

# Database Management System

Show table structure  
(\* .tdf file)

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This function includes **read \*.tdf file** and **display table structure**. Read all table definition information in the the "Ruanko" database, and display to **tree view CDBView** and **list view CTableView**.

## 1. Read \*.tdf file

Read **table description information** from the "Ruanko.tb" file, and find table definition file **.tdf**). From. Then read **table definition information** from **“.tdf”** file, and display in the tree view.

### Input

Click the menu **“database -> open database”**, and enter the default database name **“Ruanko”**.

### Process

Read the table structure information from **table description file "Ruanko.tb"** and **table definition file (.tdf)**.

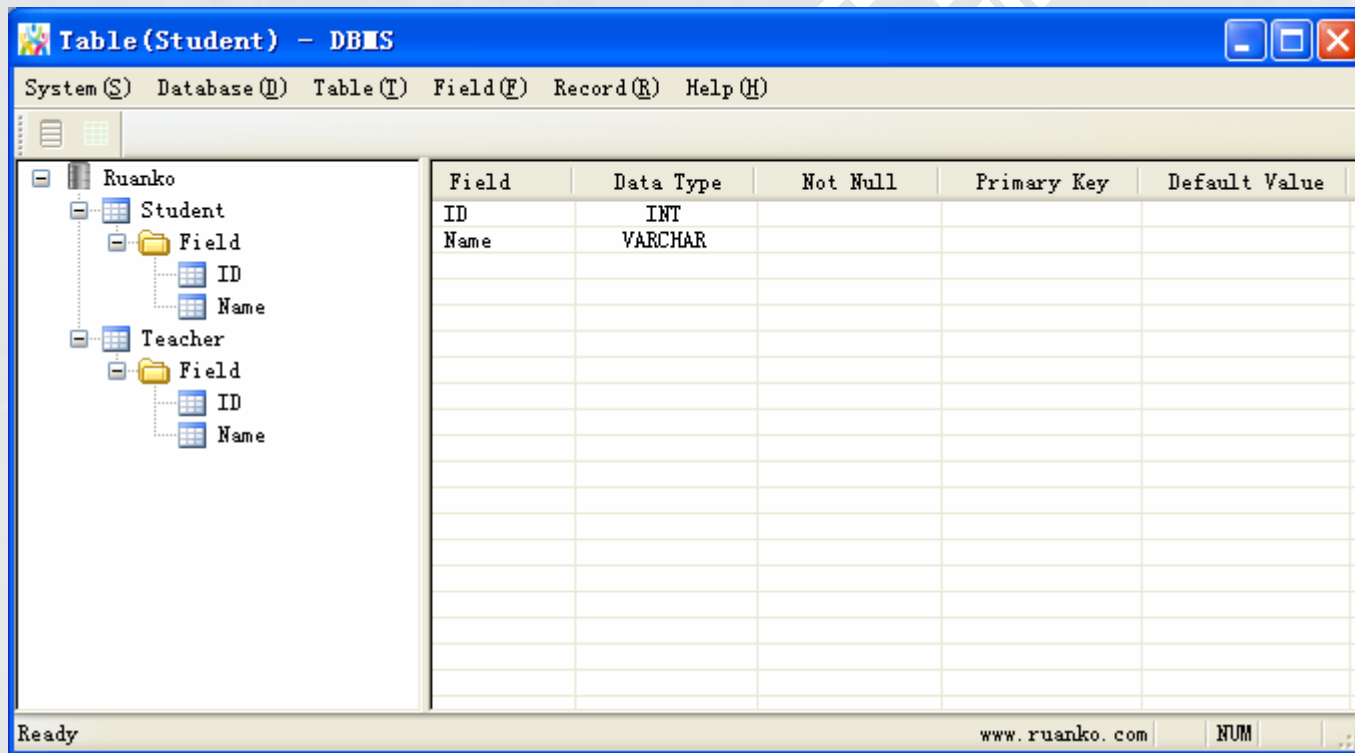
### Output

Display all of the tables names and the field names in the table in the **tree view CDBView**.

## 2. Display table structure

Select a table in the **tree view CDBView**, click on the **menu "table-> modify table"**.

Query related table information entity according to the name of the table, then display all the fields information in the **list view CTableView**.

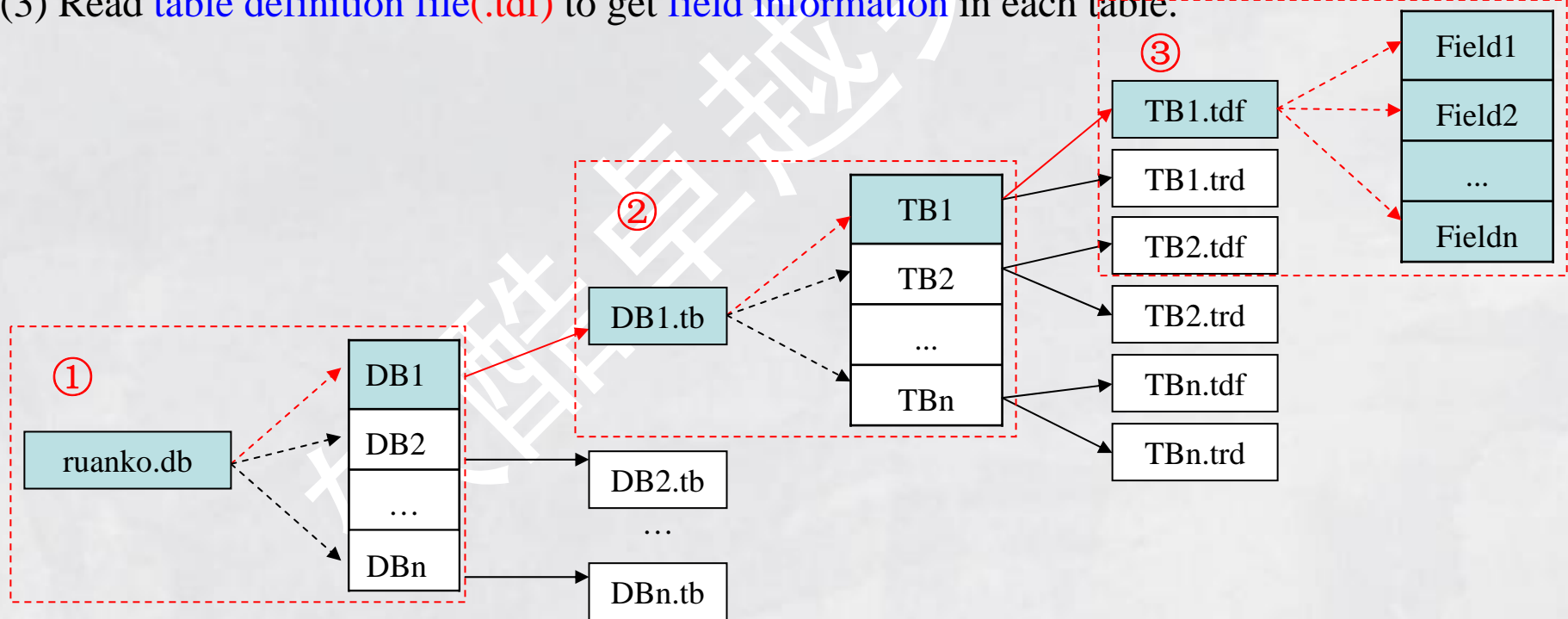


Iterative development based on the “define table structure”.

Read the table definition file (\*.tdf), and query each table structure. Define CTableEntity array in the document class CRKDBMSDoc; save the table structure into memory and display in the tree view CDBView and list view CTableView.

## 1. File structure

- (1) Find the path of “Ruanko.tb” file according to the database name “Ruanko”
- (2) Read table description file “ruanko.tb” to get the path of table definition file(.tdf).
- (3) Read table definition file(.tdf) to get field information in each table.





## 2. Data transfer

The database name “Ruanko” is transferred to the **CTabelLogic** class in the **business layer** for processing by the document class **CRKDBMSDoc**. **CTableLogic** call **CTableDao** class in the data access layer to read file, and assemble the table structure information to **CTabelEntity** array, then return to document class.

### (1) **CRKDBMSDoc::LoadTables()** function of document class

**CRKDBMSDoc::LoadTables()** call the **CTableLogic::GetTables()** function, and transfer database name “**Ruanko**” to the business logic layer.

### (2) **CTableLogic::GetTables()** function of logic class

- 1) Call **CTableDao::GetTables()** function, and read “**Ruanko.tb**” file to get table descripton information.
- 2) Call **CTableDao::GetFields()** function, and read “**\*.tdf**” file to get field information in the table.
- 3) Assemble **CTabelEntity** object array, and return to the **document class**.

### (3) View diaplay

Call document class **CRKDBMSDoc::UpdataAllViews()** , and notify view update.

Iterative development based on the “define table structure” function; get [table information](#) in the database from [table description file \(.td\)](#), and get [field information in the table](#) from [table definition file \(.tdf\) file](#), then display in the interface.

The implementation steps are as follow:

**Step 1: query table structure in the data access layer**

**Step 2: query table structure in the business logic layer**

**Step 3: display table structure in tree view**

**Step 4: display table filed information in list view**

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Thanks

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