

Team: Buff^2s

Team Members: Willem Mirkovich, Daniel Taylor, Tyler Tokumoto, Carlos Salazar, Aaron Lu, Casey Durham

Milestone #4

General Overview

Our Team has selected MongoDB as our database software for our workout website. It uses BSON, a very close relative to JSON in the NoSql family. It includes an extensive python library for CRUD operations and database setup, as well as an fast and easy way to create and maintain a local instance of the database. It will be running on a Google Cloud Platform remote machine, where we will also be hosting our website.

Link to Database Scripts

<https://github.com/tyto8880/buffsgitbuff/tree/master/databaseScripts>

Visual Representation of the Database Design

The next page contains a visual representation of the database layout.

MongoDB database

MongoDB uses BSON, which is very similar to Json databases. It follows key value pair organization

Bufs
Equipment
Exercises
Users
Workout
Muscles

Bufs is a database of collections, where a collection is a collection of objects under a specific category

Equipment	
PK	<u>equipment_id</u>
str	equipment_name

Exercises	
PK	<u>exercise_id</u>
str	exercise_name
ary	muscles
ary	equipment

Users	
PK	<u>user_id</u>
str	username
str	password
ary	favorite_exercises
ary	favorite_workouts

Workouts	
PK	<u>workout_id</u>
ary	exercises
str	workout_name

Muscles	
PK	<u>muscle_id</u>
str	muscle_name

All FK relationships are matching in color. For example, muscle_id in the array muscles is a FK to muscle_id in Muscles collection

muscles	
	muscle_id

equipment	
	equipment_id

favorite_exercises	
	exercise_id

favorite_workouts	
	workout_id

exercises	
	exercise_id