ICON OF JAVA

ADV. JAVA

JDBC

2. Storage Areas

Mr. Nagoor Babu M.Tech

[ICON of JAVA]
(Sun certified & Realtime Expert)
Ex. HCL Employee
Trained Lakhs of Students
for last 14 years across INDIA

Storage Areas

As part of the Enterprise Application development it is essential to manage the organizations data like Employee Details, CustomerDetails, Products Details..etc
-->To manage the above specified data in enterprise applications we have to use storage areas (Memoryelements).There are two types of Storage areas.

1) Temporary Storage Areas:

These are the memory elements, which will store the data temporarily
Eg:Buffers,Java Objects

2) Permanent Storage Objects:

These are the memory elements which will store data permanently.
Eg:FileSystems,DBMS,DataWareHouses.

File Systems:
It is a System, it will be provided by the local operating System.

--->Due to the above reason File Systems are not suitable for platform independent technologies like JAVA.
--->File Systems are able to store less volumes of the data.
--->File Systems are able to provide less security.
--->File Systems may increases data Redundancy.
--->In case of File Systems Query Language support is not available. So that all the database operations are complex.

DBMS:

-->Database Management System is very good compare to file System but still it able to store less data when compared to DataWareHouses.
-->DBMS is very good at the time of storing the data but which is not having Fast Retrieval Mechanisms.

DataWareHouses:

When Compared to File Systems and DBMS it is able to store large and large volumes of data.
-->Data ware houses having fast retrieval mechanisms in the form of data mining techniques.

Q)What is the difference between database and database management system
Ans: DataBase is a memory element to store the data.
Database Management System is a Software System,it can be used to manage the data by storing it on database and retrieving it form Database.
Database is a collection of interrelated data as a single unit.
DBMS is a collection of interrelated data and a set of programs to access the data.

There are three types of DBMS:

1)RDMS(Relational Database Management Systems)
2)OODBMS(Object Oriented DataBase Management Systems)
3)ORDBMS(Object Relational DataBase Management Systems)

1)Relational Database Management Systems:

-->It is a DBMS,it can be used to represent the data in the form of tables.
-->This DBMS will use SQL3 as a Query Language to perform DataBase Operations.

2)Object Oriented DataBase Management System:

-->It is DataBase Management System,it will represents the data in the form of Objects.

-->This database management system will require OQL(Object Query Language)as Query language to perform database operations.

3)Object Relational DataBase Management System:

-->It is a DataBaseManagement System,it will represents some part of data in the form of Tables and some other part of the data in the form of objects
-->This DataBaseManagement System will require SQl3 as Query Language to perform database operations.

Where SQL3 is the combination of SQL2 and OQL

SQL3=SQL2+OQL