Backend Architecture

The backend is basically constructed based on the multitier architecture with some additional modules such as middlewares to handle incoming requests. In addition, besides connecting to the MySQL database of the application, the back is also reponsible to communicate with services such as the Squizz server (for some authentication & authorization processes) and AWS S3.

In software engineering, multitier architecture or multilayer architecture is a client–server architecture in which presentation, application processing and data management functions are physically separated (Microsoft Team).

In our archiecture, instead of using only one DAO (Data Access Object) layer to connect to the database like in a tranditional multitier architecture, we have created two separate DAO layers named Resources and Repositories. The purpose of this action is to take advantage of use of ORM (object-relational mapping) frameworks in the Repository layer as well as use of optimized SQL queries used in the Resource layer. In addition, this makes us easier when implementing the application.

