CSCI 3308 Milestone 3: Database

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Database Management System

The database management system that Apollo has chosen is MySQL. This has been chosen due to its widespread use in industry and consequently its comprehensive documentation and available support resources. Additionally, MySQL provides reliable front-end integration as it is compatible with virtually every operating system and supported in essentially all web hosting services.

Apollo Database Architecture

Apollo will tentatively have one database with three tables: users, artists, and tournaments. All three of these tables will share an ID attribute as a primary key. This will allow for all users and artists to be uniquely identifiable so that specific attributes such as names, songs, and passwords can be associated with them across multiple tables. The users table will contain first name, last name, email, and password attributes. Both listeners and artists will contain these attributes. The artists table will contain artist name and song attributes. Only artists will contain these attributes, and functionality will be present in the user creation page to allow users to designate if they are an artist. Finally, the tournaments table will contain song, artist, and tournament rank attributes. This will allow for each artist in a tournament to be associated with their artist name, song name, and current tournament ranking.

Database ER Diagram

Shown below is an entity relationship diagram for the for the Apollo database architecture explained above.

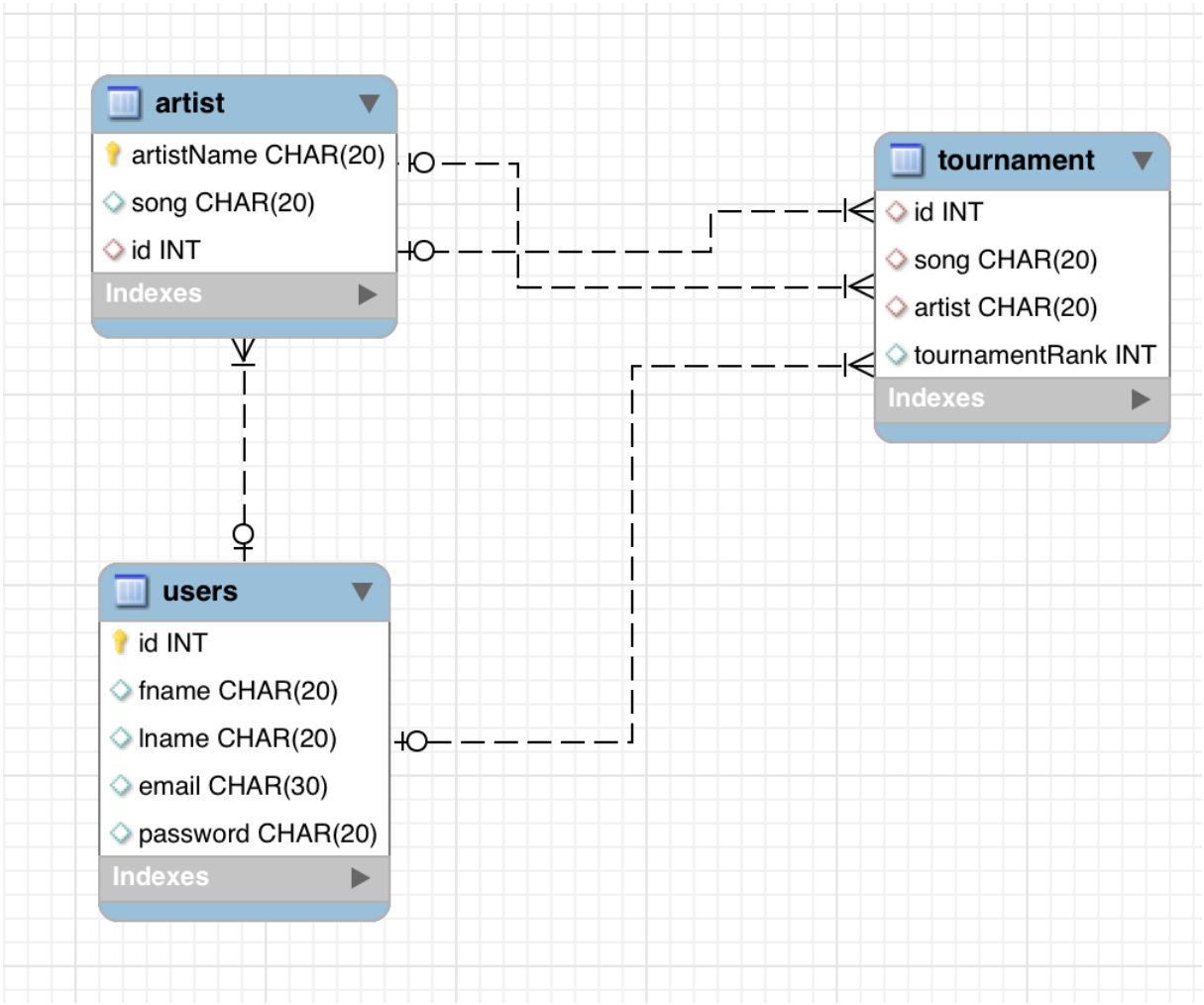

Figure 1. Apollo database ER diagram.

SQL Script Link

`https://github.com/taratani/Apollo/blob/master/ApolloDatabase.sql`