Names and IDs

Mark Michel Boushra	20236556322
Felopater Nabil Amin Hakim	20236555742
Mohamed Moktar Mohamed	20236555013
Yehia Badi Kodzo Abdelsabour	20236535712

What is DOS?

Disk Operating System

DOS, or Disk Operating System, refers to a family of operating systems designed to manage disk storage and run programs on personal computers.

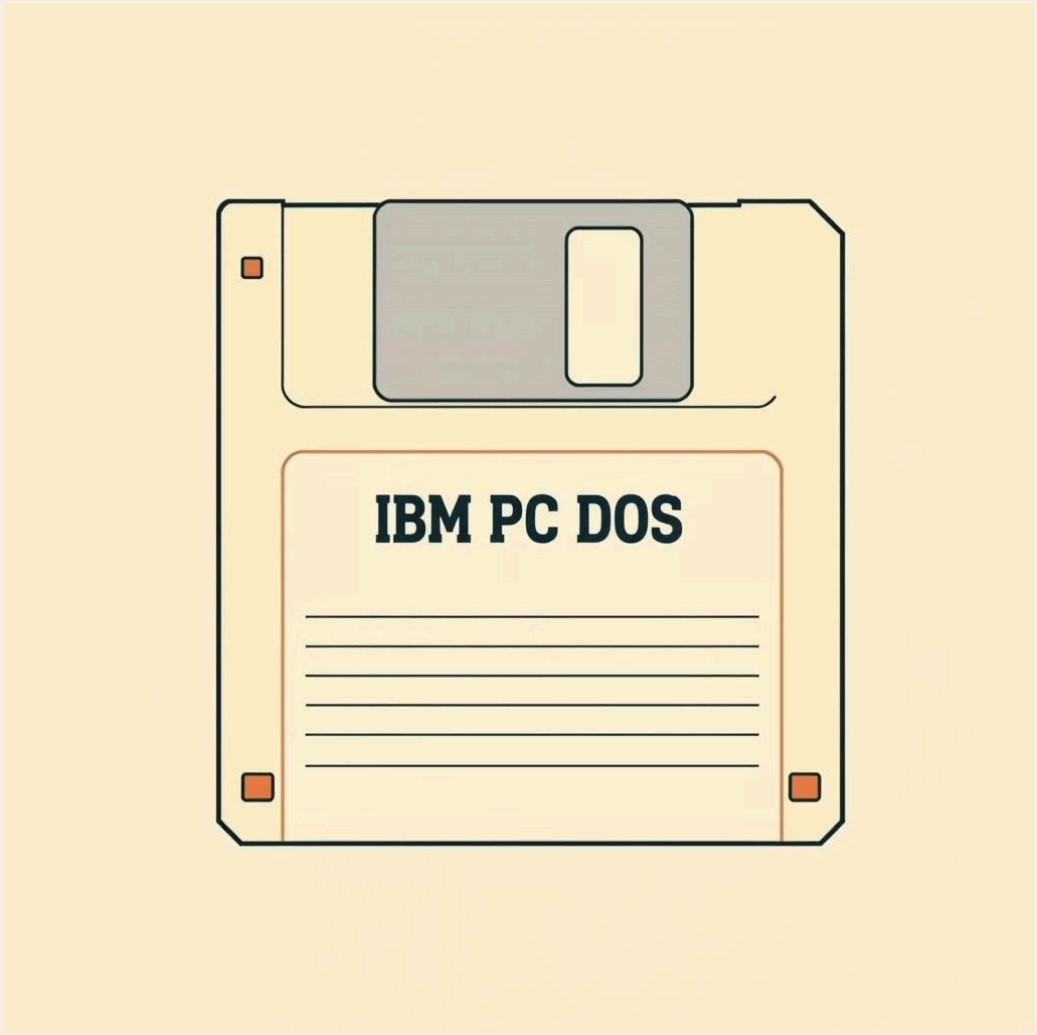
Command-Line Interface

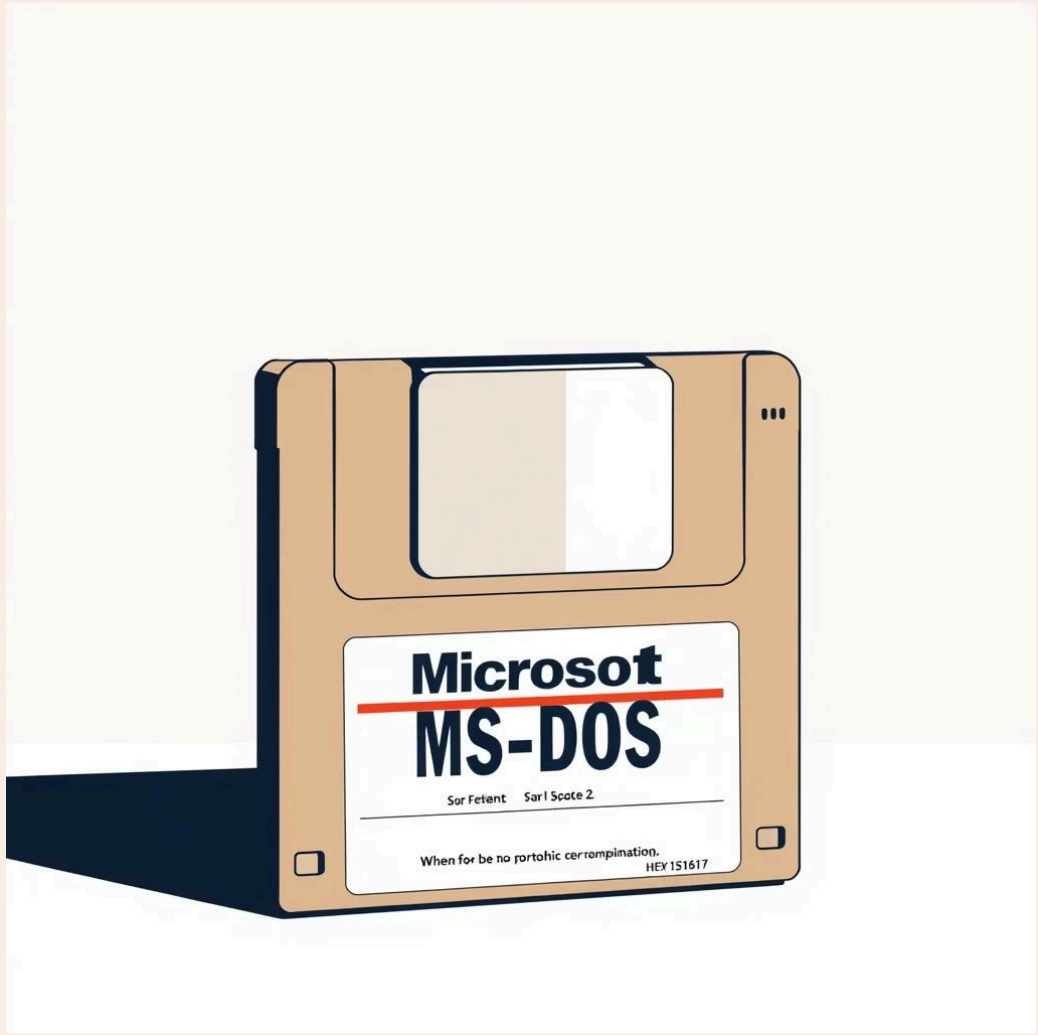
Unlike today's graphical interfaces, DOS operated primarily through a command-line interface, requiring users to type specific commands.

IBM PC Compatible

It was specifically developed for IBM PC compatible computers, which became the industry standard.

The Original Players: IBM PC DOS & MS-DOS





IBM PC DOS (1981)

Initially developed by IBM, PC DOS was the operating system shipped with the original IBM Personal Computer. It quickly established itself as a critical component of early personal computer market.

Microsoft MS-DOS (1981)

A rebranded version of PC DOS, Microsoft's MS-DOS rapidly became the dominant operating system for IBM PC compatibles. This strategic move positioned Microsoft as a key player in the software industry.

The Rise to Dominance: MS-DOS's Reign

From 1981 to 1995, MS-DOS was the main operating system for IBM PC-compatible computers. It became the standard for personal computers during that time.

IBM PC DOS: Evolution of a Classic

Explore the key milestones and features introduced with each significant version of IBM's PC DOS, tracing its development from early hardware support to more advanced utilities.

1

1981: PC DOS 1.0

Launched with the inaugural IBM Personal Computer, establishing the foundation for disk operating systems on the platform.

2

1983: PC DOS 2.0

Introduced crucial support for hard drives, a significant advancement for storage and data management in personal computing.

3

1984: PC DOS 3.x

Enhanced capabilities to support larger disk capacities and incorporated early networking functionalities, expanding PC utility.

4

1988: PC DOS 4.0

Offered support for even larger disk partitions and attempted to integrate a graphical shell, though it was known for being somewhat buggy.

5

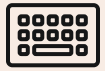
1990s: PC DOS 5/6/7

Later versions focused on improved memory management and a suite of new utilities, maintaining IBM's distinct flavor of DOS.

Key Features of Early DOS

Disk Management

Provided core functionalities for managing files, directories, and disk space.



Input/Output Control

Managed interactions with peripherals like keyboards, printers, and monitors.

Program Execution

Enabled users to load and execute application programs.

System Utilities

Included essential tools for system maintenance and configuration.

Core Features of Early DOS

01

Single-Tasking

Could only run one program at a time, requiring users to close an application before opening another.

02

Command-Line Interface (CLI)

Users interacted with the system by typing commands directly into a text-based interface, without a mouse or graphical elements.

03

FAT File System

Utilized the File Allocation Table (FAT) system for organizing and storing files on disks.

04

File Naming

File names were limited to eight characters, with an optional three-character extension (e.g., `REPORT.DOC`).

05

Direct Hardware Access

Allowed programs to interact directly with hardware components, offering high performance but also potential instability.

06

640 KB Memory Limit

Limited conventional memory access to 640 kilobytes, a significant constraint for complex applications.

07

Bootable Design

Designed for quick and simple startup from floppy disks or hard drives, loading essential system files efficiently.

08

Device Drivers

Loaded via the `CONFIG.SYS` file to support peripherals like Keyboard and CD-ROM drives.

09

Batch Files (`.BAT`)

Provided a powerful way to automate sequences of commands and tasks through simple scripting.

Limitations of Early DOS

Limited Graphics

DOS provided weak support for advanced visuals and multimedia, restricting applications primarily to text-based interfaces.

Memory Limit

Applications were constrained by a 640 KB conventional memory limit, a significant hurdle for more complex software.

Single-Tasking

Users could only run one program at a time, necessitating the closing of an application before launching another.

No Native Networking

Basic DOS versions lacked integrated networking capabilities, requiring separate software for network connectivity.

Poor Hardware Support

The system offered limited generic drivers, often requiring specific, sometimes difficult-to-find, drivers for modern peripherals.

Primitive Interface

Interactions were entirely text-based via a command-line interface, without the user-friendly graphical elements common today.

No Long Filenames

File naming conventions were restrictive, adhering to the 8.3 format (e.g., `REPORT1.TXT`) which limited descriptive file names.