DBMS ESE

7 chap:

1] Cloud Computing : Storing data on some other space rather storing it locally on your machine.
- No maintenance cost
- No disaster manage.
- No physical space req.
- Other's machine is used for storing.

Other companies give their machines for storing data so that producers will only have to focus on their task & need not to worry about storing.

① Types: IAAS
Infrastructure as a service
(Hardware, networking, virtualization)
- Google photos

User - App, Data, o.s, middleware

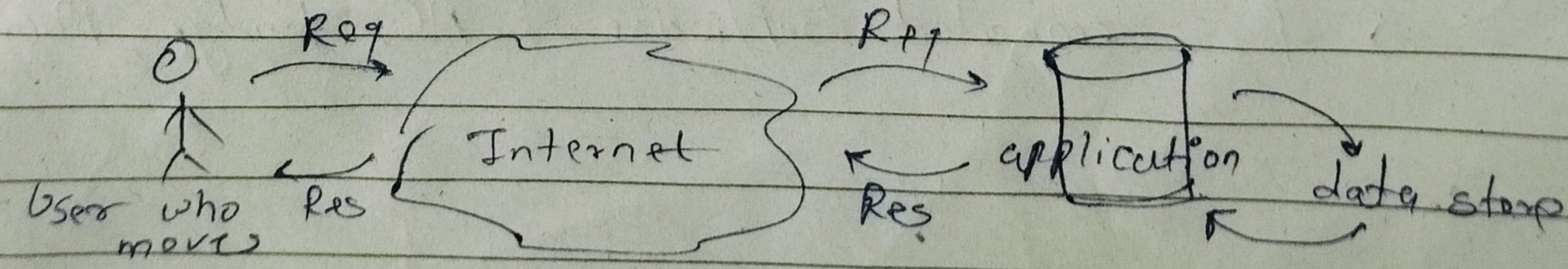
② PAAS : Platform as Service
(O.S, middleware, Hard.., Net--→vir----)

User - App, data.
- instagram.

③ SAAS : Software as a service
(All)

No need to install software
- Google docs

2] Mobile databases
Allows application for hand-held devices to access data stores even while on move.



features :- (i) Robust – ( ~~dist.~~ avoid disconnections while moving )

(ii) Low battery life, slow processor speed, limited memory.

(iii) Should react fast for freq. env. change.

3) Hadoop : Open Source framework which allows us to store & process large data sets in parallel & distributed manner

HDFS
Hadoop Distributed file System
↓
Storing

MapReduce
↓
Processing Element

① Partitians of 128 mb
HDFS makes copy of the data, in different nodes, ~~Se~~ In case of failure or corruption. That copy of node is used.

② mapReduce : Processes each data individually & Sums at the end while showing.
Groups same kind of data with its duplication number & displays it with their occurance at last

③ Yarn : Processes Job requests & manages cluster resources

4) SQLite : – Standalone DBMS
postgres, mysql, oracle – client server - based (Bulky)
→ for embeded software, AC, fridge, Microwave.

5) MongoDB — Document Oriented NOSQL database used for high volume data storage.

NoSQL — No need to worry about putting NULL in unknown columns & wasting space.
Just write jo pata hai, jo nhi pata wo dont write.

— Open source, highly scalable, highly available

High availability : If primary node is inactive for more than 10 sec, other secondary replica node becomes active & becomes primary node & when that primary node becomes active it becomes secondary

It splits data in different places — Shrading.
mongoose ⟶ it is a lite process which reaches to the appropriate shrade for the given query.

Schemaless : No need to follow structure.
Jo dalna data