Project – DB Lab

Final Project – Requirements

- Working in group of 3 students
- Topic proposal: defined by members ➔ validated by professor
- Database Management System (DBMS): postgresql
- Programming language: no limit (java, c#, php, …)
- Project presentation: 16th of the semester or exam date

- **All members** must
  - work together
  - participate to the presentation section, QA section

Final Project – Requirements

- Results of the final project:
  - **Source code**
  - **Installation guide / Usage guide: Decription in details how to install and how to use your product**
  - **Report (PDF file)** composes of **:**
    - Description in details the selected subject
    - Determining necessary functionalities (students can use UML diagram if needed)
    - *Database design: ER schema + descriptions of all tables and their relationships*
    - Installed functionalities
    - Code sources/ packages are re-used in your product
    - Difficulties in carrying out the project ? And solutions?
    - Evaluation about the final results: avantages/ disadvantages
    - *Tasks of each member*

Project Evaluation

- Final program
  - Complixity/ difficulty of the problematic
  - Quality:
    - Functionalities: complete, correct,
    - User interface: easy to use (user-friendly interface)
  - Demo: demo scenario should be prepared

- Presentation quality
- Report quality

Topic proposal

- Each group proposes a topic (for example: human resources management, football club management, hotel management, …)
- Topic proposal must be described in details:
  - 1-2 pages
  - Description: objectives, usage scenario, functionalities, data and all requirements or relationships between data.
  - Database design (1st version)
    - ER schema (entities and relationships)
    - ER schema → Relational Model (tables, keys)
  - Group members:
    - List of all members: fullname, classe, email
    - Leader

Topic proposal - Plan

- Sending topic proposal via email:
  - oanhnt@soict.hust.edu.vn before **17h 20/03/2019**
  - Email subject: **[DBLab-ICTK61] Project – topic proposal**

  - Pdf file contains: group members, topic description, ER schema and designed DB

  - File name: **leader name_topic.pdf**
    - Ex.: *cuongth_hotelManagment.pdf*
  - File format: **.pdf**

- Discussion about the topic and 1st version of DB design
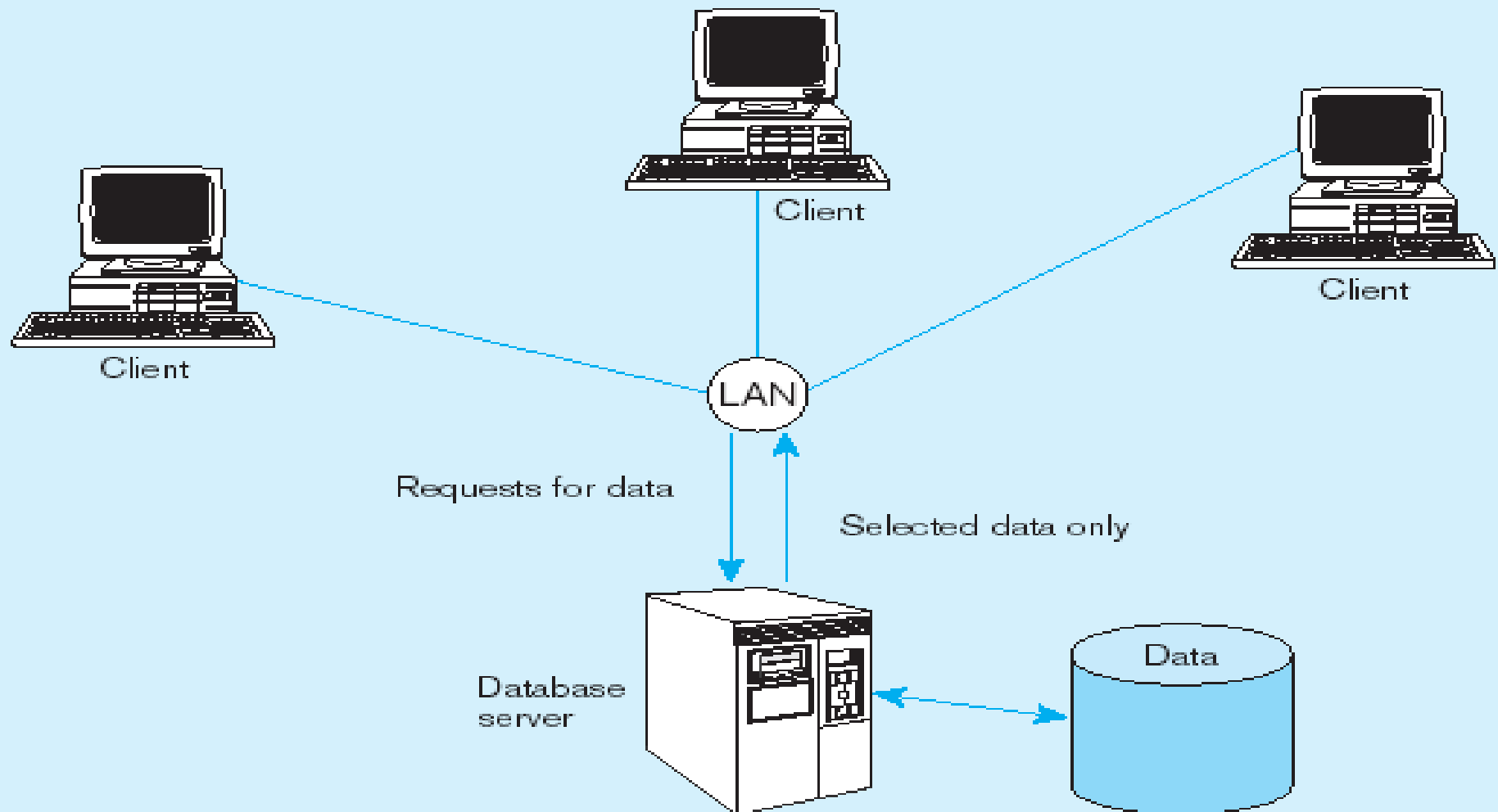 - **26/03**

Topic: examples

- Information Management Systems:
  - Normal user: information query / retrieval
  - Administrator: update database, update data (create/drop, insert, update…)
- Library management (users: lecturer, staff)
- Learning management system (users: students, teacher, staff,…)
- Sales management system (selling online/offline, selling books, selling supplies ...)
- Management system for fitness club / English Teaching Center, …

Programming language/ Interface

- No limit: Pascal, C, **C#, Java**, **PHP**…
- Interface:
  - GUI (Graphical User Interface): menu, button, tab…
  - Console: command-line interface; menu: list of functionalities => users choose by typing option listed on the menu

Project – Mô hình

Thực hành PostgreSQL

Project – Mô hình

PostgreSQL Server

Database Files

Database Engine

Local Area Network

Application Program

Application Program

Application Program

Application Program

User Workstation

User Workstation

User Workstation

User Workstation

Thực hành PostgreSQL