SWE 207
Database Management Systems

~ Introduction~

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ÜNİVERSİTESİ

Content

- The objectives of the DBMS

- Evaluation

- Resources

- Working environment

- Class attendance and communicaton

- Instructor
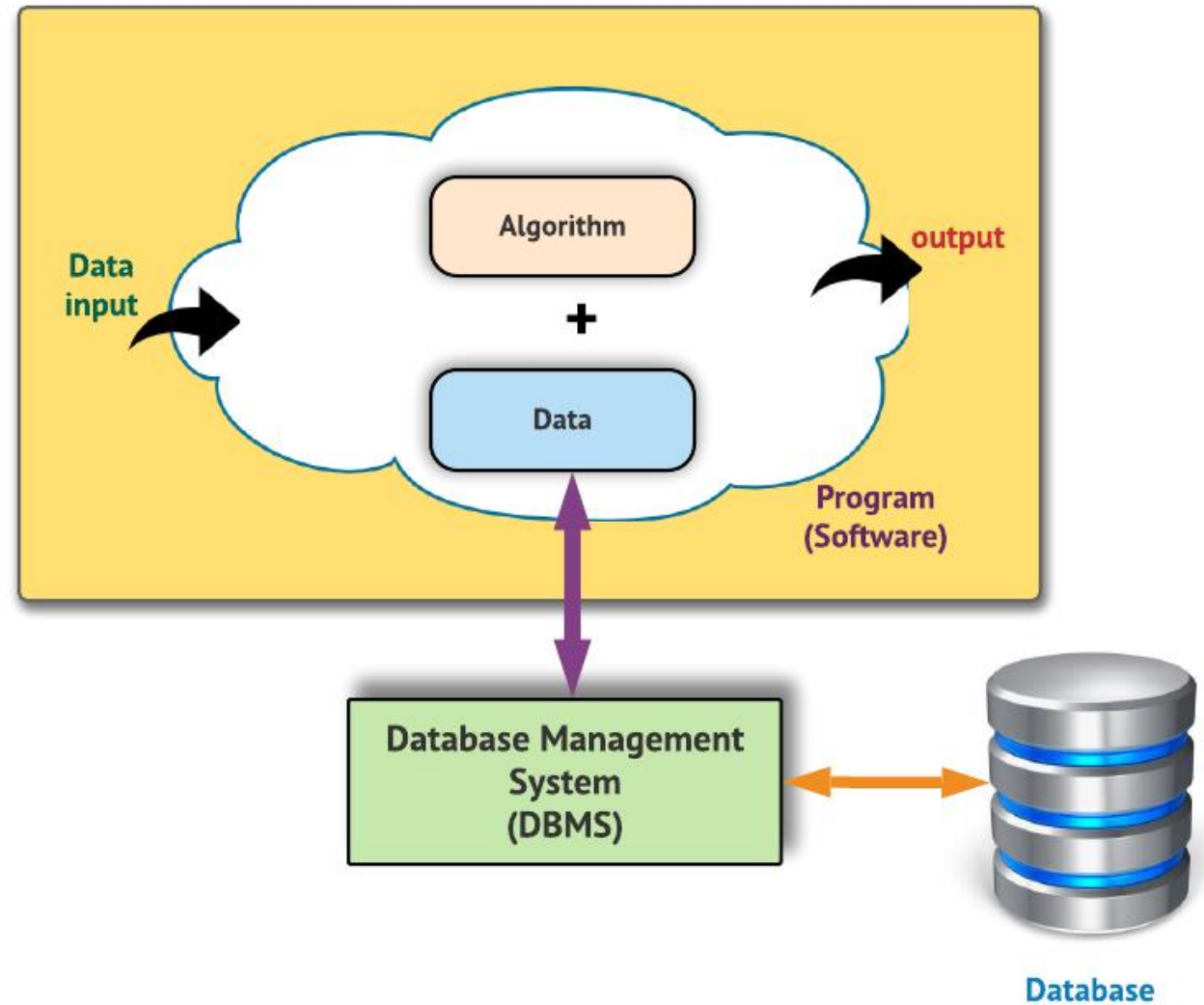
- FAQ

- Software engineering ethics

The objectives of the DBMS

- The information era
  - Data management is one of the most fundamental activities of organizations.
  - Accurate, relevant and obtained in time information is important.
  - It is very effective in decision making processes.
  - It is extremely important for the survival of organizations.
- Solution: Database Management System
- Database Management System
  - Storing, accessing, organizing the data.
- Objectives
  - To gain skills about Database Management Systems.

The objectives of the DBMS

data in the ram but we can not story every data on the ram

Evaluation

- Quiz 5%

- Quiz 5%

- Project 20%

- Midterm exam 20%

- Final 50%

Resources

- Database Systems: Design, Implementation, and Management; Carlos Coronel, Steven Morris, Peter Rob; Cengage Learning

- https://www.postgresql.org/docs/manuals/

Working environment

- PostgreSQL
  - No license fee required
  - Open source
  - It is an advanced relational database management system
  - It runs on many operating systems
  - https://www.postgresql.org

Working environment

- ## pgAdmin
  - Client Software
  - It is deployed with PostgreSQL.

- ## Valentina Studio
  - Client Software
  - https://www.valentina-db.com/en/valentina-studio-overview

Working environment

- NorthWind
  - https://code.google.com/archive/p/northwindextended/downloads

- Pagila
  - http://www.postgresqltutorial.com/postgresql-sample-database

Class attendance and communication

- Attending the class personally is important for learning.

- Check SABİS and your student e-mail addresses regularly.

- Assignment announcements and notifications are also made through the SABIS system.

- Sometimes the SABIS system can be used for other announcements.

Instructor

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Course Flow

- Database Systems

- Data Models, Entity Relationship Model

- Entity Relationship Model Examples

- Relational Database Model

- Extended Entity Relationship Model, Relational Algebra

- Structured Query Language, Data Manupilation Language

- Data Definition Language

- Advanced SQL

- SQL Programming

- Normalization and Performance Tuning

- Database Security, Other Database Models

Frequently Asked Questions

- I'm late for the class. May I come in?
    - Yes, without disturbing the order of the class.

- I had an immediate concern during class. Can I go?
    - Yes, without disturbing the order of the class.

- Can I use my mobile phone during the class?
    - No. If necessary, you can leave the class.

- Should I come to class with my computer?
    - You will be notified in advance for weeks when a computer is required.

- Can I turn in my homework late?
    - <u>No. Assignments must be submitted before the deadline. No excuses are accepted for late delivery.</u>

Frequently Asked Questions

- I could not attend the quizes. What should I do?
  - <u>There are no excuses for work during the term(homeworkquizes, etc.).</u>
- I could not attend the midterm/ final exam. What should I do?
  - See the regulations.
- I think my exam was misevaluated. What can I do?
  - You can contact via e-mail.
- How can I communicate over the Internet?
  - You can contact via e-mail.

Frequently Asked Questions

- I gave all or part of a study I found on the Internet as an assignment. I didn't get points. Why?
  - Your homework should be your own original work written in your own sentences and codes.
  - You should indicate the sources you have benefited from in the bibliography section and write in your own words by referring to the information you have obtained from those sources.

- I gave my friend's work as an assignment. I didn't get points. Why?
  - See the item above.

- Also;
  - You must sign the roll call (it is not important for your class mark).

Software engineering ethics

- The products you develop should not harm the environment, nature and people.

- The primary objective of your project should be the benefit of the community.

- Get and protect the copyrights of your own products.

- Do not violate the copyrights of other people's products.

- Don't use pirated software, books, etc and; raise the awareness of the users of them.

- Write your own documentation.

Software engineering ethics

- Write your own code.
    - Review the license before using code that isn't yours.
    - If the license allows, use it as and as it allows. Don't use it if the license doesn't allow it.
- In any case, give a reference to the owner of the work you used.
- What does license mean?
    - A text that sets out the rules for the use, editing, and distribution of a work.
    - work: Software, Source Code, Photo, Picture, Book, etc.