

Effective Programming Practices for Economists

Background

A Brief History of Operating Systems

Janoś Gabler and Hans-Martin von Gaudecker

Two broad lines

1. Unix-based/inspired (Linux, MacOS X)
2. Windows



Unix

- Developed at Bell labs starting 1969 (some history)
- Quickly evolved to become the main OS for servers.
- Became a commercial product in the early 1980s.
- Early OSS spin-offs: Berkeley Software Distribution (BSD) and GNU's Not Unix (GNU).



Linux

- In 1991, Linus Torvalds wrote a new kernel inspired by the Unix kernel from scratch.
- Many flavours of Linux today: Debian, Ubuntu, Red Hat, Mint, Android, ...



MacOS X

- After parting ways with Apple in the 1980s, Steve Jobs founded a company called NeXT.
- Developed the OS NeXTstep, which was based partly on the BSD.
- NeXT was bought by Apple in 1996
- Eventually brought back Jobs as CEO.
- MacOS X, iOS, ... all based on NeXTstep and thus BSD, Unix.

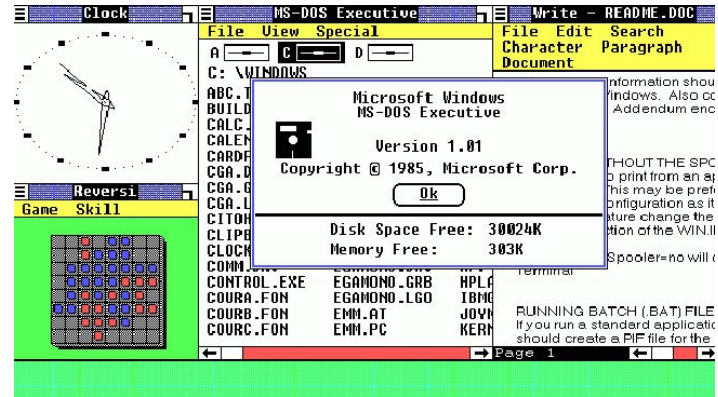


POSIX

- Stands for Portable Operating System Interface
- Aims to establish a standard for Unix derivatives.

Windows

- Complex history of corporate collaborations between Microsoft / IBM.
- Big break between MS-DOS / Windows 9x and Windows NT, XP, subsequent versions.



Signs of convergence

- Most of Microsoft's cloud services seem to be running Linux
- Since version 10, Windows includes the Windows Subsystem for Linux (WSL)