CreeperServlet.java

**Structure:** The basis of the server is built on a Create-Read-Update-Delete design with a ‘method’ (if-then statements) designated for each basic operation. The user interface implementations send objects to the server through URL requests. The URL requests are queried for the parameters and checked through the if-then statements to perform the appropriate actions and formulate the appropriate SQL queries. The SQL query results are then passed back to the user interface through a results object.

**Parameters:** The user interface’s URL requests specify the user’s desire to create, read, update, or delete the different objects in the database. The alterable objects are Song, Artist, Album, Playlist, and Member. These different combinations of “CRUD” and the objects are restricted based on whether the user is logged in as a member, and admin, or not at all.

**Application Assistance:** Every action in the server is implemented with error processing. The results object from the query contains an error object with is a detailed error message in the case of a faulty SQL query returned to the user through the webpage. This helps greatly with designing user interface applications in conjunction with the server.

*-See CreeperServletUML.jpeg-*