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Week 1 Assignment
Using APA format, give short answers to each of the following:

1. What additional technical issues must be addressed when managing a computer center or local area network, as compared to developing a single information systems application?

Compatibility between systems and planning for future information technology trends are two additional concerns when managing multiple systems as opposed to a single information system.

2. Describe three types of multicomputer configurations. What are their comparative advantages and disadvantages?

A cluster configuration is a collection of similar or identical computers. They are highly scalable by simply adding computers; however, they are also more complex to configure and administer.

A blade configuration is a collection of circuit boards stored in a cabinet, each one contains most of the hardware comprising a computer. Blade configurations have the same advantages and drawbacks as cluster, with the additional advantage of being able to store more computing power in less space.

A grid is a collection of dissimilar computers connected with a high-speed network coordinating to perform a service or execute a common application. The computers may be spread all over the world, and do not need to be dedicated to the task, but performing it with excess processing power or when not in use.

3. How can a computer system be tuned to a particular application?

Utility programs may be used to fine tune system software to a particular application. The system software allocates resources to applications and manages multiple applications running in such a way that they do not conflict with the User's actions.

4. In what ways does system software make the development of application software easier?

System software provides a platform for the development of application software in higher-level languages rather than programmers having to code in binary machine language. System software also provides a platform for running application development utilities, such as program editors, debugging tools, and system development tools.

5. Describe the relationship between the resource allocation and management functions

of system software and external resources accessible via a network. What system software functions must be provided to access external resources?

When making services available on a network, a system must be able to manage multiple users and programs, allocating resources properly to serve all clients accessing it. In order to access external resources, a system must have the ability to find requested resources on the network, negotiate resource access, and receive/deliver resources to the requesting user or software.