Phase 2: Database Application Programming (30% of the overall project, 30 pts):

Phase III Grading

The grading rubric for phase I is:

(1) Category I: 15% self and peer evaluation* (individual)
(2) Category II: 15% from the summative report from each individual member** (individual)
(3) Category III: 30% system demo /presentation *** (individual)
(4) Category IV: 40% final group report **** (group)

*: Each team member will turn in the evaluation under their own account on webCT. Your score in this category will be based on the average score on the "Overall Team Evaluation" question from all team members.

**: Each team member will turn in their own summative report under their own account on webCT. Items to be included in the summative report include:

(1) List of items that you contributed in this phase of the project
(2) Evidence of your contribution, such as the draft that you worked out before group discussion

For phase III only: It is OK to claim that all items are collaboratively done and use the final group report as the summative individual report. But both group members must do so. If only one group member claim that everything is collaboratively done, and the other group member turn in his evidence of contribution separately, then the person who claimed that all work are collaboratively done will receive zero credit for this category.

***: You will be asked to demo your system on December 4th, or 6th. **The sign-up sheet is posted on a google doc, and a link to the doc is listed in webct->course content->notes.** Make sure you demo all bonus features that you have implemented. During the demo, I will ask questions regarding the design and the implementation of the system, and each individual member will be evaluated independently based on his answer to these questions.

****: A group needs to turn in only one report under any team member's account on webCT. Details regarding the report can be found on the next page.

Phase III Team Report

In Phase 3 you will finish all the coding that needs to be done on the database back end. The deliverables of this phase are:

(1) Phase 1&2 report with all revisions

(2) Phase 3:

   a. If you used any framework or tool to develop phase 3, add a link to it in your report.

   b. Summarize all applications that you have implemented. For each application, write a brief description about its targeted user group and functionality. Minimum requirement for phase 3 are described on the following page.

(3) Bonus feature (Optional): total bonus points can be up to 30 pts, some examples are listed as follows

   a. Automatic order: after a sale, if an item is under a certain quality, automatically create a order that that item to the vendor (5 pts)

   b. Sales report: for Manager only, generate a report that sort the total sales in a certain period by title, by vendor (5 pts)

   c. Receipt: for each sale, generate a receipt in a reasonable looking format that displays all the information that is related to the sale (5 pts)

   d. Employee of the month: Each month, automatically find the employee of the month by finding out the employee who has made the largest amount of sales. Report that results to the manager only. (5 pts)

   e. Others: talk to the instructor individually

(4) Source code:

   a. Source of sql script (includes triggers, procedures, indices, and constraints)

   b. Source of application code

(5) Conclusion: describe what you have learned from the project, and what would you do differently next time.

Submit all items as one report to blackboard (one per group) by **December 2nd (Sunday) midnight**.

- employee of the month generated continually by looking at employee's total sales for time period (last month)

Minimum requirement for phase 3:

1. Your must demo the interface for at least two different types of users/roles

2. If you are working on your own project, you must have at least three different applications (menu choices), and for the majority of the application, there should be at least two non-trivial sub-choices for each application.

3 You will not graded based on user interface design. Focus on getting all apps to function correctly with proper exception handling capacity.

4. If you are working with the music store project, you will find a list of required applications in the following. **Notice this list is a little different from what you saw when the project was first announced. Please stick to this version for phase 3.**

Applications For the Oracle Music Store

You are to develop a menu driven application system for the Oracle Music Store database using Java. The following are examples of some of the menus to be developed. All applications described below MUST be implemented. However, you may choose to add more functions.

*** Note: You may add more menu screens as necessary; the menus below are intended only as a guide.*

Oracle Music - Main Menu

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1. Music Applications

2. Ordering Applications

3. Sales Applications

4. Administrative Applications -- Access restricted to Managers ONLY

5. Exit

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Select Item:

For item 1 (Music Applications) in the Main Menu, another menu would appear as shown below, which allows a sales clerk to add a music title to the inventory, change information about any title (based on ISBN) and query the music title information.

Music Applications - Menu

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1. Add A Music Title

2. Query Music Information

3. Return to Main Menu

Select Item:

Each of these items would require further information about the music title to be entered from the user. Adding music requires all parameters of the title to be entered into the database. ***Note:** Changing music information stored in the database is not included for this project. To query music information, the system must prompt the user to enter the desired search criteria and then return the results in a tabular format.

For item 2 (Ordering Applications) in the Main Menu, another menu would appear as shown below, which allows a sales clerk to query the order data (based on order number, customer, or vendor), or place a new order.

Order Applications - Menu

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1. Query Order Information

2. Place New Order

3. Return to Main Menu

Select Item:
Each of these items would require further information about the order from the user. To query an order, the user must enter search criteria, and results of the query must be returned in a tabular format. To place an order, the order information must be prompted for and stored into the database; if the order is for a customer, then customer information must be stored also.

For item 3 (Sales Applications) in the Main Menu, another menu would appear as shown below. The first option allows a clerk to record the information in the database that a given music title(s) has been sold. Appropriate customer information is also stored. The second option produces six sales reports. Note that only managers are allowed to produce sales reports.

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Sales Applications - Menu

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1. Sell A Music Title(s)

2. Return to Main Menu

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Select Item:
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The first choice is continuously used at the cash registers. No customer information is required for a sale. A sale should allow for multiple music titles to be sold during one transaction.

For item 4 (Administrative Applications) in the Main Menu, another menu would appear as shown below. This menu allows the manager to add/change employee information.

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Administrative Applications - Menu

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1. Employee Information  -- Access restricted to Managers ONLY

2. Return to Main Menu

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Select Item:
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The first item would require further information. The system should ask whether the user wants to add new information or change existing information. To add information, the system should ask for input and store it appropriately. To change information, the system should first display the current information in the database for a particular record, then prompt the user to change the appropriate information, and finally, store the changes.