Lab 5

Goals for this Lab

1. Explore more use of JDBC
2. Create a text user interface for database interaction.
3. Consider how the MVC model fits databases.

Task Description

Your goal for this lab is to write a program that allows a user search for data within the database that we created and populated in the last lab. You will support search, delete, and count operations, but need to allow the user to select which column or columns they want to search, and what values or range of values they are interested in. How you choose to implement the user interface for this interaction is up to you, but you must make sure that it is reasonably intuitive (e.g. a blank line with no prompt and expecting a user to be able to write perfect SQL is not reasonable).

You only have to support the following columns to be selected on; latitude, longitude, depth, and mag. You should return all columns when displaying data.

Beyond the specification of behavior, the implementation details of this lab, like the others, is left up to you. If you have any questions or are unsure of what a good starting place for interacting with the user would be, please ask me.

You will be turning in your program that allows for search interaction with the database. Please be sure to test it yourself before turning it in.

Requirements

1. Program class must be named "USGSDataInteraction".

2. The following operations must be supported;

    1. Count (on specified columns)

        1. For values or ranges

        2. For single columns or multiple columns

        3. For no specified values or columns

    2. Search/Display (on the specified columns)

        1. For values or ranges

        2. For single columns or multiple columns

        3. For no specified values of columns

    3. Delete (on the specified columns)

        1. For values or ranges

        2. For single columns or multiple columns

        3. For no specified values or columns

Testing

This lab will be run and tested by hand. You will want to manually test your code before turning it in.