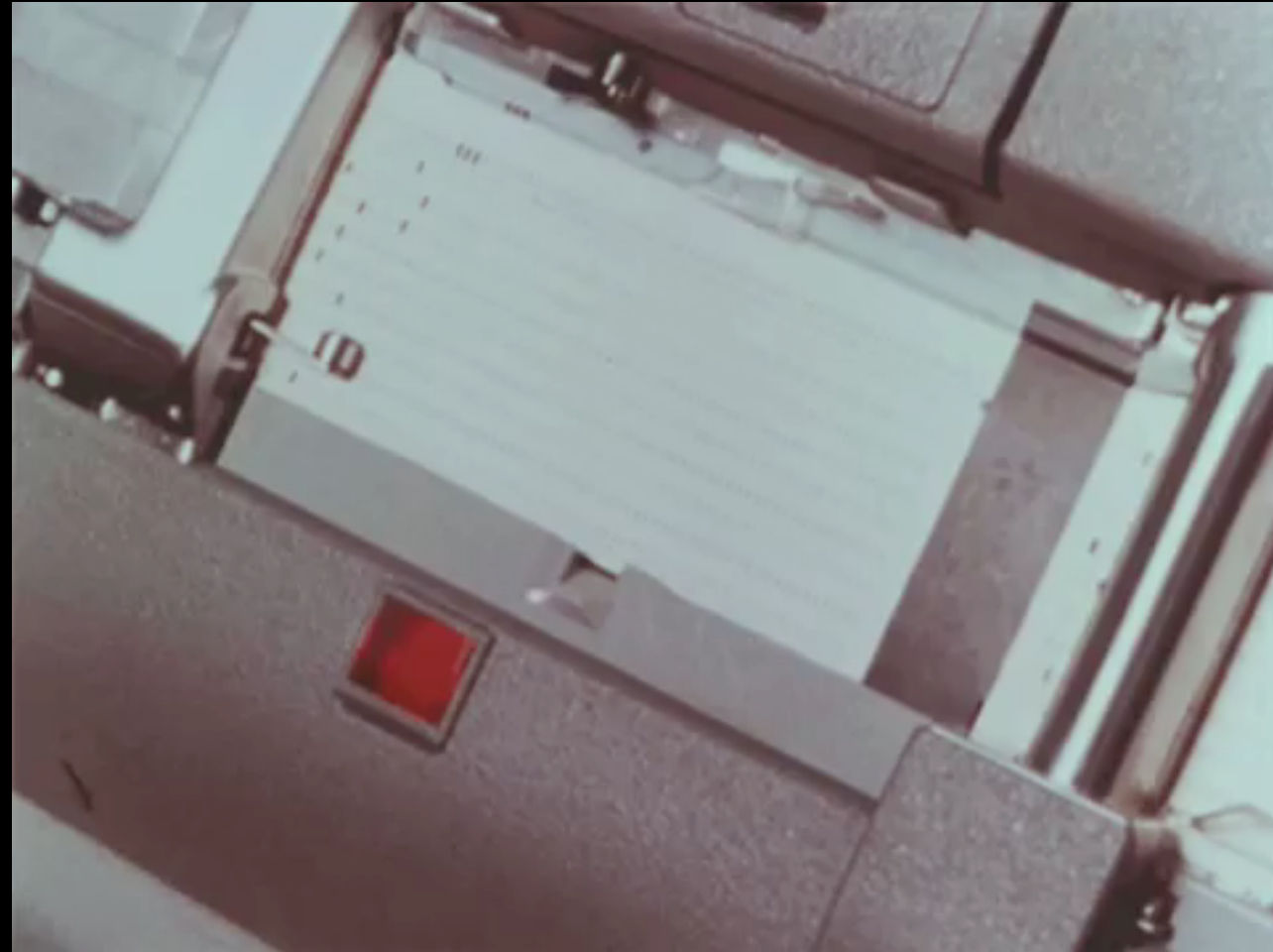
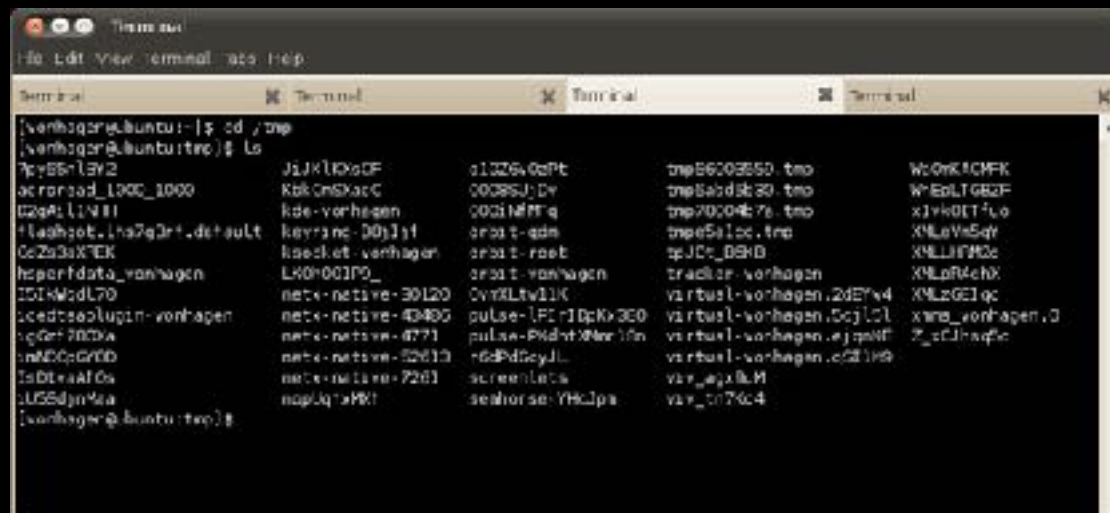**First digital computers had no operating systems**

Ran one program at a time, which had command of all system resources

A human operator would provide any special resources needed

First operating systems were developed in the mid-1950s

Command Line Interface
v.
Graphical User Interface

UNIX

Operating system by AT&T Bell Labs

Originally developed in 1969

Command line interface

Portable, multi-tasking, multi-user

Free distribution, open system

Servers, workstations, mobile devices

Basis of Linux and MacOS

UNIX

```
pwd

cd <directory name>

cd ..

cd

cp <filename> <copied filename>

cp -i <filename> <copied filename>

ls

ls -l

ls -a
```

```
mkdir <directory name>

pico <filename> OR nano <filename>

rm <filename>

rmdir <directory name>

man

chmod
```

Check out commands HERE:

http://www.jason-aston.com/introweb/unix

UNIX

chmod
Sets permissions

Every file and directory has nine permissions associated with it

Files and directories have three types of permissions (or none):
r **(read)**

w **(write)**

x **(execute - where permitted- performs task or can be "run")**

- **(no permissions)**

The above permissions occur for each of the following classes or users:
u **(user/owner)**

g **(group)**

o **(other/everyone else)**

UNIX

chmod

r = **4**

w = **2**

x = **1**

- = **0**

Permission

U   G   W

rwx rwx rwx

rwx rwx r-x

rwx r-x r-x

rw- rw- r--

rw- r-- r--

Command

chmod 777 filename

chmod 775 filename

chmod 755 filename

chmod 664 filename

chmod 644 filename

UNIX

chmod

Standard file permission: 644

Standard Directory permission: 755

HOMEWORK

Read Chapters 1 and 2 in the book.
Feel free to start experimenting with html.

Standard Directory permission: 755