Connect to SQLite via JDBC

SQLite is a simple, small, fast, reliable, server-less, zero-configuration and no-installation SQL database library which is running in-process with the client application. Although there is no official JDBC driver library from www.sqlite.org, there is one provided by www.xerial.org – an XML Database Management System project.

1. Download SQLite JDBC driver

You can download the latest version of JDBC driver for SQLite here. The download is categorized by versions, so browse a directory for a specific version you want: 3.5.9, 3.6.16, 3.7.2, etc. As of this writing, the latest version is 3.7.2 which corresponds to the jar file sqlite-jdbc-3.7.2.jar.
Beside Java class files, the jar file includes SQLite binaries for Windows, Linux and Mac (for both 32-bit and 64-bit).
Place the sqlite-jdbc-VERSION.jar into your classpath.

2. SQLite JDBC database connection URL

The SQLite JDBC driver can load a SQLite database from file system or creates one in memory.
Here is the syntax of database connection URL for file system database:
jdbc:sqlite:database_file_path
Where *database_file_path* can be either relative or absolute path. For example:
jdbc:sqlite:product.dbjdbc:sqlite:C:/work/product.db
And here is the syntax of database connection URL for memory database:
jdbc:sqlite::memory:jdbc:sqlite:

3. Loading SQLite JDBC driver

With this SQLite JDBC library, you have to load the driver as follows:

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Class.forName("org.sqlite.JDBC");
```

Or:

4. Making SQLite JDBC connection

The following example program creates a connection to a SQLite database file product.db which is in the same directory as the program, prints some database metadata information, and closes the connection:

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package net.codejava.jdbc;
import java.sql.Connection;
import java.sql.DatabaseMetaData;
import java.sql.DriverManager;
import java.sql.SQLException;
/**
 * This program demonstrates making JDBC connection to a SQLite
database.
 * @author www.codejava.net
 *
 */
public class JdbcSQLiteConnection {
    public static void main(String[] args) {
        try {
            Class.forName("org.sqlite.JDBC");
            String dbURL = "jdbc:sqlite:product.db";
            Connection conn = DriverManager.getConnection(dbURL);
            if (conn != null) {
                System.out.println("Connected to the database");
                DatabaseMetaData dm = (DatabaseMetaData)
conn.getMetaData();
                System.out.println("Driver name: " +
dm.getDriverName());
```

```
                System.out.println("Driver version: " +
dm.getDriverVersion());
                System.out.println("Product name: " +
dm.getDatabaseProductName());
                System.out.println("Product version: " +
dm.getDatabaseProductVersion());
                conn.close();
            }
        } catch (ClassNotFoundException ex) {
            ex.printStackTrace();
        } catch (SQLException ex) {
            ex.printStackTrace();
        }
    }
}
```