Part Five: Application Implementation and Testing

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- Total Points: 100
- Total Weight: 6%
- Due: Friday, November 28, 2012, in class

Description

In this part, you will implement and test your application program. Specifically, your tasks are the following.

1. PL/SQL Package

   You should create a PL/SQL package including at least one procedure and one function. These procedures and functions should implement some of the application functionality and be used as embedded SQL in your application.

2. Application Coding and Testing

   Implement your application program in Java/JDBC, Pro*C/C++, or some other language. Specific requirements of the program are listed below.

   (a) It should implement the functionality specified in the conceptual design of the application in (revised) Part One report. Specifically, it should implement functions for data update, various predefined or dynamic queries, and business rule enforcement.

   (b) It should provide either a menu driven or a graphical (including web) user interface. It should be user-friendly.

(c) The program should handle exceptions and errors gracefully.

(d) If you program in Pro*C/C++, at lease one subprogram should use a cursor (in addition to any cursor used in your PL/SQL package). If you program in Java/JDBC, this should be done as result sets.

What to Hand In

Hand in a well-formatted written final report include following items. (I will keep the final report on my file so you should make copies for yourselves)

1. Revised Report of Previous Parts

   Since this is the final report, it should be complete. Therefore, it should include a fresh copy of revised reports of ALL the previous Parts, ordered chronically.

2. Function Lists

   A list of originally proposed functions and a list of actually implemented functions.

3. Program Source Code

   A script of your PL/SQL package. and a copy of your program source code.

4. Script and Screen Shots

   Include a script that shows the compilation and execution of your program. You should show, within a user session, all functions currently supported by your application. If your program provides a graphical user interface, include some screen shots as well.

5. Summary Statement of the Entire Project

   You should include a section to summarize the team's activities during the project; discuss your experiences with this project; pros and cons of your design and implementation methodology, and aspects of the team work. You should comment on whether and how this project contributes towards your learning of database subjects and discuss possible future extensions of your project. Optionally, you may comment on how each team members contributes to the overall project. Please be specific and insightful.