

History databases

- Five stages in the development of databases:-

a) 1960s

- During the above period, data was stored in separate files, most of which were kept on reels of magnetic tapes
- No data integration
- No simultaneous access to data.

Disks
(invented 1954, general use 1960s)



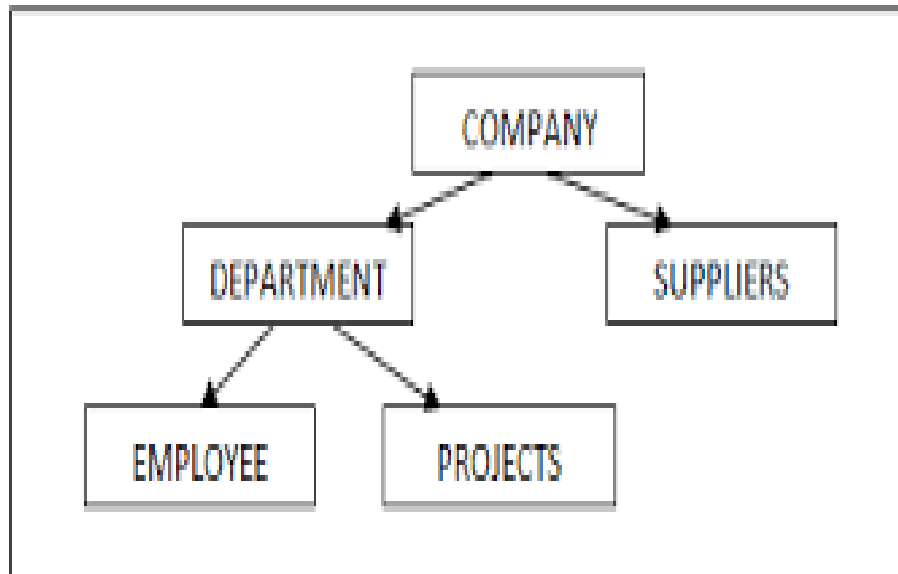
History databases Cont...

b) 1970s

- The need for integrated databases heightened
- Organizations were compelled to develop database management systems
- Database systems such as database systems include ADABAS, IDMS, System2000, Total and IMS emerged

History databases Cont...

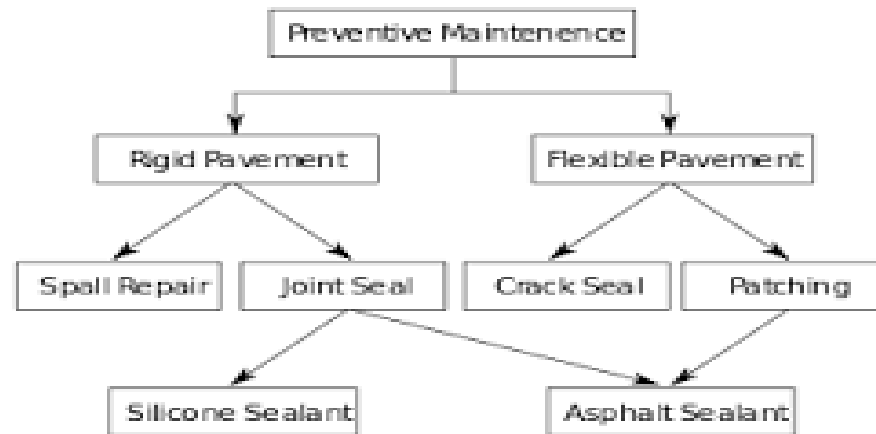
- These systems represented data relationship in a hierarchical or tree structure



History databases Cont....

- Other database systems were based on network model
- Access to data in these databases systems was on **sequence**

Network Model

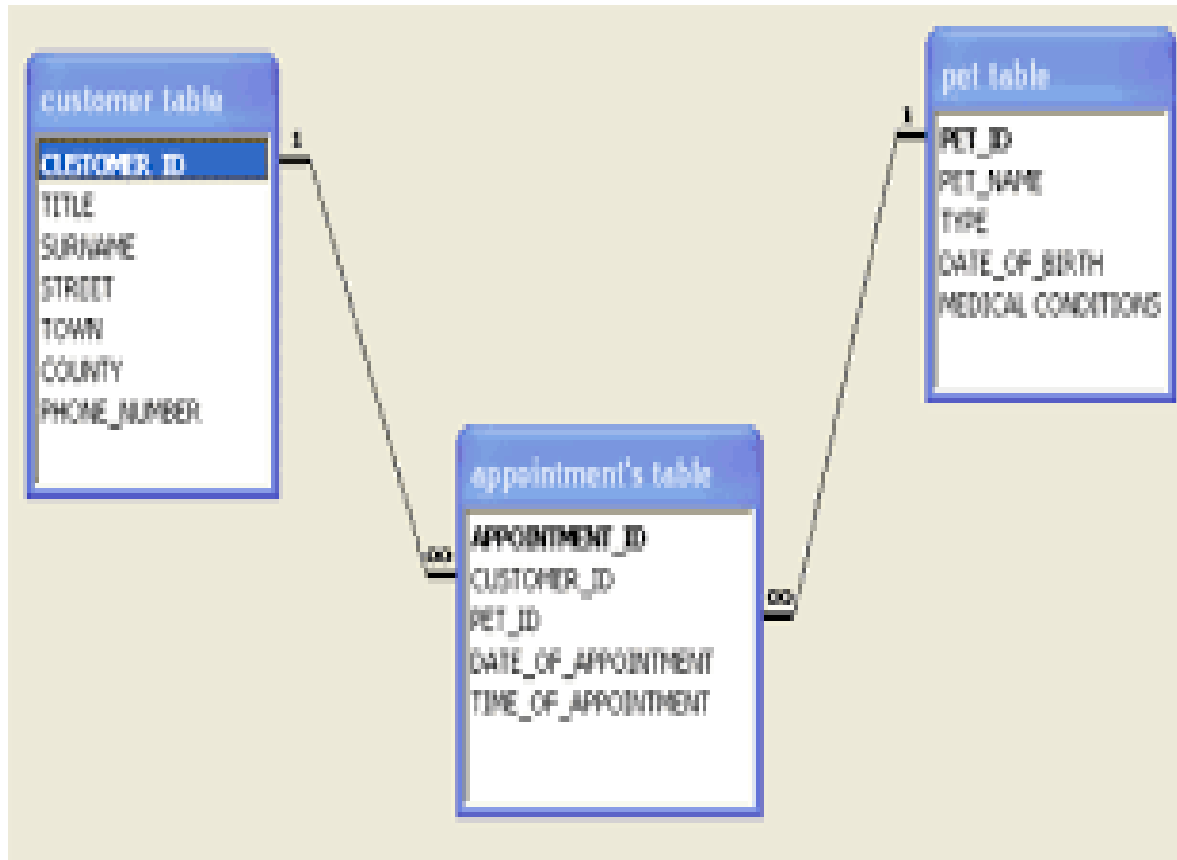


History databases Cont...

(c) 1980s

- In 1980, relational databases were introduced IBM under the guidance of Mr. Codd
- In the relational model, data was/ is represented in the form of tables
- SQL language was introduced as a database language

History databases Cont....



History databases Cont....

(d) 1990s

- Internet was born in the 1990s.
- Client/server computing, data warehousing and Internet applications emerged
- Database systems that could keep not only structured data but also unstructured data such as sounds, images, video and graphs emerged

History databases Cont....

- Object oriented database management systems (OODBMSs) combine database capabilities with object-oriented programming languages (Java, C++, Perl etc) capabilities appeared

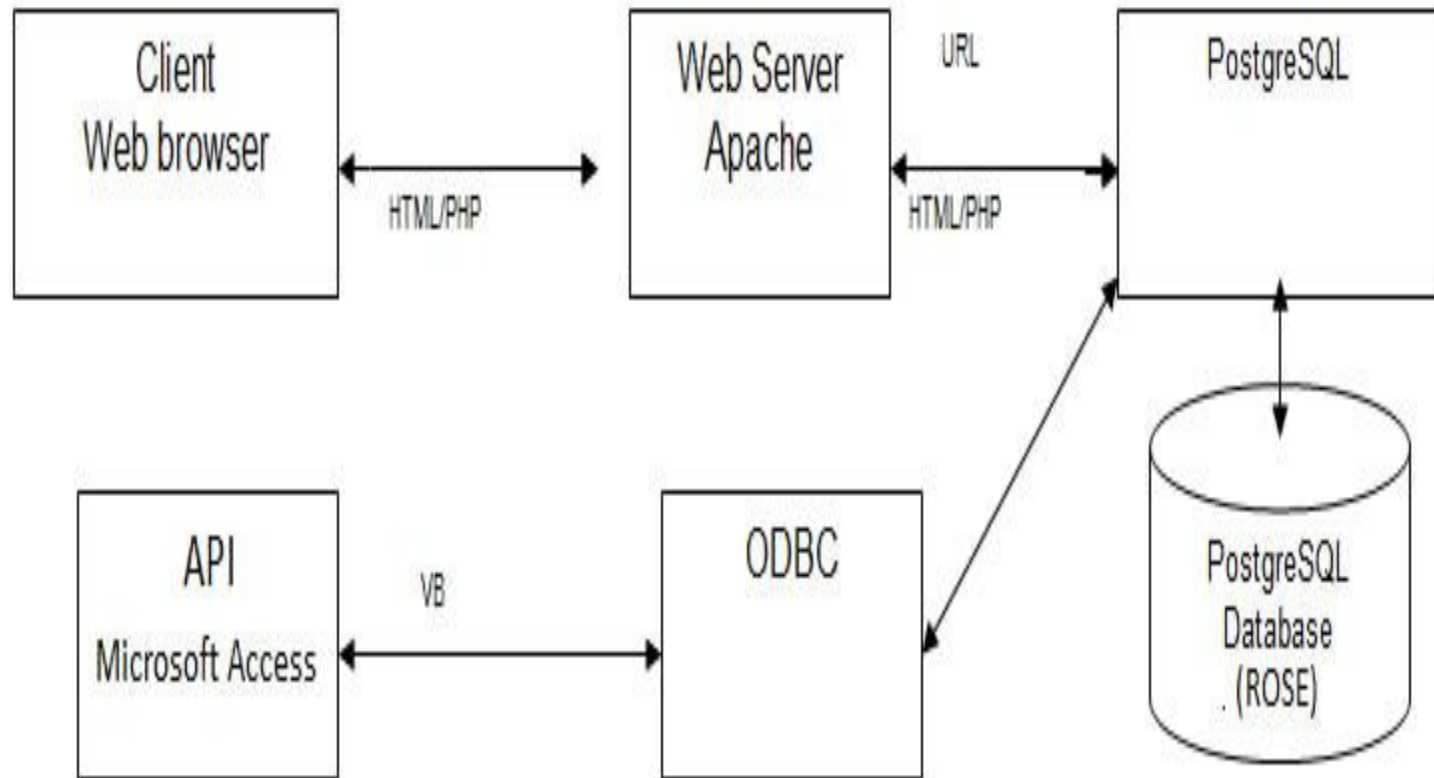


History databases Cont....

(e) 2000 and beyond

- Birth of object-relational database management system (ORDBMS)
- Hybrid model born from the relational and object oriented models. This model has borrowed features from the above mentioned database models
- The idea is to keep multimedia data in tables

History databases Cont....



End of Lesson