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**ITC-ASSIGNMENT # 1**

**TOPICS:**

1. CLOUD COMPUTING
2. FUTURE OF TOUCH SCREEN TECHNOLOGY
3. MODERN DATABASE MANAGEMENT SYSTEM
4. CORES i3, i5 AND i7

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Q.1 What is cloud computing? Discuss the types of cloud computing with their advantages and disadvantages?

Ans. ***CLOUD COMPUTING:***

The meaning of cloud computing is to deliver the cloud service like servers, databases, storage, networking, software and many more over the internet. The companies who provide this service are called cloud providers. And the cost of this service depends on its use.

For example: Electricity, use at home its bill depend on the usage.

***TYPES OF CLOUD COMPUTING:***

Cloud computing contain 3 types are following:

1. Private clouds.
2. Public clouds.
3. Hybrid clouds.

***PRIVATE CLOUDS:***

Cloud computing resources use exclusively by a single business. The company physically located of onsite data centre. For host this cloud many of companies pay to the third party. On this private network, the services and infrastructure are maintained by this cloud.

***PUBLIC CLOUDS:***

Public clouds are owned and operated through third party. Over the internet, computing resources as servers and storage. All the software, hardware and supporting infrastructure are managed and owned from provider. With the help of web browser you manage and access your account by these services.

***HYBRID CLOUDS:***

This clouds is the combination of private and public clouds, which connected technology that allows to share data and application between them which gives them business flexibility and other options.

***TYPES OF CLOUD COMPUTING SERVICES:***

Cloud computing services contain 3 types are mentioning below:

1. IAAS

2. PAAS

3. SAAS

***INFRASTRUCTURE-AS- A-SERVICE (IAAS):***

The most basic category of cloud services in computing is IAAS, wherein we rent infrastructure of IT, servers, virtual machines, storage, operating systems and networks on a pay-as-we-go from a cloud provider.

***PLATFORM-AS-A-SERVICE ( PAAS):***

In this service, it supply on demand for developing, testing, managing software applications and delivering. To fast create a web or applications without unsatisfaction about setting and arranging the infrastructure of server, network, storage and database which are required for development.

***SOFTWARE-AS-A-SERVICE (SAAS):***

This is the process to delivering software on demand and subscribe basis. Cloud provider manage, host the software application and infrastructure and security patching and software upgrade. On the internet, users connect with applications usually with web browser on their PC’s, tablets or phones.

***ADVANTAGES OF CLOUD COMPUTING:***

1. Cost efficiency
2. High speed
3. Excellent accessibility
4. Backup and restore data

***COST EFFICIENCY:***

It takes lesser cost than an on-premise technology. Now companies not store data in any disk cloud offers enormous space available for resources and saving money to the companies.

***HIGH SPEED:***

Cloud deploys quickly fewer clicks in these services. The deployment required particular resources to manage our system in shortest time

***EXCELLENT ACCESSIBILITY:***

Cloud permission us to access through storing Information any where, any time with individual devices. This is highly accessible and flexible of this time.

***BACKUP AND RESTORE DATA:***

Once you store your data at cloud it is easier to get backup and recovery in quite time taking process.

***DISADVANTAGES OF CLOUD COMPUTING:***

1. Security issues
2. Low bandwidth
3. Flexibility issues
4. Incompatibility

***SECURITY ISSUES:***

At the time of storing data the challenge of information theft in front of company, and still storing data confidentially in cloud, it will be a risky affair.

***LOW BANDWIDTH:***

The bandwidth is going down because the users access the cloud at the same time. The benefits of cloud can not realized with less speed.

***FLEXIBILITY ISSUES:***

This is hard for companies to control hardware and software when cloud service run on remote servers. At this time the service is not work the way it should.

***INCOMPATIBILITY:***

Entire infrastructure, incompatibility issues arise at a time when they have serious challenge the way of smooth running services.

Q.2 Discuss the future of touch screen technology?

Ans. ***FUTURE OF THE TOUCH SCREENS TECHNOLOGY:***

In touch screen technology, the rapid transition is on from touch screens. The most popular touch screen is “Projected Capacitance”. In the core of this technology, this is a transparent conductor which needs to conduct the electricity still transparent and it is to allowing light from underlying the display to shine with the help of screens. When creating a large area touch screen, they use the silver which is most conductive material. For example: 20 inch monitors.

Future of the touch screen is seems like every industry have many experiences about technology sectors. Dot-matrix to laser printers, desktops to laptops and tablets in computer, discrete IC’S to system-on-a-chip.

Today we are using touch screen but in future we use more than today and in future the touch screen sizes are small but we use it for a huge work and it will be more modernize.

Day by day, year by year its upgrade. The day is no far, the world will being called touch screen world.

Q.3 Discuss the modern data bases used today with their advantages and disadvantages?

Ans. ***MODERN DATABASE SYSTEM:***

Database is found from anyplace. They are hidden behind online banking, air reservation systems, medical fields and employment records.

Different databases have different purposes and they each are dependent upon a deployment environment and user interactions with different types.

We must need three requirements to count the databases and to manage these requirements, relational data bases are able to manage its called “NoSQL” key have value or wide column which stores data and meet others.

The meets all three requirements are:

* ***The Database MUST Scale.***

In this, if data volume and velocity is growing, then databases also must grow too. In the cloud or on commodity hardware, without doing un-natural things, it scale should be horizontal and elegant. Meeting base on the requirement having enough capacity to provide your customers.

* ***The Database MUST Adapt To Change.***

The speed of business is accelerate, your database must keep pace, enabling quarrel. This means that must be able to process new data classification and sources.

* ***The Database MUST Unleash Your Data.***

This is not enough for storing data. It must able to exploit data, means that to ask the significant question to your data. Database must support rich queries, aggregation, indexing and search across multi-structured, rapidly change data set at real time. And it also means that it support data modern use including mobiles, internet and other systems.

***ADVANTAGES OF DATABASE SYSTEM:***

The advantages of database system are given below:

1. Storing of data
2. Data consistency
3. Improved security
4. Economy of scale
5. Increased Concurrency

***STORING OF DATA:***

Database regarding organizations linked to entire resources and it accessible for all users after created particular IDs.

***DATA CONSISTENCY:***

The database approach reduces the risk of consistencies occurring, by controlling redundancy. It ensures that all data are reserved consistent.

***IMPROVED SECURITY:***

Protection of data from the unofficial users is provided by data base approach. It takes some information for security including users name, password, user type and any other, they also access right the operation including deletion, updating and insertion.

***ECONOMY OF SCALE:***

Cost savings through operational data depending on single database system along with applications by doing combine work on single source through professionalism by the all organizations.

***INCREASED CONCURRENCY:***

It arrange to concurrent in data process effectively. Its guarantee without any interference between their users. There is no loss of any information and integrity.

***DISADVANTAGES OF DATABASE SYSTEM:***

The disadvantages of database system are given below:

1. Complexity
2. Size
3. Cost of DBMS
4. Cost of conversion
5. Performance

***COMPLEXITY:***

This system is a complex piece of software. All parties take full advantage by familiar with functionality. For these purpose trained/professional administrators, designers and operators/users are required.

***SIZE:***

To make it run efficiently and preserved database for maximum time, be used the advanced/modern system wherein consumes of secondary memory as well as a large capacity of disk space.

***­­COST OF DBMS:***

The multi-user system is very costly. It takes high cost after installation of software and also occurs maintenance cost on it.

***COST OF CONVERSION:***

When file/database system conversion into required/latest system, it takes an additional cost to its company on updating of system including hardware.

***PERFORMANCE:***

The database to accommodate for many application than exclusive for the particular one, some application cannot run as speedy as before because lots of load and linked down.

Q.4 Discuss the core technology with the difference amongst core i3, i5 and i7 ?

Ans. ***DIFFERENCE AMONGST CORE:***

Core i7’s are better than core i5’s and it is better than core i3’s. The numbers 3, 7 and 5 doesn’t mean the same number of cores they have, its represents their processing power. The processing power depends on the collection of level involving core’s number.

***CORE i3:***

Core i3 is dual core processor. They have 2 cores. It support hyper-threading. It has 3 to 4 Mb memory. It not supports turbo boast technology. It is cheap than i5 and i7.

***CORE i5:***

It is dual or quad core processor. They have 4 or 2 cores dependent that you use desktop or laptop. Hyper-threading is not in core i5. It has turbo boast to maximize its speed. It is with average price.

***CORE i7:***

Core i7 is majority quad core processor. They have 2 to 4 physical cores with hyper-threading. It is with turbo boast technology. We maximize its clock speed