

In the Beginning, There was Chaos
And then, there was Chaos
And of the chaos, UNIX was born
And from UNIX came UNIX
And quietly from the shadows, arose freedom
And GNU/Linux was born

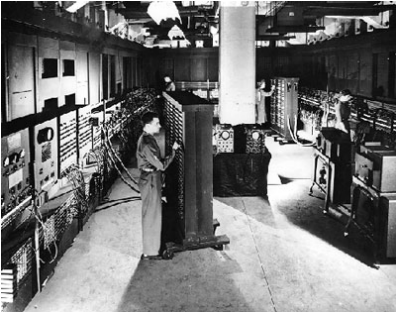
Beginning System Administration DeCal

Week 2

February 8, 2010

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Mainframe



- Proprietary
- Over-sized calculators
- Behemoths

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What is an Operating System?

- Interface between the user and the hardware.
- Allows control over the execution of processor operations, management of the memory hierarchy, and interaction with devices.
- Allocates the physical resources of the machine as necessary to make these interactions happen.

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What does the Operating System have?

- Facilities to add new sequences of processor operations (Known as Programs).
- Some way of having different programs running at the same time and potentially talk to each other.
- An interface to manage the execution of programs.

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Enter UNIX

- 1969 - Ken Thompson, Dennis Ritchie, Rudd Canaday
- PDP-7, PDP-11



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Enter academics



- 1975-1977 UCB + CSRG

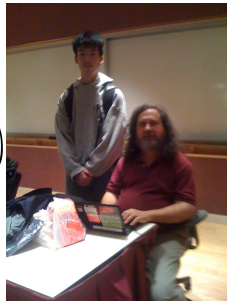
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1984 - The UNIX Wars

- Commercial entities invested
- Sun - Solaris
- Microsoft - Xenix
- HP - HP-UX
- IBM - AIX
- AT&T, Novell, Bell Labs
- Unix-like vs. POSIX
- UNIX System V

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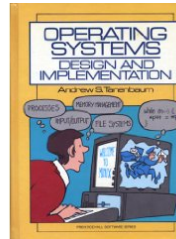
1984 - GNU



- Richard Stallman and the Free Software Foundation

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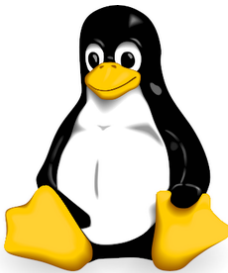
1985 - MINIX



- Andrew Tanenbaum
- Operating Systems - Design and Implementation

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1991 - Linux



- Linus Torvalds
- Tanenbaum-Torvalds debate

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GNU/Linux



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UNIX Family Tree

