Instructions:

* No talking during the exam
* Instructor cannot assist in the exam
* The exam is an open book
* If you complete the exam early, you may be dismissed

**There are 9 print screens, each worth 11.1%**

Project #1 (Java-FX & Access Database or Derby Database)

Create a GUI design using Java-FX that will allow the user to enter the username with password, be sure to encrypt the password field. Also, use two labels for each with a button control. When the user presses the button control with the correct username and password, create a J-Option Pane that welcomes the name of the user and prints the screen below. Be sure to have the login page read from the database.

**#1 print screen the welcome message below here.**

**#2 print screen the Java code below here for project #1.**

When the user presses the OK on the J-Option Pane message box it redirects to the Employees page that will be created on Project #2.

Project #2 (Java-FX & Access Database or Derby Database)

Create a GUI design using Java-FX that will allow the user to enter the employeeID (place a primary key on this column), Last Name, First Name, Address, City, and State with Zip Code. Be sure to create labels and text fields for each.

For the State be sure to use a combo box and populate the combo box with any four states that will be in alphabetic order. Be sure to create a table that will contain the first SIX employees.

Write the insert, update, and delete statements that will communicate with the table. The update command will only update the employee’s Last Name.

**#3 print screen the confirmation after the insert button is pressed below here.**

**#4 print screen the confirmation after the update button is pressed below here.**

**#5 print screen the confirmation after the delete button is pressed below here.**

**#6 print screen the employee’s table below here.**

**#7 print screen the Java code for the employees class below here.**

Project #3 (SQL Script, relationships, and ERD diagrams).

Using SQL Script, create the department table as shown below: Enter any three random data into the new table. Remember, there is a relationship between the EmployeeID on the table below and the table above (employees table).

|  |  |  |
| --- | --- | --- |
| DeptID (place a primary key in this column) | employeeID (this column will act as the foreign key and reference the employees table) | DepartmentName |
|  |  |  |
|  |  |  |

**#8 print screen the SQL Script below here.**

Using SQL script join the two tables into one and print screen the output below.

**#9 print screen the joined tables below here.**

**Submit this document to the Module 12 Quiz.**