

Final Term Paper (Spring - 2020)

Cloud Computing

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Note: Attempt all Questions. Answers should be in your own words. Plagiarism will not be tolerated, if detected, it will lead to failure.

Question No. 1: (20)

a. Explain in detail network and cloud-based storage.

Ans: Network: A Network is when two or more than two computers are connected together via a switch, communicating via a routing protocol. The purpose of network is to enable the sharing the data and information between multiple systems. The computer network is a set of computers connected together for the purpose of sharing resources and those and those resources can be internet, printer, of a file server. When we use computers we come across a new technical term which is called computing. Computing is the process of utilize computer technology to complete a task. The computer network involves the use of computers for computing and telecommunication technology like telephones lines wireless radio links for sending the data over long distances. The computer network can be said to be involved at the interface of the telecommunication and computing. The first computer network that appeared was like a wide network that have connected computers around the globe and that computer network is called the internet.

Cloud- Based storage: A Cloud based storage is storage made available to users on demand via the internet from a cloud-computing provider's server. Cloud storage is a model of data storage where the digital data is stored in logical pools, the physical storage spans multiple servers and the physical environment is typically owned and managed by hosting a company. There are many cloud provide companies which are the Google drive, Drop box, iCloud and iCloud Drive. You can access the data stored in cloud storage from any where by using an electronic device and have the access of internet. There is an easy way to use the cloud storage by going to their website and login and the will provide you a specific amount of space and if you need more space then you have to pay for it. The advantages of using cloud storage is that you don't have to manage your storage you can simply ask for your desired storage. There is no issue of security of your data the company will keep your data secure.

Question No. 2:

(20)

- a. Explain in detail web application and multitenant technology.
- b. Explain in detail cloud security threats.

Ans: (a) Web Application: A web application is an application software that runs on a web server through internet. The web application is not like the computer based software application that is stored locally on the operating system on your computer device. The web applications are accessed by the users through a web browser with an active internet connection. The web application is programmed using a client server modeled structure. The user is provided these services through an off site server which is hosted by a third party. The web applications can be designed for a wide variety of uses and can be used by anyone. From an organization to an individual for many reasons. The web applications do not need to be installed on your computer system but you just need an internet technology to access the web applications online. Users can access the web applications through a web browsers like google chrome, Mozilla firefox or safari.

Multitenant Technology: The Multi-Tenant Technology in the cloud computing means that using shared services and resources for multiple clients. The Multi tenant technology is a software architecture pattern where a single application instance is utilized by multiple users at a same time. These resources can include compute, networking and storage. Each tenant data is isolated and is invisible to other tenants. Applications at leverage multi tendency allow multiple users to access the same application server and database. The Multi Tenant technology is a good platform for the developers the developers don't have to worry about the resources which is required to make an application. Simply you can combine many computer devices to share their resources and make your work done.

(b) Cloud Security Threads:

There are many cloud security threads which are as follows,

- The integrity of the data is very important. The most important issue is Data Breach. It is an incident in which an individual unauthorized person steals personal data.
- The Data lock is also a thread in cloud computing. It is usually referred to as vendor locks in and it is a situation in which a customer using a service cannot easily transition to a competitor's service.
- Data removal. It is a residual representation of data loss.
- Data recovery might becomes difficult in case of server breakdown.
- Data locality is the implementation of the concept that the data should be stored near to where it is being processed but it makes things quite complex for simple applications.

Question No. 3:

(10)

- a. Briefly describe following.
 - a. Advantages and disadvantages of cloud computing.
 - b. Collaborative meeting in cloud.

Ans: (a) Advantages and Disadvantages Of Cloud Computing:**Advantages:**

- Low Cost of Computer for users.

In cloud computing you do not have to buy a high super computer for your work. You have to go to cloud computing application and do your work there.

- Low IT Infrastructure Cost.

By using cloud computing you do not need to invest in large number of powerful servers and you also do not need to hire IT staff for the powerful servers.

- Few Maintenance Cost.

The maintenance cost in cloud computing greatly reduces both hardware and software maintenance for organizations.

- Low Software Cost.

The cloud computing reduces the software cost because you do not need to buy specific software for your work or your development.

Disadvantages:

- Require a constant internet connection.

Accessing Cloud Computing is impossible without the internet connection. To access any applications or documents in cloud computing you need a constant high speed internet connection. If you do not have a high speed internet for accessing a cloud computing sometimes it becomes painful. The web based applications require a lot of bandwidth to download, if you need to download a large document.

- Data Stored Might Not be Secured.

All your data is stored in cloud computing and you do not know whether your data is fully secured or not.

(b) Collaborative meeting in Cloud:

Collaborating meeting in cloud computing is a way of sharing and co-authoring computer files through the use of cloud computing where the documents are upload to a central cloud for storage where they can then be accessed by others. Cloud collaboration allows others to upload, comment and collaborate on documents and even amend the documents its self-evolving the businesses in the last few years have increasing to use of cloud collaboration. The Cloud Collaboration technology that provides data access and storage that do not require any physical location of the system that delivers these services.