Linux Notes

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1 High-level View of Unix Environment

- To best understand how an operating system works, keep in mind the concept of abstraction.

    – Abstraction focuses on the basic purpose and operation of an object.

- There are many times for an abstracted subdivision in software. In these notes, the term **component**

- This chapter provides a high-level overview of the components that make up a Linux system.

1.1 Levels and Layers of Abstraction in Linux

- Abstraction helps break down the Linux operating system into easy-to-understand components.

- We arrange components into layers or levels, classifications or groupings of components according to where the components lay between the user and hardware.

    – i.e. Web browsers, games, etc. are at the top layer; the bottom layer consists of the memory in hardware which is composed of 0's and 1's.

- A Linux OS consists of 3 main levels:

    – The base consists of hardware:

        ∗ Hardware includes the memory as well as the Central Processing Unit(s) to perform computation or RD/WR to memory.