1. **Connection Pooling**

Originally, we used the JDBC driver manager to connect to the server. Now we use connection pooling and prepared statements in order to further optimize the server. Connection pooling optimizes the database because it maintains a cache of connections that can be reused when more connections are needed.

In order to enable JDBC connection pooling, we first needed to create a context.xml. This context.xml has two resources, one connects to the slave, and the other connects to the master. After that, we are able to create the context in our login.jsp file. Using the context, we get the datasource from the server and store it in a session. We use this datasource to create a connection to the server so we can execute queries. We use connection pooling every time we need to execute a query, and we are able to reuse it because we stored the context into a session. Some of the other files where we use connection pooling include booklist.jsp, checkout.jsp, bookpage.jsp, and search.jsp.