Introduction to Software Systems (CS6.201)

Summer 2021, IIIT Hyderabad

25 May, Tuesday (Lecture 1)

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Course Objective

The aim of this course is to provide a working knowledge on tools and processes for building simple software systems.

What is a System?

The commonly used/understood definition of a system is a "set of interrelated components working together to achieve a common objective".
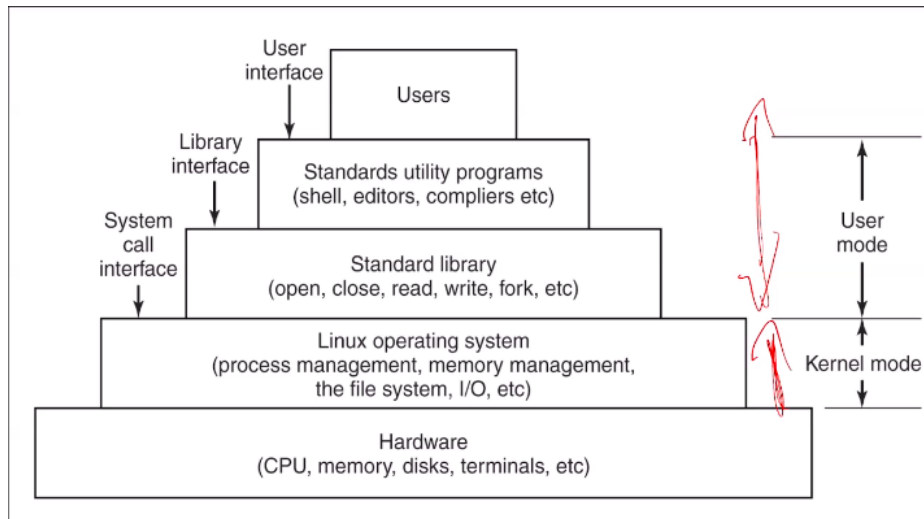A system may be natural or engineered. Further, all systems have boundaries beyond which their behaviour is undefined.

Features of Systems

- Programs
- Teams
- Processes
- Design
- Communication

Systems vs Application Software

Systems software fundamentally helps to communicate with hardware, at a much lower level. Application software, on the other hand, is higher-level programming.

The Shell

The kernel executes all the commands we give it through the shell.
The shell is a program (command-line interpreter) that allows the user to interact
with the Unix/Linux system. Examples of shells are `sh` (Bourne shell), `bash`
(Bourne again shell), `zsh` (Z shell), etc.