Java Web Development Project with SQL database design

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<u>Level</u>: Lower Division Undergraduate, Honors Project <u>Class</u>: CSCI-19A Object Oriented Programming in Java

Research Focus: Extend the academic curriculum to learn MySQL and Java Database Backend Programming, in the making of a personal project (My Event Manager). The development of the project will include the self learning of the use of JSP's, Tomcat Servers, JDBC Protocol, and Java as a backend development programming language. The research will focus on MySQL database administration and management as well.

Abstract:

The project includes an initial stage of research, about the use of the Java programming language as a backend development programming language for website applications. The final product, the 'My Events Manager' website, is designed with HTML5, JavaScript (ES6), and CSS, in its front end, using the Bootstrap CSS design library. Using Java Server Pagelets (JSPs), the front end connects and sends all information and data to the backend, which is connected to the local host server. Through the local host (running on a Tomcat Server), all data sent, analyzed, managed, and manipulated in the backend using Java, is stored and managed using MySQL. The backend programming is connected to the database using the JDBC (Java Database Connectivity) protocol. The final product, 'My Events Manager', includes two pages: an insertion page with information about the event (time, date, how many people, etc.) which will include an HTML form and submit information as data to the database on a click of a button. A second page will include the opportunity of display of all events stored, or to order in a specific method. Each specified query is flexible based on user request.