GNU Linux

1. 01b - GNU Linux

1.1 CSCI 330

1.2 Overview of Today's class

Overview of Today's class

- History of UNIX

- Modern UNIX/Linux

1.3 History of UNIX

History of UNIX

- Invented by Ken Thompson at Bell Labs in 1969
  - first version written in assembly language
  - single user system, no network capability
- Thompson, Dennis Ritchie, Brian Kernighan
  - rewrote Unix in C
- Unix evolution:
  - Bell Labs: System V, Novell
    - BSD, FreeBSD, Mach, macOS
    - AIX, Ultrix, Irix, Solaris, ...
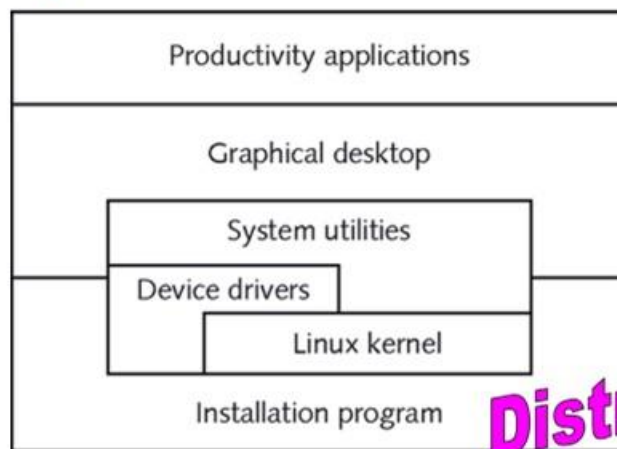 - Linux: Linus Torvalds
- Newest:
  - Linux on portables: Android

1.4 What Can UNIX Do for You ?

What Can UNIX Do for You ?

- User Tools
  - word/text processing
  - productivity applications
  - entertainment
- Programmer Tools
  - scripting: sh, awk, sed, perl
  - programming: C, C++, Java, python, …
  - IDEs: geany, eclipse, VS code, …

- E-commerce server
  - mail server
  - web server
  - application server
  - database server

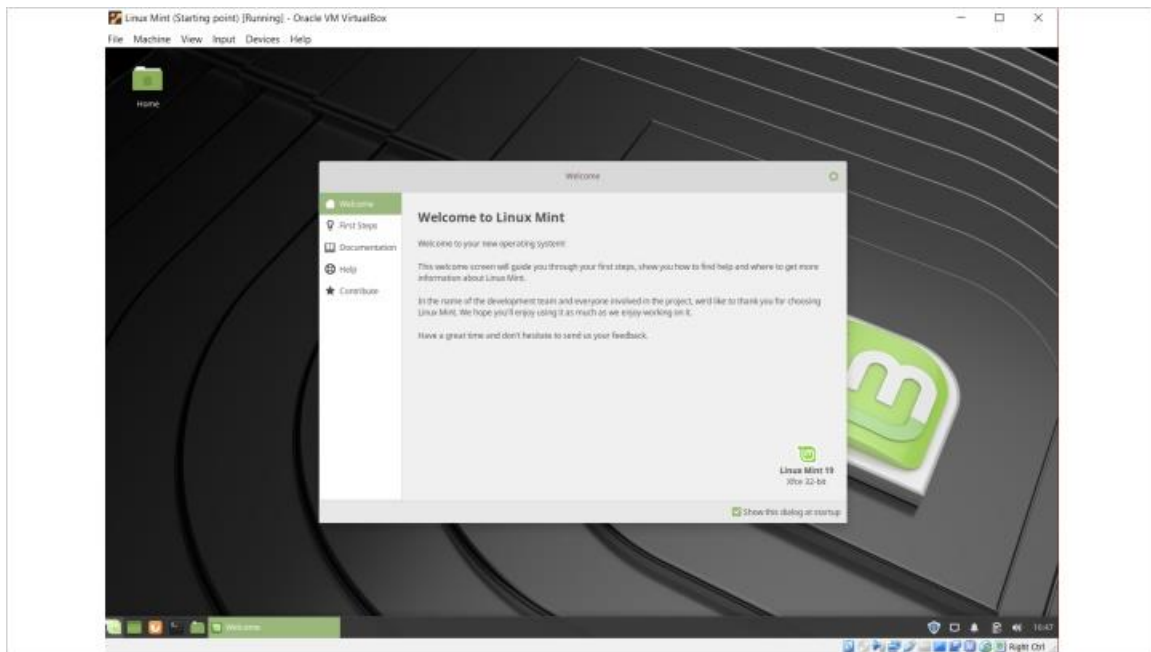## 1.5 Components of GNU Linux

Components of GNU Linux

Productivity applications

Graphical desktop

System utilities

Device drivers

Linux kernel

Installation program

Distribution ?

1.6 Linux Distributions

1.7 distrowatch.com

1.8 Mint tour

1.9 Summary