

- Introduction to Database Management System
- DBMS vs File System
- View of data
- Data models
- Database Languages: DML, DDL, DCL
- Database users and administrators
- Transaction Management
- Database System Structure
- Application architectures

(1/13)

The slides include:

- Introduction to Database Management System
- DBMS vs File System
- View of data
- Data models
- Database Languages: DML, DDL, DCL
- Database users and administrators
- Transaction Management
- Database System Structure
- Application architectures

(A+B)

The slides include:

- Data is a representation of raw, facts for example name, address, telephone numbers.
- Database is a well organized collection of data that are related in a meaningful way which can be accessed in different logical orders.
- DBMS is a collection of interrelated data and set of programs to access and modify those data conveniently and efficiently. Examples of DBMS are MySQL, Postgre, SQL, Microsoft Access, SQL Server, Informix ,Oracle, FoxPro, etc.

Introduction to Database Management System

(A+B)

- RDBMS stands for Relational Database Management System. It is a type of database management system that organizes data into tables, which consist of rows and columns. RDBMS is based on the relational model of data, which defines relationships between data entities. The relationships between tables are established using keys, allowing for efficient retrieval and manipulation of data. Example of RDBMS are IBM DB2, Informix, MySQL, PostgreSQL, SQL server, Oracle etc.

Introduction to Database Management System

(A+B)

- OODBMS stands for Object-Oriented Database Management System. Represents data in form of objects similar to Object Oriented Programming. OODBMS stores data in the form of objects, which are instances of classes in an object-oriented programming language. OODBMS handles large and complex data. Smalltalk is used in GemStone, LISP is used in Gbase, and COP is used in Vbase. Object databases are commonly used in applications that require high performance, calculations, and faster results.

Introduction to Database Management System

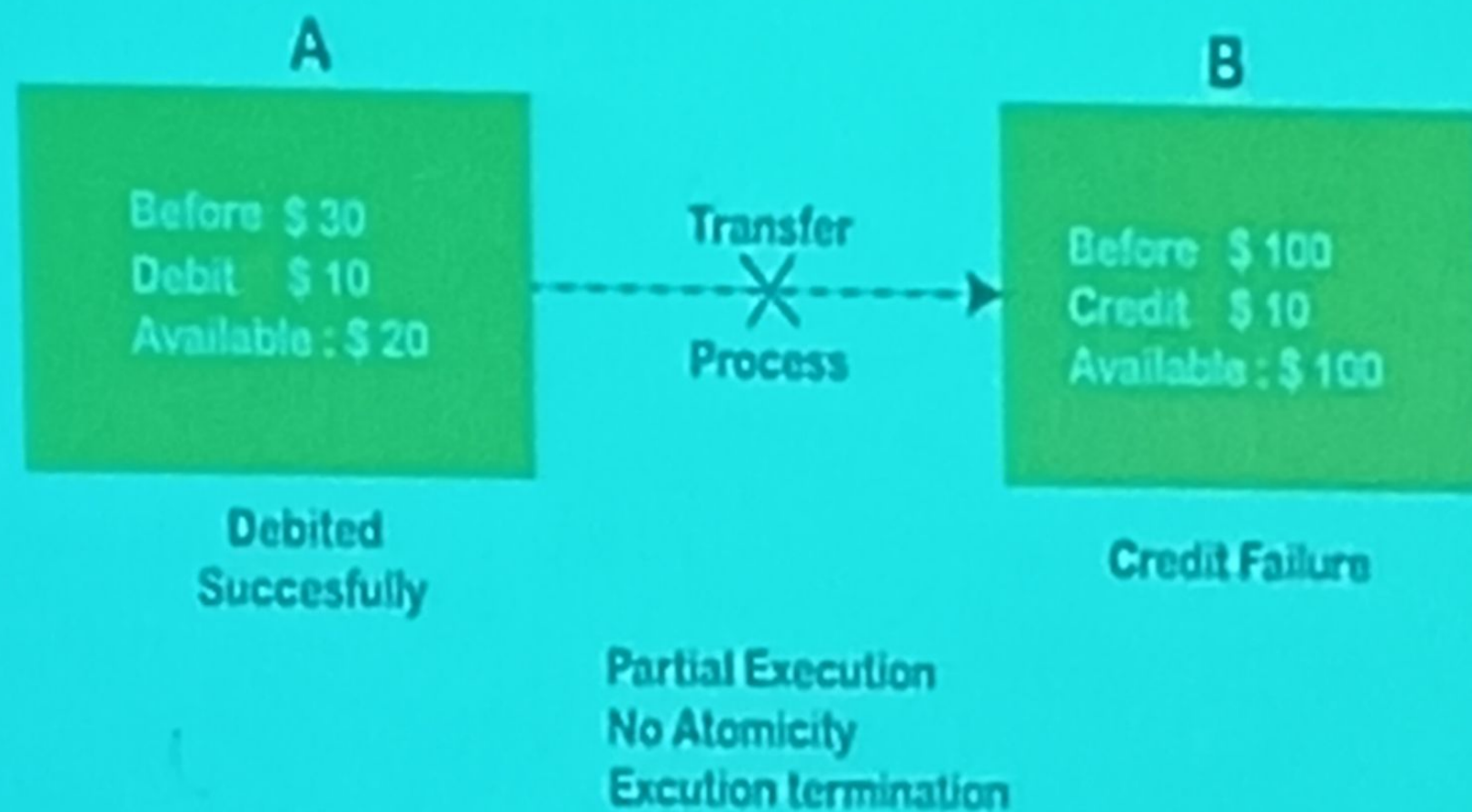
- **ORDBMS** An object relational database management system (ORDBMS) It is a type of database management system that combines elements of both relational and object-oriented databases. ORDBMS extends the relational database model by incorporating object-oriented features. This system supports objects, classes and inheritance in database schemas and query language. Examples of ORDBMS include PostgreSQL and Oracle Database with Oracle Object-Relational features , IBM Db2 with user-defined types and stored procedures.

Introduction to Database Management System

Difference between DBMS and File processing system

- 1) Data Redundancy and Inconsistency
- 2) Difficulty in accessing the data
- 3) Data Isolation
- 4) Integrity Problems
- 5) Concurrent Access Anomalies
- 6) Security Problems
- 7) Atomicity Problem

Introduction to Database Management System



Atomicity Problem

(A' + B')