Course Information-Database Design and Implementation

- Subject Outline
- Test Information

summary

Database design and implementation is a course aimed at improving practical application ability based on theories of database definition, data management, and operation process.The content of this course is to develop application knowledge related to database in terms of design and implementation of relational database by using MySQL and MySQL workbench, a design and management tool for effective modeling.This course aims to enhance the computer's application ability by experiencing and learning the whole process from the requirements analysis stage of the database to the implementation and operation.

Medium name

- Multimedia lesson

Service schedule

- Additional updates every Monday during the semester.

lecture content

- Multimedia lesson

Count	Lecture Topic	The details	Textbook Pages	Professor in charge
1	Understanding the database	Understanding Databases Database Modeling MySQL Environment	1-31	Jaehwa Jung
2	User Requirements Analysis	● User requirements analysis ● Application of user requirements	35-88	Jaehwa Jung
3	Database modeling	● ER Model ● ER Modeling ● Forward Engineer	88-100	Jaehwa Jung

Count	Lecture Topic	The details	Textbook Pages	Professor in charge
4	Database language	● SQL ● Data Definition Language ● Schema Creation and Deletion	103-112	Jaehwa Jung
5	Table management	● Table Management ● Index Management	112-135	Jaehwa Jung
6	Data manipulation language	● Concepts of data manipulation language ● Data insertion ● Data modification ● Data deletion ● Data retrieval basics	139 ~ 154	Jaehwa Jung
7	Data retrieval 1	● Simple Query ● Conditional Query ● Function	154-185	Jaehwa Jung
8	Exercise Solving 1	Solving problems in Chpater 1 ~ 7	1-185	Jaehwa Jung
9	Data retrieval 2	● Group query ● Multiple SELECT statement query ● Inner join ● Outer join	185-204	Jaehwa Jung
10	Data retrieval 3	● Subqueries ● Views ● Operations with Views	205-228	Jaehwa Jung
11	Storage program	● Stored Programs ● Stored Procedures ● Representation of Procedures	233-260	Jaehwa Jung
12	Function, cursor, trigger	● Function ● Cursor ● Trigger	260-278	Jaehwa Jung
13	Permission and user management	● Rights ● User Management ● Rights Management	281-309	Jaehwa Jung
14	Transaction and backup	● Transactions and locks ● Backup and restore	313 ~ 341	Jaehwa Jung
15	Exercise Solving 2	● Solve problems in Chpater 9 ~ 14	185 ~ 341	Jaehwa Jung

- Attendance class

division	Lecture Topic	The details	Textbook Pages	Lecture

division	Lecture Topic	The details	Textbook Pages	Lecture
1	Database modeling	Study conceptual database modeling based on ER model.	2 ~ 34	lecture
2	Tools for Database Design and Implementation	Learn the functional usage of MySQL and the MySQL workbench.	35-72	Training
3	Requirements Analysis and Database Design	Students will learn how to analyze user requirements and create table design specifications using examples.	73-102	Training
4	Database definition	Learn how to create and change the database, table, and index views that correspond to the functions of DDL in SQL.	103-138	Training
5	Database Manipulation 1	Learn about simple DML to manipulate data in database schema.	139-154	Training
6	Database operations 2	Learn about creating advanced manipulation queries using groups, joins, subqueries, and so on.	154-232	Training

Evaluation method and question range

Evaluation Type	Assessment Methods	Scope of question	Remarks
Attendance class	Practice Assignment	After each attending class (practice), the exam is scheduled and the attending professor in charge of the class attends directly (submitted as an assignment).	

Note: The above information is subject to change, so please refer to the academic bulletin.

references

- http://www.dbguide.net/
  http://www.mysql.com/

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