

Database Actors



- Database Administrators
 - In a database environment, the primary resource is the database itself and the secondary resource is the DBMS and related software
 - authorizing access to the database
 - coordinating and monitoring its use
 - acquiring software and hardware resources as needed
- Database Designers
 - identifying the data to be stored in the database
 - choosing appropriate structures to represent and store this data undertaken before the database is actually implemented and populated with data

VINIT

Database Actors

- communicate with all prospective database users, in order to understand their requirements
- develop a view of the database that meets the data and processing requirements for each group of users
- These views are then analyzed and integrated with the views of other user groups. The final database design must be capable of supporting the requirements of all user groups
- End Users
 - access to the database for querying, updating, and generating reports
 - · Casual end users:
 - · occasionally access the database
 - · need different information each time
 - · learn only a few facilities that they may use repeatedly.

Database Actors



- use a sophisticated database query language to specify their requests
- typically middle- or high-level managers or other occasional browsers
- Naive or parametric end users
 - constantly querying and updating the database, using standard types of queries and updates called canned transactions that have been carefully programmed and tested
 - · need to learn very little about the facilities provided by the DBMS
 - Bank tellers check account balances and post withdrawals and deposits
 - Reservation clerks for airlines, hotels, and car rental companies check availability for a given request and make reservations
 - Clerks at receiving stations for courier mail enter package identifications via bar codes and descriptive information through buttons to update a central database of received and in-transit packages

VINEYS

Database Actors

- · Sophisticated end users
 - Engineers, scientists, business analysts, and others who thoroughly familiarize themselves with the facilities of the DBMS so as to implement their applications to meet their complex requirements
 - Try to learn most of the DBMS facilities in order to achieve their complex requirements
- · Stand-alone users
 - Maintain personal databases by using ready-made program packages that provide easy-to-use menu- or graphics-based interfaces. An example is the user of a tax package that stores a variety of personal financial data for tax purposes
 - · Typically become very proficient in using a specific software package



Database Actors

- System Analysts and Application Programmers
 - Determine the requirements of end users, especially naive and parametric end users, and develop specifications for canned transactions that meet these requirements
 - Application programmers implement these specifications as programs; then they test, debug, document, and maintain these canned transactions
- · Workers behind the Scene
 - Typically do not use the database for their own purposes
 - DBMS system designers and implementers
 - design and implement the DBMS modules (for implementing the catalog, query language, interface processors, data access, concurrency control, recovery, and security.) and interfaces as a software package

Database Actors



- Tool developers
 - Tools are optional packages that are often purchased separately
 - include packages for database design, performance monitoring, natural language or graphical interfaces, prototyping, simulation, and test data generation.
- Operators and maintenance personnel
 - system administration personnel who are responsible for the actual running and maintenance of the hardware and software environment for the database system

