

ISTE-722 Database Connectivity and Access Practice Exercise 6 - Compiled Statements

Assignment Purpose: Practice writing generic code and working with prepared statements.

1. Modify your “database” class from the prior practice exercise:
 - a. Add a private method named “**prepare**” that accepts an SQL string and a list of string values, prepares the statement, binds the values, and returns a prepared statement.
 - b. Add a method named “**getData**” (in addition to ones you already have) that accepts an SQL string and a list of string values. This method calls the “prepare” method, executes the statement, and returns a 2-d data structure. If the query fails to run, return null.
 - c. Add a method named “**setData**” (in addition to one you already have) that accepts an SQL string and a list of string values. This returns an integer indicating how many rows were changed. This setData method calls the *executeStmt* method.
 - d. Add a method named “**executeStmt**” that accepts a string and a list of string values. The string that is passed in is a string representation of a prepared statement to be bound and executed. This method should call the “prepare” method, then execute the SQL statement and return a single integer value indicating the row count (or null on failure).
2. Modify your “Equipment” data object from the prior exercise:
 - a. Change the fetch, put, post, and delete methods to use the new getData() and setData() methods of the database class.
3. Modify your “main” class to:
 - a. Instantiate the equipment data object, set its equipmentId, call the data object’s fetch method, and then display the values to the user.
 - b. Change a piece of equipment data for the fetched record, then use fetch again to get and print change.