

**Department of Computer Science and Engineering
University of Notre Dame**

**CSE 40746 - Advanced Database Projects
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Final Project

Group 4 - Final Design

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Schema:

Users(USER_ID, USER_EMAIL, USERNAME)

Sessions(SESSION_ID, SDATE, WORKOUT_TYPE, USER_ID, NAME)

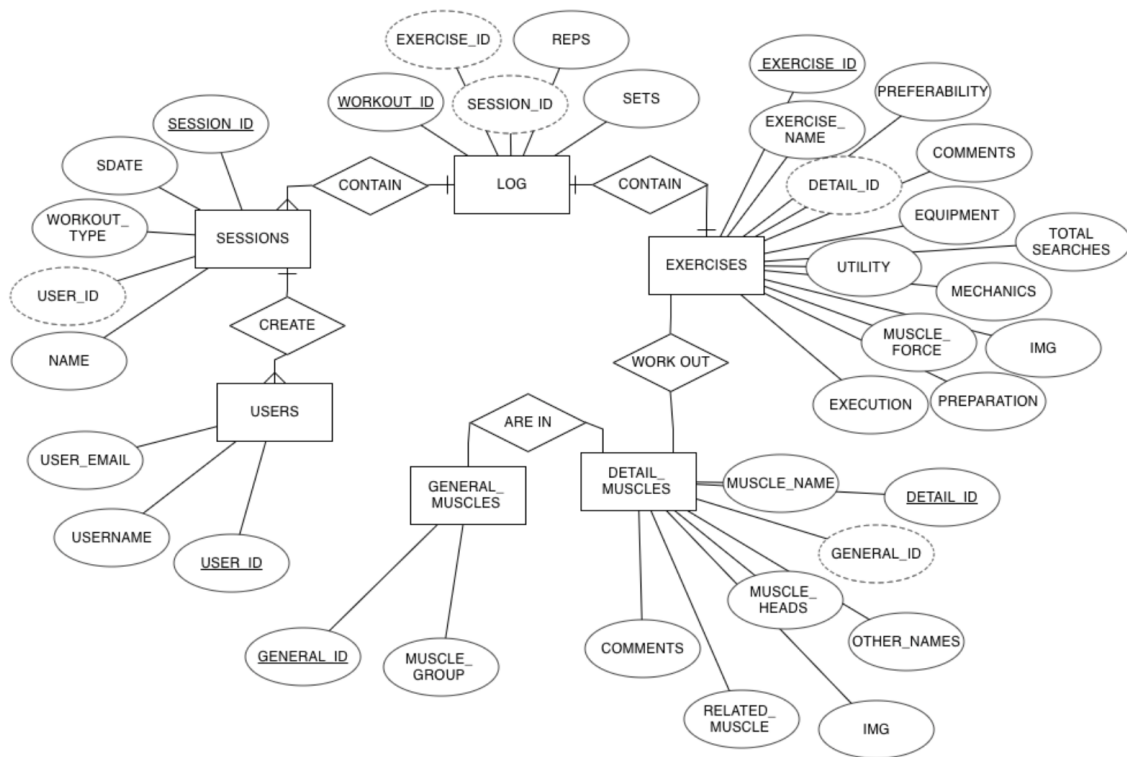
Log(WORKOUT_ID, EXERCISE_ID, SESSION_ID, REPS, SETS)

General_Muscles(GENERAL_ID, MUSCLE_GROUP)

Exercises(EXERCISE_ID, DETAIL_ID, EXERCISE_NAME, EQUIPMENT, UTILITY, MECHANICS, MUSCLE_FORCE, PREPARATION, EXECUTION, COMMENTS, IMG, PREFERABILITY, TOTALSEARCHES)

Detail_Muscles(DETAIL_ID, MUSCLE_NAME, GENERAL_ID, OTHER_NAMES, MUSCLE_HEADS, RELATED_MUSCLES, COMMENTS, IMG)

ER Diagram:



The final and complete edition of our database is relatively consistent with our updated design in terms of the amount of tables and data kept in each. We have decided to expand the exercises and muscles tables to include more information about the specific exercise or muscle that we feel would be helpful to the user's understanding including images, comments, and detailed instructions on how to complete the exercise. Users will be entered into the database upon the creation of their account where we securely store an ID, username, and password. All of the information about the muscles and exercises will be available through the catalog pages in which the user can filter through or search directly for a specific exercise or muscle that is in our database and all of the necessary information will be displayed on that page. Users will also be able to request a workout that is recommended based on their type of workout that they want to get done that day or they can create their own by combining different exercises in the catalog. Upon completion of a workout, the user will be able to log that specific session in order to track their progress and visualize how much they achieved that day. Once a session has been created, it will be added to the user's log where every session will be stored and can be used to access. This feature will be very important to the user so they can track their progress and reflect on their efforts thus far. We hope our application will assist users with staying consistent and informed on their journey to chase their gains.