Sat, Apr 13th 2024

COMP3005 - Final Project V2
BONUS Features for Relational Database Application

As approved by Prof. Abdelghny, we have implemented an extensive web application using a server-client based approach which counted as bonus to this project submission. Beyond the usage of a website, we additionally hosted our PostgreSQL database on Heroku cloud hosting platform using the Heroku postgres add-on.

We decided to implement a website to enhance the user experience of navigating a fitness club, and performing duties such as user data information, and updating the state of the fitness center. Our implementation allows for three types of users and gives functionality to each user as described in the problem statement.

The Momentum Fitness Center website is a full stack web application that uses Node.JS and Javascript for the backend server-side code to process different types of user requests and add functionality to the different web pages within the website. We use the “Express.JS” Javascript library to handle post and get requests and use the “pg” library to connect to and make changes to the Heroku cloud hosted instance of our PostgreSQL database. Additionally, we used HTML and CSS to create and style our website by creating different views for each type of user and the functionality they have within the system. Moreover, we add functionality to the HTML elements in user-side Javascript code separated for each of the three users to send requests to the server and get back the server queried data from the database to update appropriate webpage. In total we have 22 files of HTML/CSS/Javascript to write and deploy the implementation of the Momentum Fitness Center website.