**Database Application Development**

**CSC317 Database Systems II**

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**CASE 03 - Java and DBMS**

**Summary**

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This, by far, was one of the most rewarding assignments I’ve accomplished at Trident University. I had many struggles and setbacks but in Christ and through perseverance I was able to build a database program that incorporated JDeveloper’s HTML/CSS Designer, Java, and Oracle’s SQL Developer.

This first of many issues I tackled was installing JDeveloper. I had no prior experience with this IDE and it took me about 1.5 hours to download and install it. In the setup process, setting the environment variables was a little tricky because, I named the root directory for my Oracle database differently than what is assumed by the tutorials provided within the Case 03 assignment.

In attempting to import the ‘OracleDataSource’ object, I struggled for quite a while trying to figure out how to get JDeveloper to be aware of the necessary file paths. After restarting the machine and in further troubleshooting, I was able to fix this error in Eclipse but not so quickly for JDeveloper. After a considerable amount of research, I was able to point the Libraries and Class paths to the correct directory; thus, resolving the issue in JDeveloper.

In the beginning of chapter 3, I quickly noticed that Oracle assumes default settings for the tutorials. I’ve changed some settings on my machine due to the issues I had experienced at the start of the quarter in this class. The Port on my machine Oracle is set to listen on is 1522, not 1521. Additionally, my SID is set to ‘orcl’ and not ‘XE’. This modification also needed to take place when specifying the database URLs.

Because I’m using the Oracle Enterprise Edition, I found that the enabling the Diagnostics tool was far more of a chore than I was hoping for. After considerable research, I was able to find the assumed directory for the path to change the configuration of Oracle Enterprise, to enable the Diagnostics tool; however, I was unable to locate the *setOERDomainEnv.sh* file on my machine (“2 Post”, 2016).

In the steps to create a JSP page, I ran into an odd problem that I’m still not entirely clear on. The path that is given by default, within the JSP dialog box, is not correct. I ended up modifying the specific path by utilizing the browse button and navigating to the correct location for the files in which this new JSP page was to interact with. It wasn’t a major time factor for the assignment, but it certainly added a bit of confusion as the error is not logical.

In one of my first programming classes, we used Microsoft’s Visual Studios’ Forms to build programs. Other than playing around with Java’s Layout Manager, I have not had a chance to practice writing code with an intelligent Designer. This project certainly resolved that for me; although, I did have to take note of a step that I missed in creating a result set.

In the employees.jsp – Structure window, I missed clicking on the ‘page’ node and struggled to properly follow the instructions. After carefully re-tracing my steps, I was able to quickly get back on track and continue through the tutorial.

Once I had created a Scriplet and saved it, I found it challenging to go back and modify the code in that Scriplet. I could not find a way to open the Scriplet Properties window to modify the existing Script I wrote so, I simply switched from the Designer to the Source Code and made the appropriate changes to my code.

Upon testing the JSP page, my program ran without a single error. I was really pleased to see my database query displayed, dynamically, on my web browser. This is a feat that I’ve really been looking forward to accomplishing in my studies and look to enhance my knowledge in these areas in the near future.

On a side note, through curiosity, I ended up using the Database Navigator with IntelliJ’s WebStorm IDE and connected our Oracle hr database to it. Instead of Java, I decided to play with Golang and now have the beginnings of a full-stack Web program.

REFERENCES

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4 Querying for and Displaying Data. (2016). Retrieved March 03, 2016, from <http://docs.oracle.com/cd/E17781_01/appdev.112/e18805/querdata.htm#TDPJD148>