

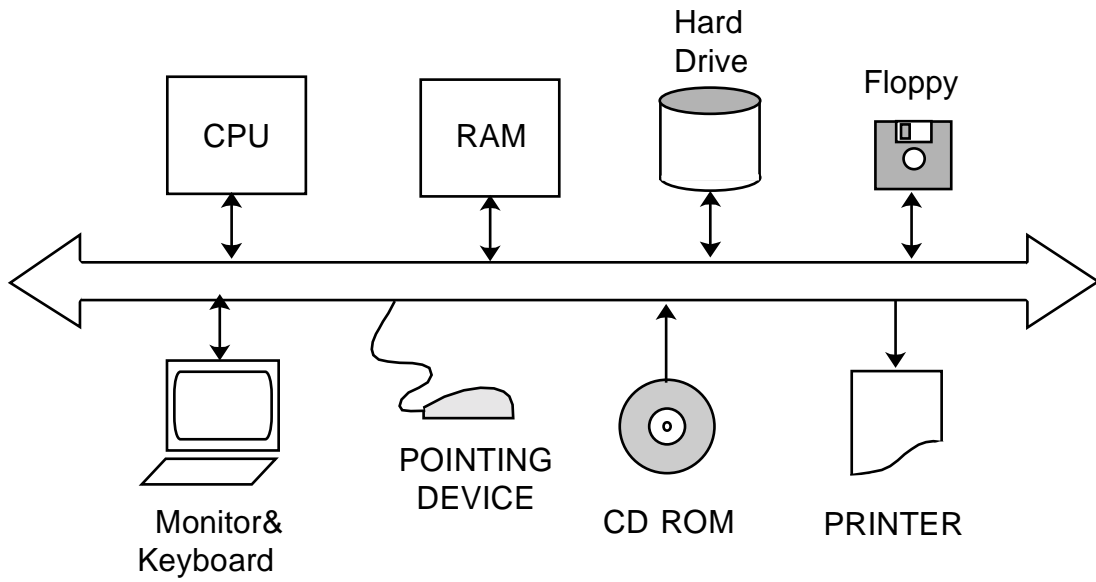
Chapter 1

INTRODUCTION

Table of Contents:

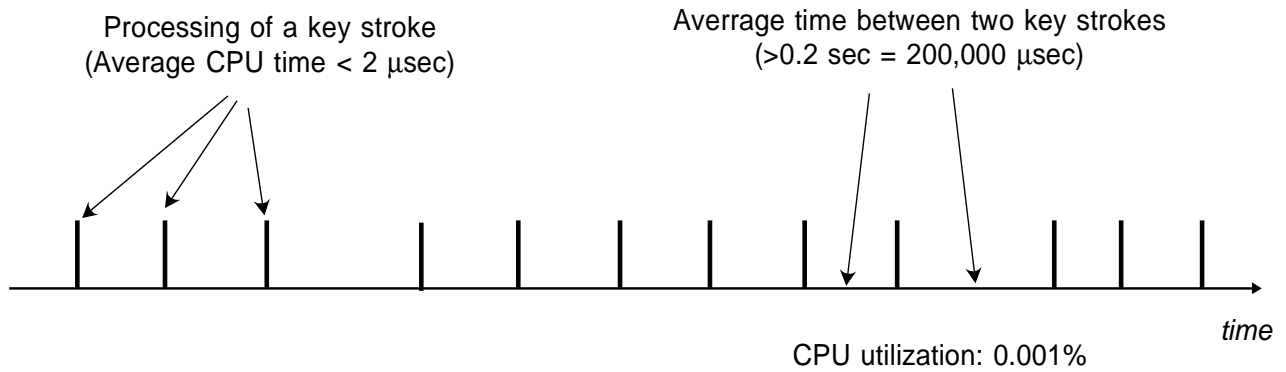
1.1 WHAT IS OPERATING SYSTEM?

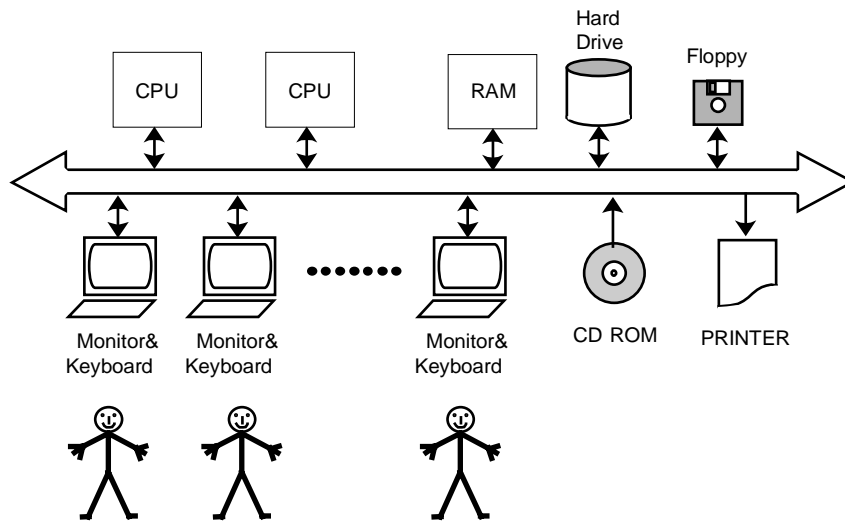
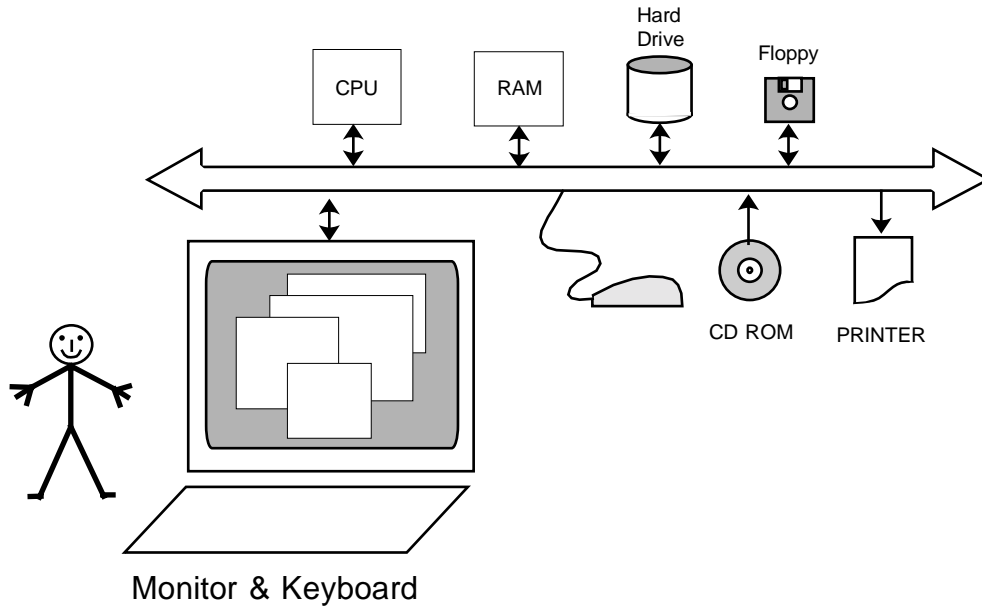
1.1.1 I/O Management	1-2
1.1.2 Processor(s) Management	1-4
1.1.3 Memory Management	1-5
1.1.4 Virtual Memory	1-6
1.1.5 Synchronization and Communication	1-7
1.1.6 File management	1-8
1.1.7 Network management	1-9
1.1.8 Security	1-9
1.1.9 Graphical User Interface	1-11
1.1.10 What is Operating System?	1-12



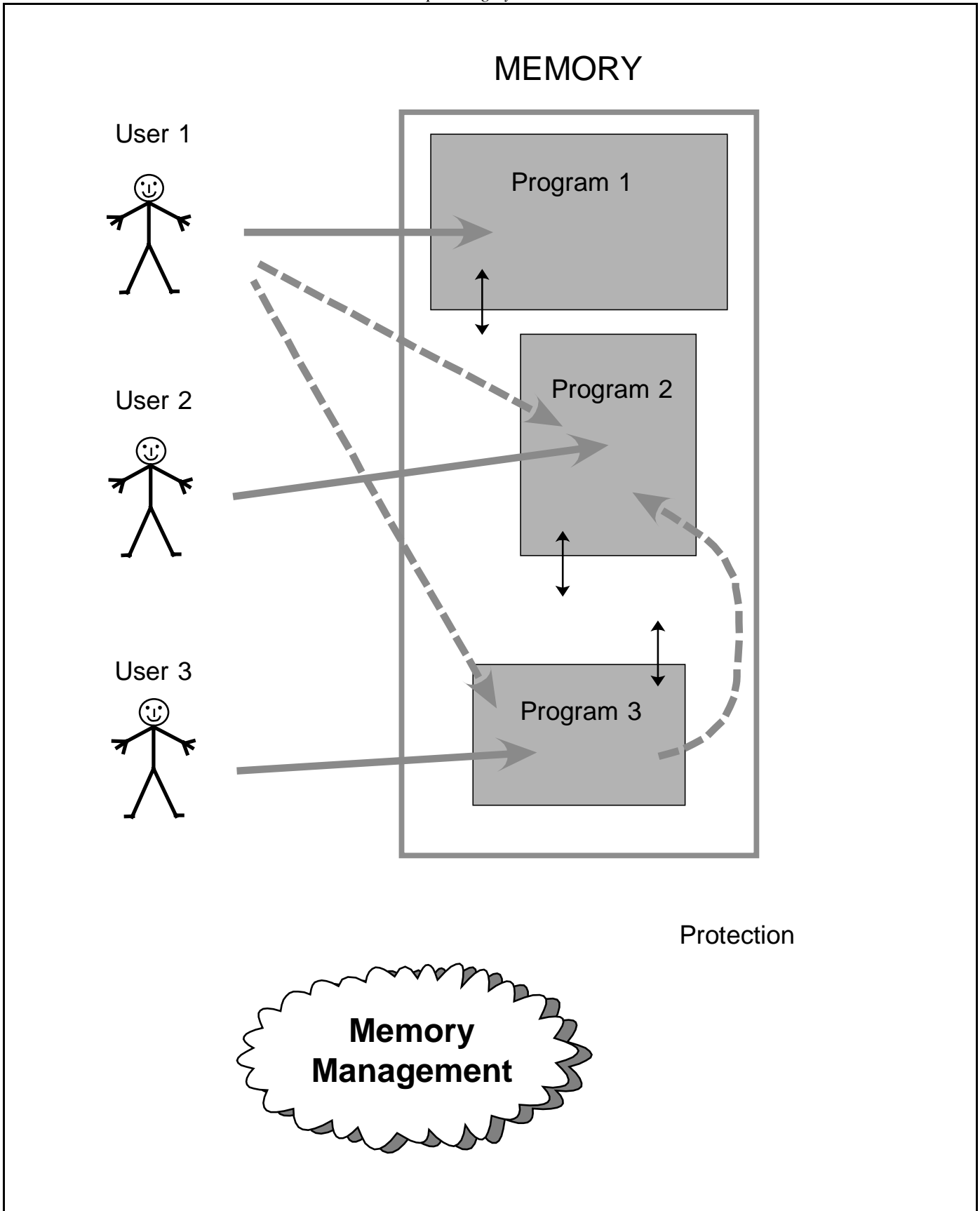
I/O Management

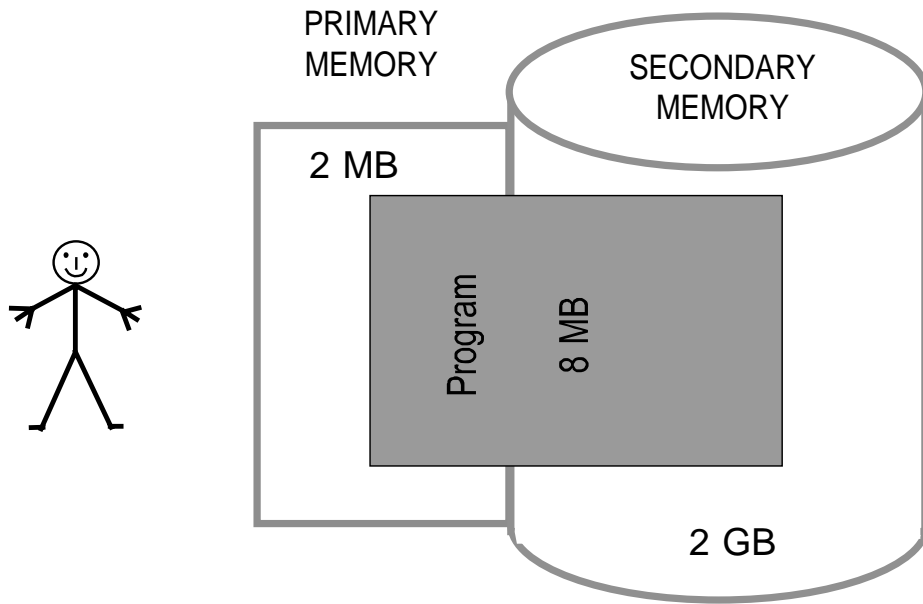
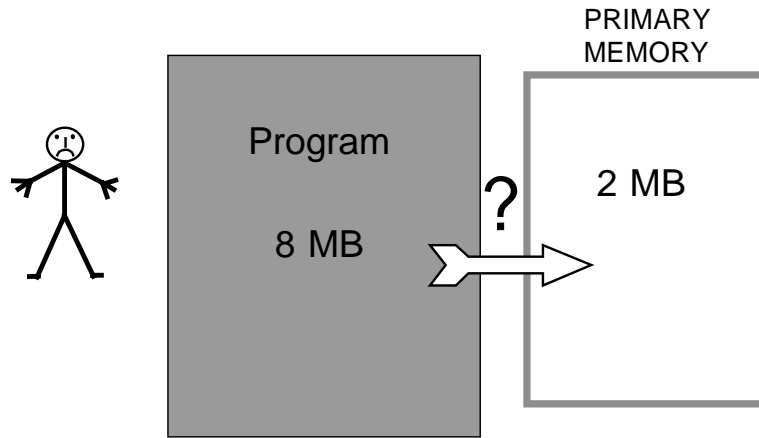
SPOOL - Simultaneous Peripheral Opeartion On Line





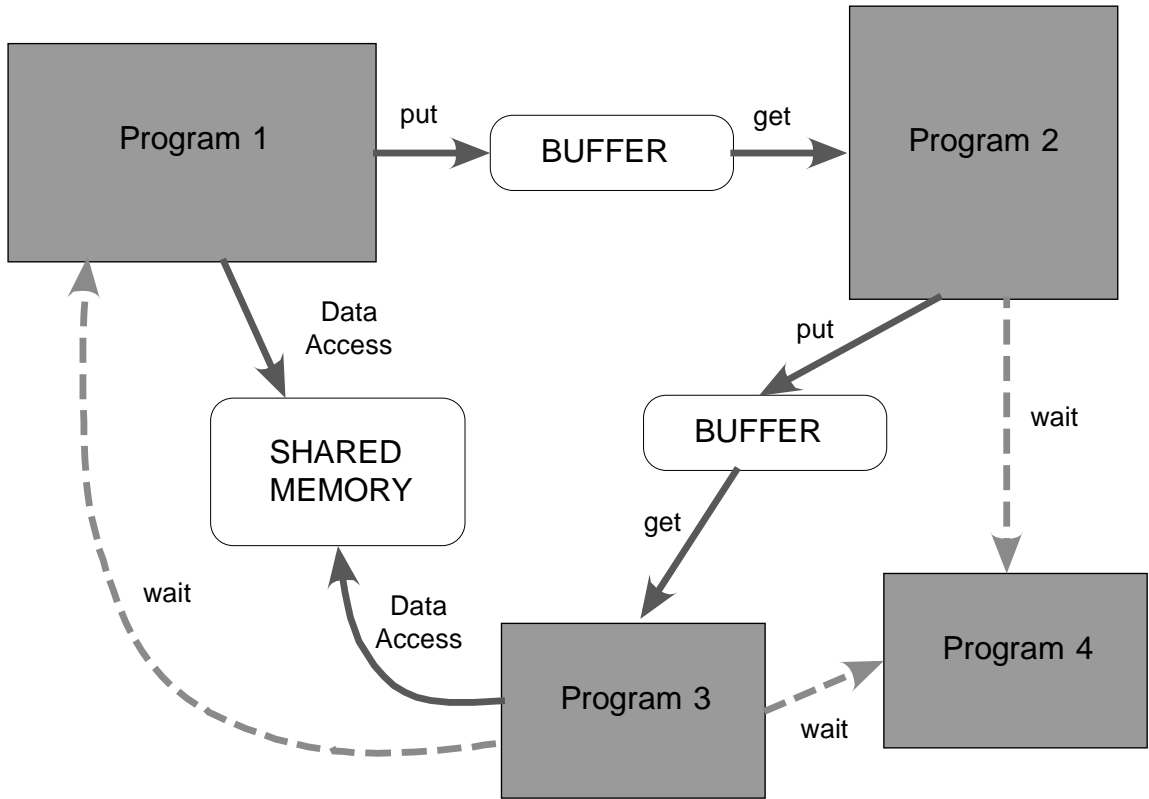
**Processor(s)
Management**



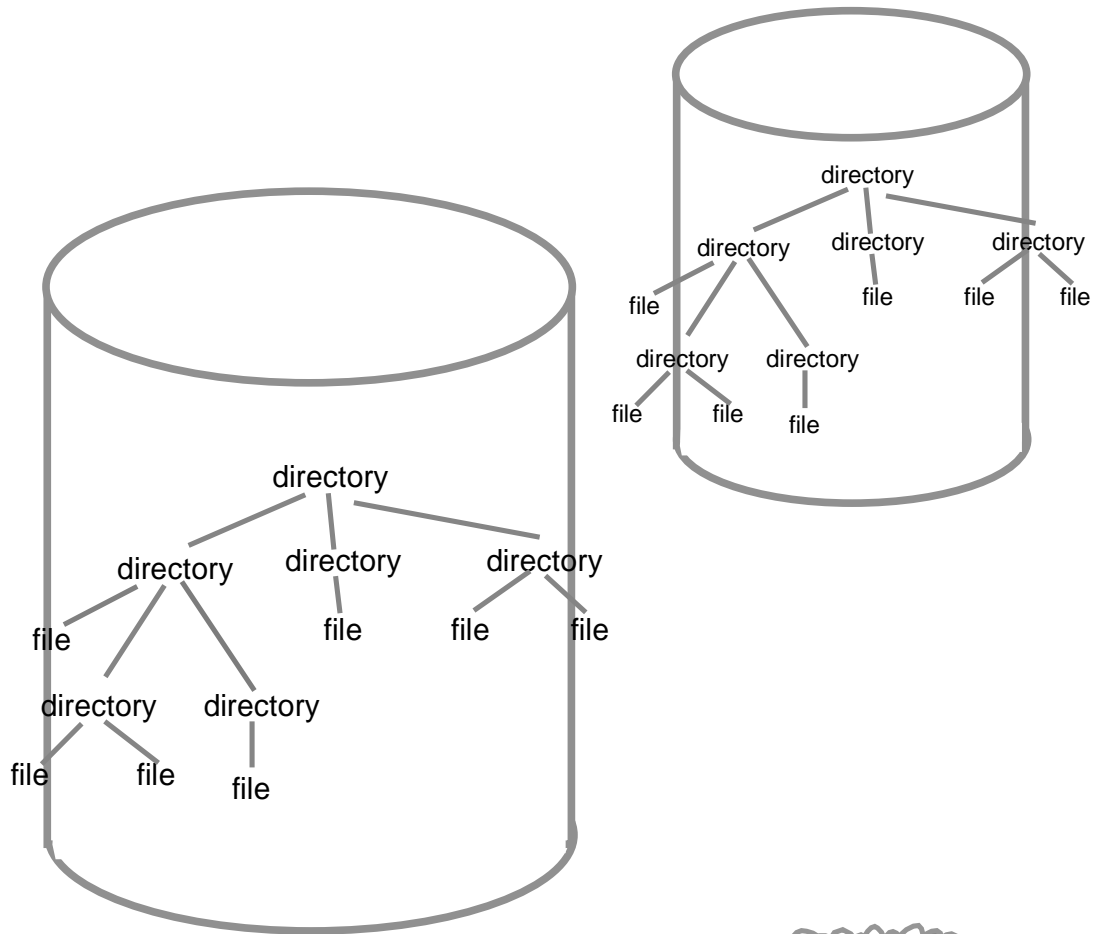


**Virtual
Memory**

Cooperative Programs



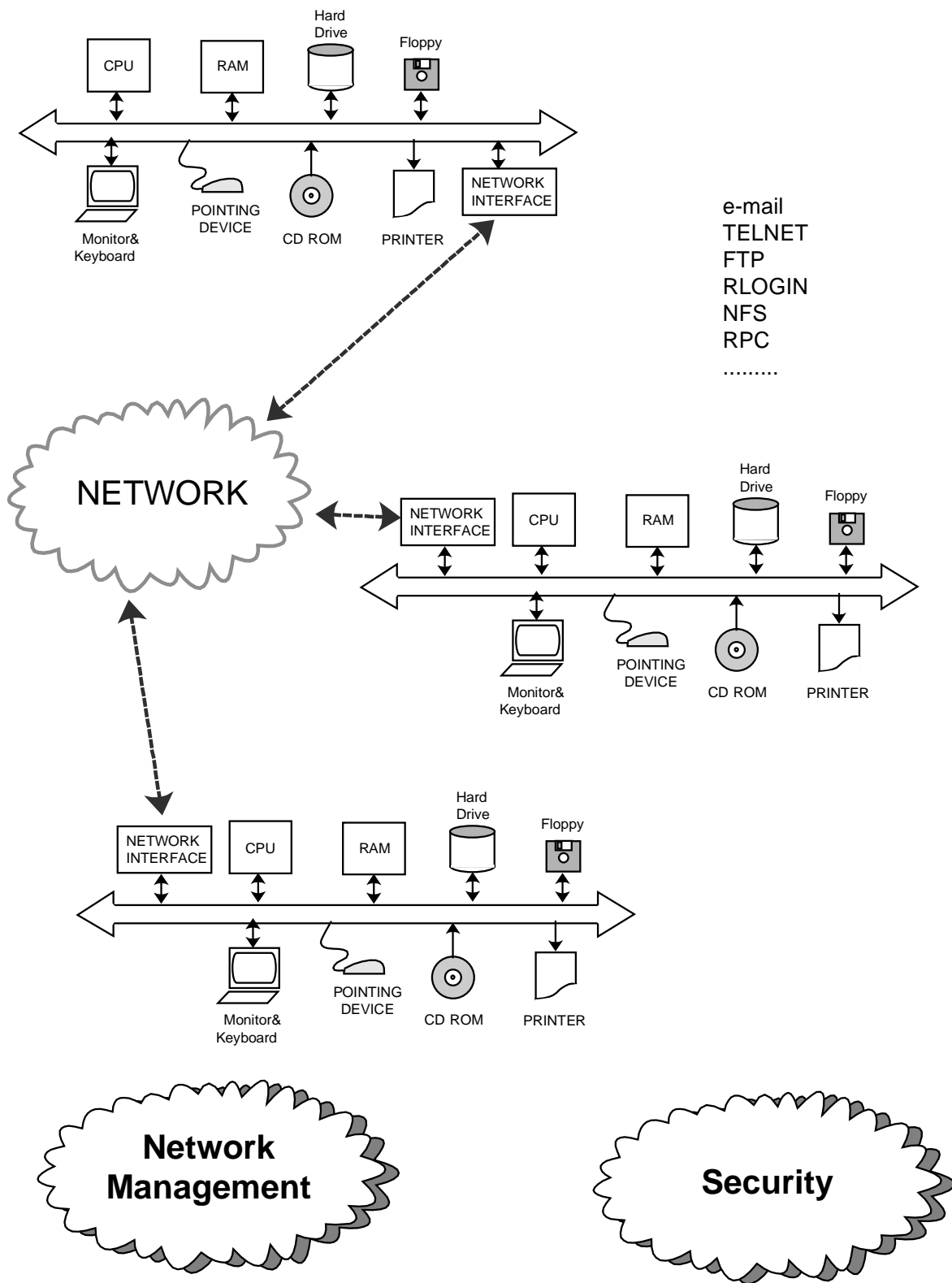
**Synchronization
and
Communication**

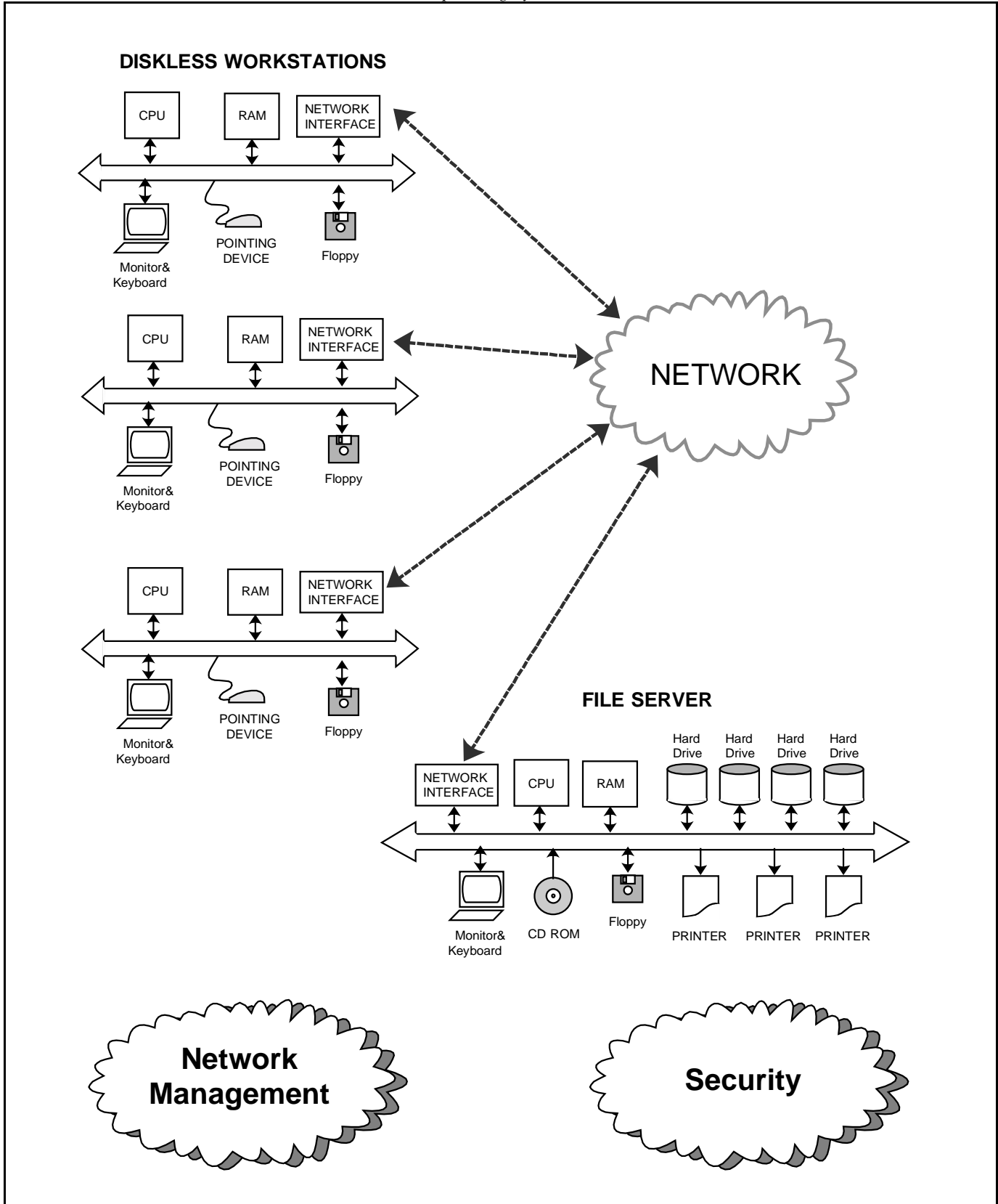


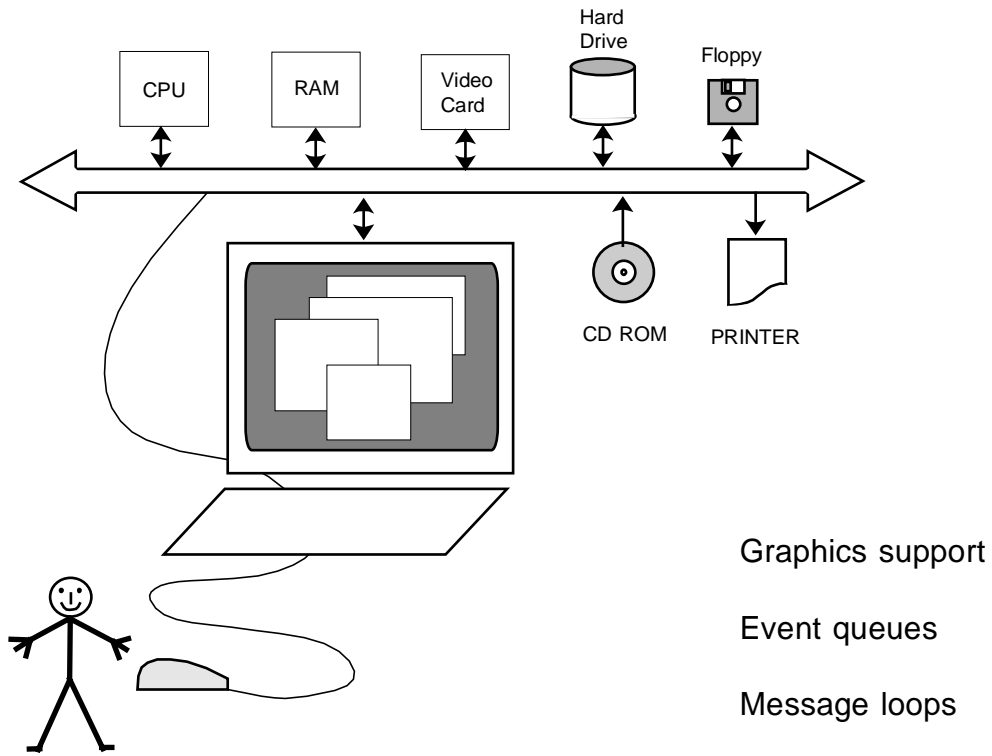
File Management

The file is a central element for most of the applications

- Data integrity (dates, access rights)
- Separating logical from the physical file organization
- Data recovery
- Naming (accessing files by their symbolic name)

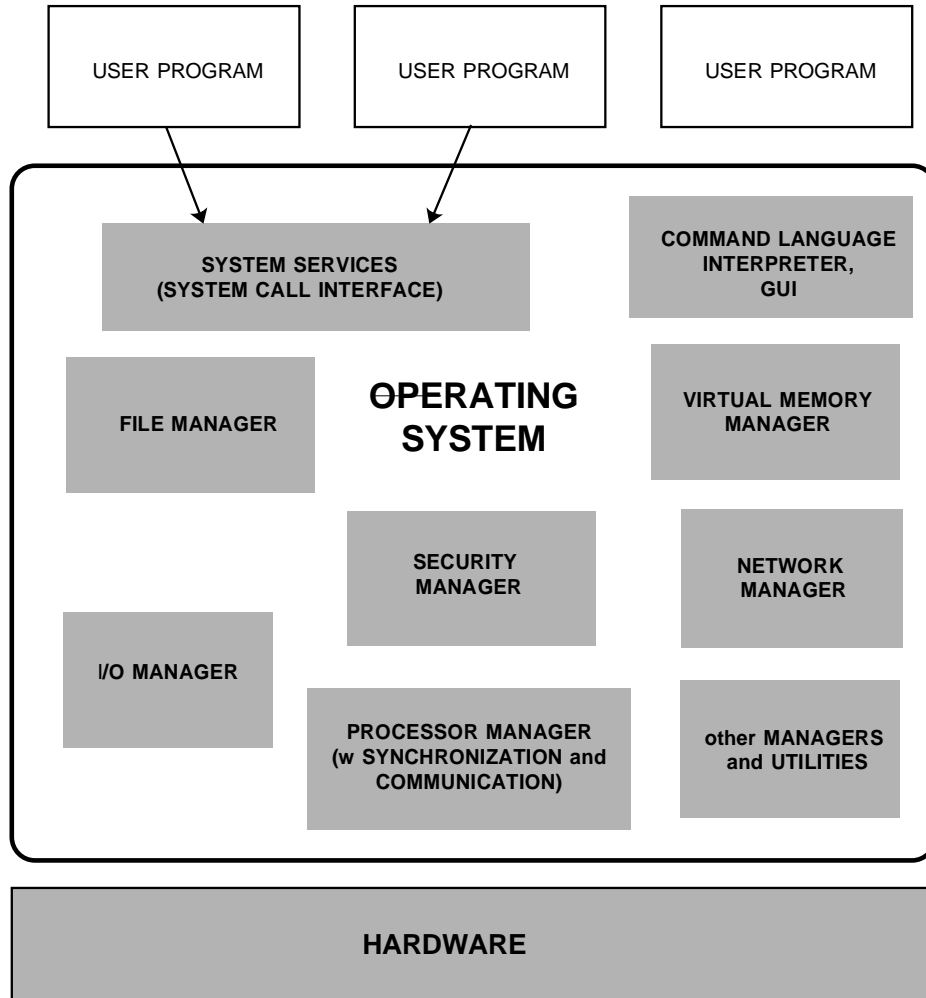






Graphical User Interface (GUI)

What is operating system?



ANSI X3.172, 1995: Software that controls the execution of programs and that provides services such as resource allocation, scheduling, input/output control, and data management.

Anderson¹: An operating system implements a virtual machine that is (hopefully) easier to program than the raw hardware...

Silberschatz²: An operating system is a program that acts as an intermediary between a user of a computer and the computer hardware.

1) T. Anderson, Lecture Notes, <http://http.cs.berkeley.edu/~tea/cs162sp96>

2) A. Silberschatz and P.B. Galvin, "Operating Systems Concepts," AW 1997