

```

package com.jiang.ThreeTierSample.Utils;

import com.jiang.ThreeTierSample.entity.Student;
import com.sun.org.apache.xpath.internal.objects.XNull;

import javax.jws.Oneway;
import java.io.IOException;
import java.sql.*;
import java.util.ArrayList;
import java.util.List;
import java.util.Properties;

public class DBUtil {
    private static Properties pro = null;

    static {
        pro = new Properties();
        try {

pro.load(Thread.currentThread().getContextClassLoader().getResourceAsStream("com/jiang/ThreeTierSample/db.properties"));

            } catch (IOException e) {
                e.printStackTrace();
            }
        }

        private static final String CONN = pro.getProperty("CONN");
        private static final String URL = pro.getProperty("URL");
        private static final String USER = pro.getProperty("USER");
        private static final String PWD = pro.getProperty("PWD");
        public static Connection conn = null;
        public static PreparedStatement pstmt = null;
        private static ResultSet rs = null;

        //获取连接对象
        public static Connection getConnection() throws ClassNotFoundException, SQLException {
            Class.forName(CONN);
            //获得connectino对象
            conn = DriverManager.getConnection(URL, USER, PWD);
            return conn;
        }

        //获取statement
        public static PreparedStatement getPrepareStatement(String sql, Object[]params) throws SQLException,
        ClassNotFoundException {
            PreparedStatement pstmt = getConnection().prepareStatement(sql);
            if (params != null) {
                for (int i = 0; i < params.length; i++) {
                    pstmt.setObject(i + 1, params[i]);
                }
            }
            return pstmt;
        }

        //查询总数
        public static int getTotalCount(String sql){
            int count=0;
            try {
                pstmt=getPrepareStatement(sql,null);
                rs=pstmt.executeQuery();
                while(rs.next()){
                    int a=rs.getInt("uno");
                    count++;
                }
                return count;
            } catch (SQLException e) {
                e.printStackTrace();
            }
        }
    }

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        return 0;
    } catch (ClassNotFoundException e) {
        e.printStackTrace();
        return 0;
    }
}

```

//通用的增删改

```

public static boolean executeUpdate(String sql, Object[] params) {
    try {
        //获取连接
        conn=getConnection();
        //获取pstmt
        pstmt=getPreparedStatement(sql,params);
        int count = pstmt.executeUpdate();
        if (count > 0) {
            return true;
        } else {
            return false;
        }
    } catch (ClassNotFoundException e) {
        e.printStackTrace();
        return false;
    } catch (SQLException e) {
        e.printStackTrace();
        return false;
    } finally {
        close(null,pstmt,conn);
    }
}

```

//通用的查询:适用于任何查询,返回ResultSet即可

```

public static ResultSet executeQuery (String sql, Object[]params){
    Student stu;
    List<Student> list = new ArrayList<>();
    try {
        //获取连接
        conn=getConnection();
        //获取pstmt
        pstmt=getPreparedStatement(sql,params);
        rs = pstmt.executeQuery();
        return rs;
    } catch (ClassNotFoundException e) {
        e.printStackTrace();
        return null;
    } catch (SQLException e) {
        e.printStackTrace();
        return null;
    }finally {
    }
}

```

//关闭资源

```

public static void close (ResultSet rs,Statement pstmt,Connection conn) {
    try {
        if(rs!=null) {
            rs.close();
        }
    } catch (SQLException e) {
        e.printStackTrace();
    }
}

```

```
try {  
    if (pstmt != null) {  
        pstmt.close();  
    }  
} catch (SQLException e) {  
    e.printStackTrace();  
}  
try {  
    if (conn != null) {  
        conn.close();  
    }  
} catch (SQLException e) {  
    e.printStackTrace();  
}  
}  
  
}
```