

ANSWERS TO THE SECOND EXAM , CIS 20.2, FALL 2008, DAVID ARNOW

(1) [15 points] You make a jsp, point your browser to it and you get ... nothing. :(
Where do you look first?

If you see an exception with a line number in your jsp, where do you look to see the line of code that generated the exception?

First stop is catalina.out. There are four possibilities:

jsp error: for example, you screwed up a tag delimiter or jsp tag syntax

java error: you have a java compiler error (e.g. missing semicolon)

runtime error: exception displayed

logical error: nothing displayed unless you put in a diagnostic print

In the first two cases, line numbers will refer to your jsp source (xxx.jsp) -- and that is your next stop. In the case of an exception however line numbers will refer to the xxx_jsp.java file created in your work directory-- and that is where you must look.

(2) [15 points] Define a method **makeBlueLine** that will be called by the jsp you're writing. The method cause the html "<hr class='blue'" to be written into the web page being generated. Be sure to specify any necessary parameters and surround it by the appropriate jsp tags.

```
<%!  
private static void makeBlueLine(JSPWriter out) {  
    out.println("<hr class='blue'>");  
}  
%>
```

(4) [15 points] Given two mysql tables with the following columns:

registered: registered_id, licenseplate, address

judgement: judgement_id, licenseplate, amount

where the first columns are integer primary keys, and amount is an integer, licenseplate is a varchar(15) and address is a varchar(50).

Write a mysql statement that prints out the licenseplates and corresponding addresses for which the amount in judgement is over 50000.

```
SELECT registered.licenseplate,address FROM registered JOIN judgement USING  
(licenseplate) WHERE amount>50000
```

(5) [25 points] Same as (4) except do it in Java or JSP.

```
<%@ page import="java.sql.*" %>
try {com.mysql.jdbc.Driver d = new com.mysql.jdbc.Driver();} catch(Exception e){}
int sqlport = 3306;
String url = "jdbc:mysql://localhost:3306/...";
String user = "...";
String pswd = "...";
String sqlqueryCommand = "SELECT registered.licenseplate,address FROM registered JOIN
judgement USING (licenseplate) WHERE amount>50000";
Connection con = DriverManager.getConnection(url, user, pswd);
Statement stmt = con.createStatement();

ResultSet results = stmt.executeQuery(sqlqueryCommand);

while (results.next()) {
    System.out.print("<tr>");
        System.out.print("<td>");
            System.out.print(results.getString("registered.licenseplate"));
        System.out.print("</td><td>");
            System.out.print(results.getString("address"));
        System.out.print("</td>");
    System.out.println("</tr>");
}
```

(3) [30 points] Consider the following "bidding" web page:

Highest Bidder: Joe Blow
Highest Bid: \$45
Your last bid: ____

New Bid:

When you first get there

Highest Bidder: Joe Blow
Highest Bid: \$45
Your last bid: ____

New Bid:

You type in a bid (60)
and are about to submit

Highest Bidder: YOU
Highest Bid: \$60
Your last bid: \$60

New Bid:

Yay! You're the highest
bidder!

Highest Bidder: Joe Blow
Highest Bid: \$90
Your last bid: \$60

New Bid:

After refreshing the
page-- uhoh- you're
being outbid by Joe
Blow!

Write the jsp for this web page. It should be a single JSP file. Assume that to get to this page the user has already given his/her name ("Joe Blow" for example) to a login page jsp and that it has been stored in an accessible way.

```
<%
String username = (String) session.getAttribute("username");
int highestBid=0;
String highestBidder = (String) application.getAttribute("highestBidder");
if (highestBidder!=null) {
    String hbid = (String) application.getAttribute("highestBid");
    if (hbid!=null && hbid.length()>0)
        try {
            highestBid = Integer.parseInt(hbid);
        } catch (Exception nfe) {}
}
int newbid=0;
String nbid = request.getParameter("newbid");
if (nbid!=null && nbid.length()>0)
    session.setAttribute("bid",nbid);
    try {
        newbid = Integer.parseInt(nbid);
    } catch (Exception nfe) {}
if (newbid>highestBid) {
    application.setAttribute("highestBid", ""+newbid);
    application.setAttribute("highestBidder",username);
    highestBid = newbid;
    System.err.println("NEW TOP BID: "+newbid);
}
String bid = (String) session.getAttribute("bid");
%>
<html>
<head>
    <title>BIDDING</title>
</head>
<body>
<br/><br/><br/>
<form>
    Highest Bidder: <%=highestBidder%><br/>
    Highest Bid: <%=highestBid%><br/>
    Logged in as: <%=username%><br/>
    Last bid: <%=bid%><br/>
    NEW BID: <input type='text' name='newbid'><br/>
    <input type='submit' name='submit' value='submit'>
    <br/><br/><br/>
    <input type='button' name='logout' value='logout' onclick='top.location="index.jsp"'>
</form>
</body>
</html>
```