

How to Use Sample Databases

Three sample databases that are related to three different database engines such as Microsoft Access 2007, Microsoft SQL Server 2008 and Oracle Database 10g Express Edition (XE) R2 are provided for this book and they can be used by all projects developed in this book.

These three sample database files are located under three different folders that are at the site: www.publisher.com/Bai/database. The names of three folders are:

- **Access** – contains the Microsoft Access 2007 sample database file:
CSE_DEPT.accdb
- **SQLServer** – contains the Microsoft SQL Server 2008 database file:
CSE_DEPT.mdf
- **Oracle** – contains a group of table files related to database CSE_DEPT

To use these three sample database files, one needs to follow the different instructions discussed below. The prerequisite to use these sample databases is that three Database Management Systems (DBMS) must have been installed in your machine. Three DBMS include Microsoft Access, Microsoft SQL Server 2008 Management Studio and Oracle Database 10g Express Edition (XE). Refer to Appendices D and E to finish installing Microsoft SQL Server 2008 Management Studio and Oracle Database 10g XE if you have not installed those DBMS. For Microsoft Access 2007, it should have been installed in your machine when Microsoft Office 2007 Plus is installed.

G.1 Use Microsoft Access 2007 Sample Database File

The Microsoft Access 2007 sample database file CSE_DEPT.accdb is located at the site: www.publisher.com/Bai/database/Access. To use this database file in any sample database programming project that used an OleDb Data Provider in this book, you need to perform the following operations:

1. Create a new folder named **database** in your root drive such as **C:/**.
2. Copy the sample database file CSE_DEPT.accdb from the site above and paste it to your new created folder **database** in step 1.

Refer to section 6.2.1.1 in Chapter 6 to establish a connection to our sample Microsoft Access 2007 database CSE_DEPT.accdb using the NetBeans IDE. After a valid connection to our sample database has been established, you can perform any desired data query and actions to this database in your projects.

G.2 Use Microsoft SQL Server 2008 Database File

The Microsoft SQL Server 2008 sample database file CSE_DEPT.mdf is located at the site: www.publisher.com/Bai/database/SQLServer. To use this database file in any sample database programming project that used a SQL Server Data Provider in this book,

you need to perform the following operations (suppose the Microsoft SQL Server 2008 Management Studio has been installed in your machine):

1. Create a new folder SQLServer under the folder C:\database at your machine.
2. Copy the sample database file CSE_DEPT.mdf from the site above and paste it to the folder SQLServer you created at step 1.
3. Optionally, you may need to copy this database file CSE_DEPT.mdf to the Microsoft SQL Server 2008 Management Studio default database file folder, which is: C:\Program Files\Microsoft SQL Server\MSSQL10.SQL2008EXPRESS\MSSQL\DATA in your machine.

Refer to section 6.2.1.2 in Chapter 6 to establish a connection to our sample SQL Server 2008 database using NetBeans IDE. After a valid connection to our sample database has been established, you can perform any desired data query and actions to this database in your projects.

Refer to Appendix K to build a Java EE 6 database application with our sample SQL Server 2008 database.

G.3 Use Oracle 10g XE Database File

The Oracle 10g XE sample database file is composed of a group of related Data Table files and it is located at the site: www.publisher.com/Bai/database/Oracle. Each Data Table file is a text file and it is related to a Data Table object, and totally we have five data table files for this sample database CSE_DEPT:

- login.txt
- faculty.txt
- course.txt
- student.txt
- studentcourse.txt

Each Data Table file is related to a real data table in this sample database and it was obtained using the Unload method from our sample database CSE_DEPT in Oracle Database 10g XE environment.

To use this database file in any sample database programming project that used an Oracle Data Provider in this book, you need to perform the following operations (suppose the Oracle Database 10g Express Edition has been installed in your machine):

1. Create a new user or user account named CSE_DEPT in Oracle Database 10g XE (refer to section 2.11.1 in Chapter 2 and the first part on Appendix F).
2. Load five Data Table files listed above from the site above to this new user or user account CSE_DEPT (refer to the second part on Appendix F).
3. Setup the relationships between these five data tables using the Constraints tab in Oracle Database 10g XE environment (refer to section 2.11.3 in Chapter 2).

Refer to section 6.2.1.3 in Chapter 6 to establish a connection to our sample Oracle database. After a valid connection to our sample database has been established, you can perform any desired data query and actions to this database in your projects.

Refer to sections 6.2.9 and 6.5 to build database application projects using JAPI and runtime object methods to perform data query to our sample Oracle database. Refer to sections 7.2 and 7.4 to build database application projects using JAPI and runtime object method to perform different data manipulations against our sample Oracle database.

Refer to sections 8.6 and 9.14 to build Java Web application and Web service projects to access and manipulate data against our sample Oracle database via Internet.