

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 storage: computer attached to a local area network lan may require additional storage space to support file sharing file replication and storage for large files traditionally this additional is provided through file servers and which have larger disk capacity with the evolution of computer network the file server was extended through the use of storage area network the SAN enabled storage device are attached to the network the software running over SAN devices allow direct access to these device throughout network later on a class of storage devices emerged to be implemented as network attached storage.

Cloud storage:

Cloud storage is a next step in the evolution of network storage devices instead of storing data locally the data can be stored in cloud and can be accessed on web the user can have virtually unlimited storage space available at affordable rates there are varios mode of data access in cloud using web browser interface to move the files to and from the cloud storage through a mounted disk drive that appear local to the users computer through API calls to access the cloud storage there are number of cloud storage providers which offer file storage sharing and synchronization such as Dropbox pCloud Elephant drive..

Question No. 2:

(20)

a. Explain in detail web application and multitenant technology.

Ans: Web application :

Web application these are the application which use web technology (URL HTTP HTML XML) and generally used web browsers based interface it can be modeled on the basis of three tier model

Presentation layer

Application layer

Data layer

Multitenant technology:

The multitenant application allow isolated to simultaneous users the data and configuration of each user remain private to other users the tenant can be customize the user interface business process data model and access control of the multitenant application common characteristic of multitenant application are

Usage isolation

Data security

Metered usage

Backup and restore is separate for each tenant

b. Explain in detail cloud security threats.

Ans: Cloud Security Threats:

This module is about the prominent security threats to the cloud computing

Traffic eavesdropping : it is possible that the data being tranfered from cloud consumer to provider may get eavesdropped through a malicious network carrier . compromises the message can go undetected for extended periods of time Malicious intermediately : the message are illegally intercepted and then the content are updated the updated message is then relayed towards the cloud the message may be updated with malicious content which reach the VM hosting the cloud services undetected

Denial of services: the purpose is to overload the IT resources so the sage where they can not work properly can be launched in the following ways

Work load on the cloud services is artificially increased through fake message or repeated communication request

Multiple cloud services request are sent each request is design to consume excessive memory and processing resources

Insufficient Authorization based attack : it is a situation when a malicious user get direct access to IT resources which are supposed to be accessed by trusted users only happen when a broad access is provided to the IT resources and or due to erroneously .

Question No. 3:

(10)

a. Briefly describe following.

a. Advantages and disadvantages of cloud computing.

Ans: Advantages:

Scalability : the users can scale the storage capacity according to requirement

Various convenient costing model are available from onetime payment to monthly payment pay as per use

Reliability: the storage provider provide the assurance for data reliability the data can be accessed worldwide by using internet various methods of data access are available

Disadvantage:

Performance: because of the internet based the cloud storage can never be as fast as SAN or NAS based local storage

Security: not all the user may be able to trust the cloud providers for the user data

Data orphans: The user have to trust the data deletion policies of the provider the file deleted by the user may not be immediately be deleted from the cloud storage .

b. Collaborative meeting in cloud.

Ans: Collaborative meeting in cloud:

Collaborative meeting can performed by using the software hosted on cloud organization get a cost effective virtual meeting is an alternative to face to face meeting the feature of cloud based collaborative meeting are :

Streaming video to allow face to face interaction

Shared white board to controls the presentation

Shared application to demonstrate software in live environment

Meeting recording for playback and sharing

The video recording of virtual and webinars can also be used for virtual training and reference purpose as well.