**实 验 报 告**

**辽宁科技大学计算机与软件工程学院 2022年5月24日**

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| **课名： JSP程序设计** | **实验题目：数据源** | | |
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| **实验目的：**   1. 掌握JDBC连接数据库的方法和步骤； 2. 掌握数据访问的方法； 3. 不同数据库和不同提供商提供的驱动程序； 4. 数据库连接池作用和使用。 | | | |
| **实验内容：**   1. 实验习题1 Add   解题内容  **package com.uvcode.servlet;  import javax.servlet.\*; import javax.servlet.http.\*; import javax.servlet.annotation.\*; import java.io.IOException; import java.sql.\*;  @WebServlet(name = "add", value = "/add") public class add extends HttpServlet {  private static String *driver*="com.mysql.cj.jdbc.Driver";  String url="jdbc:mysql://localhost:3306/works\_db?characterEncoding=utf8";  String username="root";  String password="root";  String sql="Insert into shuihu(star\_name,nick\_name,real\_name) values('天机星','智多星','吴用')";  @Override  protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {  this.doPost(request, response);  }   @Override  protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {  try {  Class.*forName*(*driver*);  } catch (ClassNotFoundException e) {  e.printStackTrace();  }  response.setCharacterEncoding("GBK");  Connection conn = null;  try {  conn = DriverManager.*getConnection*(url,username,password);  Statement stmt= conn.createStatement();  int num=stmt.executeUpdate(sql);  response.getWriter().println("添加了"+num+"条记录");  } catch (SQLException e) {  e.printStackTrace();  }   } }**   1. 实验习题2 delete   解题内容  **package com.uvcode.servlet;  import javax.servlet.\*; import javax.servlet.http.\*; import javax.servlet.annotation.\*; import java.io.IOException; import java.sql.Connection; import java.sql.DriverManager; import java.sql.SQLException; import java.sql.Statement;  @WebServlet(name = "delete", value = "/delete") public class delete extends HttpServlet {  private static String driver="com.mysql.cj.jdbc.Driver";  String url="jdbc:mysql://localhost:3306/works\_db?characterEncoding=utf8";  String username="root";  String password="root";  String sql="delete from shuihu where id=1";  @Override  protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {  this.doPost(request, response);  }   @Override  protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {  try {  Class.forName(driver);  } catch (ClassNotFoundException e) {  e.printStackTrace();  }  response.setCharacterEncoding("GBK");  Connection conn = null;  try {  conn = DriverManager.getConnection(url,username,password);  Statement stmt= conn.createStatement();  int num=stmt.executeUpdate(sql);  response.getWriter().println("删除了"+num+"条记录！");  } catch (SQLException e) {  e.printStackTrace();  }   } }**   1. 实验习题3 update   解题内容  **package com.uvcode.servlet;  import javax.servlet.\*; import javax.servlet.http.\*; import javax.servlet.annotation.\*; import java.io.IOException; import java.sql.Connection; import java.sql.DriverManager; import java.sql.SQLException; import java.sql.Statement;  @WebServlet(name = "edit", value = "/edit") public class edit extends HttpServlet {  private static String driver="com.mysql.cj.jdbc.Driver";  String url="jdbc:mysql://localhost:3306/works\_db?characterEncoding=utf8";  String username="root";  String password="root";  String sql="update shuihu set star\_name='修改星' where id=2";  @Override  protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {  this.doPost(request, response);  }   @Override  protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {  try {  Class.forName(driver);  } catch (ClassNotFoundException e) {  e.printStackTrace();  }  response.setCharacterEncoding("GBK");  Connection conn = null;  try {  conn = DriverManager.getConnection(url,username,password);  Statement stmt= conn.createStatement();  int num=stmt.executeUpdate(sql);  response.getWriter().println("修改了"+num+"条记录！");  } catch (SQLException e) {  e.printStackTrace();  }   } }**   1. 实验习题3 select   解题内容  **package com.uvcode.servlet;  import javax.servlet.\*; import javax.servlet.http.\*; import javax.servlet.annotation.\*; import java.io.IOException; import java.sql.\*; import java.util.Enumeration;  @WebServlet("/Query") public class Query extends HttpServlet {  private static String driver="com.mysql.cj.jdbc.Driver";  String url="jdbc:mysql://localhost:3306/works\_db?characterEncoding=utf8";  String username="root";  String password="root";   String sql="select \* from shuihu";  public Query() throws SQLException {  }    @Override  protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {  this.doPost(request, response);   }   @Override  protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {  try {  Class.forName(driver);  } catch (ClassNotFoundException e) {  e.printStackTrace();  }  response.setCharacterEncoding("GBK");  Connection conn = null;  try {  conn = DriverManager.getConnection(url,username,password);  Statement stmt= conn.createStatement();  ResultSet rs=stmt.executeQuery(sql);  while(rs.next())  {  response.getWriter().println(rs.getString(1));  response.getWriter().println(rs.getString(2));  response.getWriter().println(rs.getString(3));  }  } catch (SQLException e) {  e.printStackTrace();  }   } }** | | | |
| **实验心得：**  **通过本次实验学习了用servlet使用jdbc操作数据库，对连接数据库和数据库的DML操作更加熟练了。实验中出现了500错误，经查询发现是mysql版本与老师发的jdbcjar包不匹配，下载新版jar包后将其导入工程lib文件并add as library解决了问题，另外，新版本mysql中driver中的全类名与低版本有所不同，需要注意。**  **完成作业后帮助同学解决了出现的小问题。** | | | |
| **评语：** | | | |