

Concept for **DBHost**, a resource management system

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The goal of the project is to allow different users to access a database containing employee and machine information, in an access limited and easy to use environment. The users would be authorized using a username and password. Every user will have their own access level, so commands can be limited for the right users only.

The program will be written in Java 8 for it's long support. The database will be managed by SQLite3 database engine. The connection of the Java program and the SQL engine will be done using the SQLite3 Dynamic Link Library and the Java Database Connectivity API. The SQL database will contain all data of the employees and the machines, along with the user authentication data (usernames and passwords).

The front end will use HTML and CSS descriptive language, the logical processing of the data and the functionality of the website will be written in JavaScript.

Communication between the front and the back end will be done using a REST-like architecture, where the server will not hold any information about the users' current state on the website, rather it will respond to different queries based on a unique login token that will be assigned to the user every time they login to their account.

Information, like login data and command query codes can be transmitted using the HTTP headers. Using this the backend can also set cookies for the front end to store data on the front end rather than the back end in a RESTful manner.

