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.

ANSWER # 1

Network based storage

Network based storage is a computer attached to a local area network and also may require additional storage space to support the the file sharing .Network storage means that the data store on a local device a hard drive memory are on a server in tour network . its also known as Network attached storage .

Network attached storage a device are flexible and also scale out that mean that as you need additional storage you can add to what you have .NAS are also use for file based protocol .

E.G

AFP (Apple Macintosh) SMB (Window)NAS provides variety of protocol to its users .

Disadvantages of network storage

1) The migration of data from old hard drives to the new hard drive

2 Its becomes harder when change come in storage area company have to buy new hard drive so it is expensive

3) Hard drive are a fragile with time they failed and it can cost a business fortune .

Advantages of network storage

1) No internet is connection is required .

2) NAAS is quick for the storage of data is locally .

3) Physical possession of data .

Cloud based storage

Cloud based storage use can have virtually is unlimited storage space available at afforadable rates .

Cloud storage means that storing your data in a physical hardware remotely which can be accessed by your computer and mobile via the internet . Users send files to the cloud and its maintained by the cloud storage provider

Cloud service are encompass by many servers are linked together by a master server the complexity of cloud storage server depends on the provider the simplest system may also involve only one server

Question No. 2:   (20)

    a. Explain in detail web application and multitenant technology.

ANSWER #

Web   Application

1 A Web Application a program that runs a remote server wile its user` interact with it through a web browser .

2 some common web application include web based email programs (such as a Gmail ,hot mail) online ticketing service , online banking services , online auction , retail sales , etc

3 a web application is a client server software application in which the client or user . interface runs in a web browser .

These are the applications which use web technologies (URL, HTTP, HTML, XML) and generally use web browser based interface.
Can be modeled on the basis of three-tier model.

Presentation layer
Application layer
Data layer

  Multi-tenant Technology: The multi-tenant applications allow isolated to simultaneous users (tenants). The data and configuration of each user remains private to other users.

: Multi-tenant Technology: The tenants can customize the user interface, business process, data model and access control of the multi-tenant application.

 Common Characteristics of Multi-tenant Applications:

Usage isolation

Data security

 Common Characteristics of Multi-tenant Applications:
Scalability in terms of number of tenants
Metered usage
Databases, tables and/or scheion for each user .

b. Explain in detail cloud security threats.

ANSWER

Traffic Eavesdropping: It is possible that the data being transferred from Cloud consumer to provider may get eavesdropped (sectary copied) through a malicious network-carrier.

Traffic Eavesdropping: Compromises the message contents.

: Malicious Intermediately: The messages are illegally intercepted and then the contents are updated. The updated message is then relayed towards the cloud.

: Denial of Service (DoS): The purpose is to overload the IT resources so the sage where they can not work properly

Workload on a cloud service is artificially increased through fake messages or repeated communication requests.

: Network is overloaded with traffic to cripple the performance and increasing the response time.

: Multiple cloud service requests are sent.

t: Insufficient Authorization based attack: It is a situation when a malicious user gets direct access to IT resources which are supposed to be accessed by trusted users only.

Happens when a broad access is provided to the IT resources and/or due to erroneously.

Weak authentication based attacks: Happen when weak passwords or shared (login) accounts are used to protect the IT resources.

Question No. 3:
(10)

A) Briefly describe following.

a. **Advantages and disadvantages of cloud computing.**

ANSWER

Advantages of cloud computing

1 In a cloud you do not require high powered and accordingly high price computer to run a cloud computing web based application because the application run on cloud not on desktop PC or laptop .

Cost Saving: Cloud can save your cost by not buying and hardware component for the storage of your data and it can save you a lot of money.

High Speed: cloud computer allow you to get your desire service with a few clicks the faster deployment allows you to get the resources required from the system within the minutes.
>:Back up and restore data: once a user store his data on the cloud its easy for the user backup and recovery of that data on physical hard drives that is time consuming process.
>:Mobility: All a user need is internet connectivity and he can access his data from anywhere.
>: Unlimited Storage Capacity: user can expend his storage on the cloud as much as he wants of course with the term and condition of the cloud provider

. Disadvantages: >:

Internet Dependency:
For accessing cloud data a user must have internet connection without internet he can access his data. >

: **Security**
: cloud attacks are growing and may be a cloud provider not want to spend more money on cloud security it may cause user data loss. >:

Technical issues:
if a user have technical difficulties on the cloud he must have to call to the service provider to fix his issues and a user have to wait for their response if a user have urgent work to do then this may be a bad problem.

>:Limited control
: The user does not have much of control on his data.

b .Collaborative meeting in cloud.

Ans # 3: Part: b.

Collaborative meeting in cloud:

It can be performed by using the software hosted on cloud. The organizations can Cannot support a cost effective virtual meeting so instead of virtul meeting they used face to dace meeting

The start of a cloud collaboration process involves one user creating a file or document and giving access to other members of the team. Anyone who has access can make changes to the document at any time, including when other people are editing or viewing it. Any changes that you make save and sync – so every user sees the same version of the project whenever (and wherever) they view the meeting they used face to face meetings.

Features of Collaborative Meeting:

• Streaming video to allow communicating face to face.

o Messenger.

o Zoom Meeting.

o What's app

o Google class room.

• Used whiteboard or multimedia to control the presentation.

• Share Application.

• Meeting recoding.