

Unix High-Level Overview

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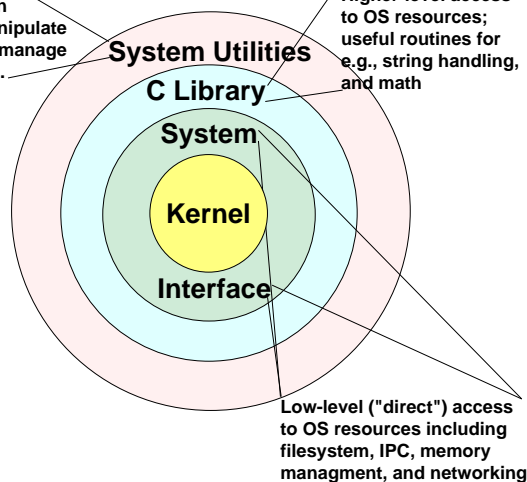
<http://classes.cec.wustl.edu/~cs342/>

Unix High-Level Overview

- User interaction with Unix
- Useful Unix Command Categories
- The Shell
- For further information

User Interaction with Unix

Programs to:
 run application
 programs, manipulate
 files and text, manage
 resources, etc.



Higher-level access
 to OS resources;
 useful routines for
 e.g., string handling,
 and math

Low-level ("direct") access
 to OS resources including
 filesystem, IPC, memory
 management, and networking

Useful Unix Command Categories

- File manipulation
 - `cp`, `mv`, `rm`, `ls -al`, `less`
- Text processing
 - `grep`, `egrep`, `sed`, `perl`
- Process management
 - `top`, `ps -lu your login name`
- Shared resource management
 - `ipcs`

The Shell

- The shell is the user's interface to the system
 - **job control** – start/stop/kill processes
 - **variables** and **aliases** – customize a user's shell interface
 - **command history** and **substitution** – view/repeat/modify previous commands
- **cs**h and **tc**sh
 - Convenient for C/C++ programmers, but flakey
 - <http://www.mars.org/home/rob/docs/csh-whynot.html>
- GNU **bash**
 - fast, powerful, widely available

For Further Information

- man pages
 - **man -k** *topic*
- **info**, if you have added **pkg gnu** (or on Linux)
- **man intro** often has useful information