Contract Management System

Database Design

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Function

According to business requirements and procedure of the Contract Management System, data information might possibly come from processes of interface operation, business process, data storage, etc. Extract and analyze data information involved in these processes and conduct database design. Create database for the project in MySQL.

1.Design database for Contract Management System.

Based the result of extract and analyze information, design system table structure and define description, type, length and constrain of fields in table accordingly.

The system interacts with multiple tables when processing business logic and data information. So you need to confirm the relationship of tables in design by analysis, with a mechanism of primary key and foreign keys.

2. Create database for Contract Management System.

Choose relational data model and relational database which is MySQL. Write SQL database script and create database contractdb for the project in MySQL, basing on table structure and relationship settled in database design.

Design

Conduct database design and modeling with steps, tool and technology specially made for database design. Relational data model and two-dimensional table structure are used in design and construction of database for Contract Management System.

1. Steps of database design

(1) Requirement analysis

Extract and analyze data information involved in the process of interface operation, procedure, data storage, etc. Identify basic system data and contract working flow for the sampling of Data Dictionary.

(2) Conceptual structure design

According to Data Dictionary, identify entity, entity attributes and relationship of entities on the basis of E-R model.

(3) Logic structure design

Choose relational data model namely two-dimensional table. Choose MySQL as project database. Write SQL script based on MySQL database.

(4) Physical structure design

SQL script is used in constructing database contractdb for Contract Management System in MySQL.

Design

2. Design project database

In enterprise developments, PowerDesigner is usually used as tool for modeling in database design, so as to improve design efficiency and quality.

PowerDesigner supports the modeling of both CDM and PDM. It converts PDM into specific SQL script supported by DBMS. It works well in supporting the conversion among CDM, PDM and SQL script. It’s easy to maintain and manage.

In this project PowerDesigner is adopted in database design and modeling. According to steps of data design, we create CDM first, and then create a MySQL based PDM for the generation of SQL database script.

Implementation

Based on the Data Dictionary and E-R diagram, use PowerDesigner to conduct conceptual data modeling and physical data modeling. And generate SQL script for Contract Management System based on MySQL.

Create contractdb in MySQL and initialize data tables.

Step 1, PowerDesigner modeling.

Step 2, Cerate database in MySQL.

Step 3, Initialize database tables.

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Thanks

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