Senior teacher
(Information system deparment)

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discipline

DataBase Management Systems

DBMS

DBMS

Lection №1

Course structure

- Introduction
- Data models
- Relational model
- Normalization
- SQL
- DBMS architecture
- DBMS in software development
- Application development
- DBMS administration

URL

http://elab.pro/

DB sample

Faculty	Spec	Code	Entrance year	Subgroup	Student
IITM	IS	090105	2003	1	Ivanov I.I.
IITM	IS	090105	2003	2	Petrov P.P.
IITM	SE	220400	2004	1	Sidorov S.S.

Database

Collection of linked data which one are organized by special rules. This rules are defining general principles of describing, storing, manipulating (independent from software). Database is information model of a part of the real world. Access to databases is provided by database management systems.

Database

From the law of Russian Federation

Objective form of representation and organization of data collection which is systematized in that way that these data could be found and processed by computer
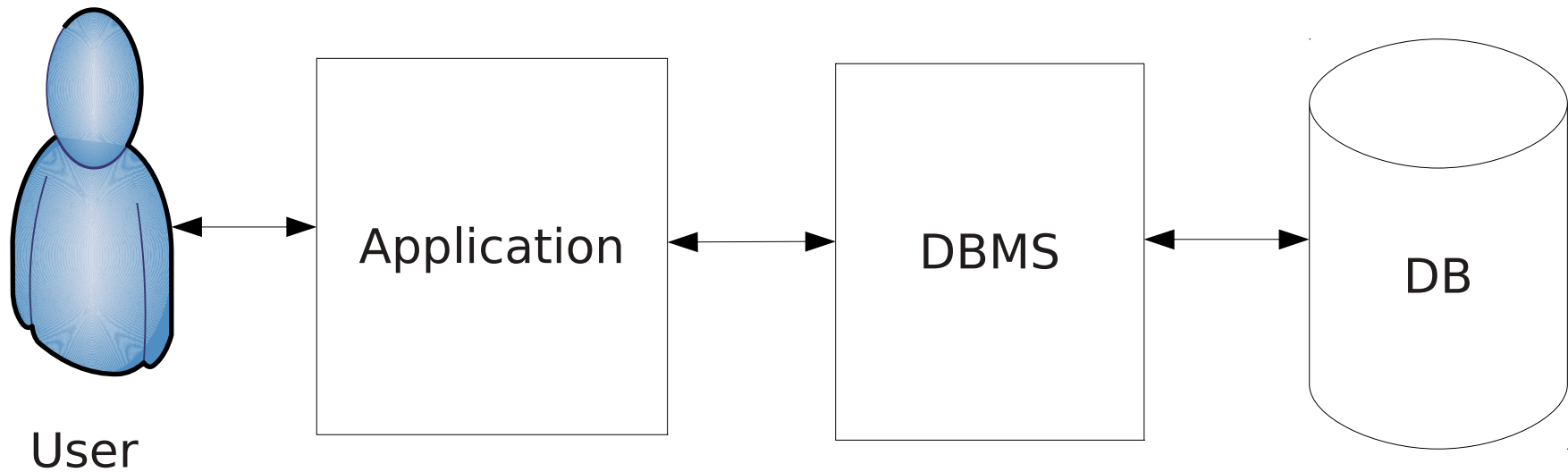
Database

DB is an organized collection of data

DB is a self-documented collection of tables

Use of DBMS

User → Application ↔ DBMS ↔ DB

DBMS history

E.F.Codd
DB2
Oracle
Sybase
SQL Server
ООСУБД
Access

DBMS history

Период	Технология
Until 1968	File processing
1968-1980	Hierarchical and network mode
1980 – current days	Relational model
1982	First DBMS for microcomputers R:Base, Paradox
1985	First steps to OODBMS. (OOP)
1991	MS Access
1995	First internet applications
1997	XML in data processing

DBMS history

Today:

- XML DB/DBMS implementation;
- Scaling DBMS / Grid;
- Specialized DBMS;
- DB consolidation.