## Software Architecture

## Group 17

For our fitness journal application, we decided to implement the Client-Server Architecture. Our prototype runs on an internet browser and behaves like a website. In this case, the prototype website is acting like the server, waiting for user's input to perform its functions. The client is the user who visits the website and inputs their daily logs. After the website is accessed, previously stored journals can be accessed and displayed.

We felt that the Client-Server Architecture was the best fit for our program because of its request and response communication type. In our program, the user sends a request by inputting a journal entry, fitness log, or requesting a previous day's information, then the program responds by saving the information and displaying the saved information. This format relates easily to our Object Oriented design paradigm. The different objects in our paradigm represent the different types of data that would be retrieved by the program. Our design paradigm displays the different requests that can be done by the user and how the program responds to each request.

Our program starts with a request to access from the user and a response from the program of the homepage display, which consists of the previous journal log entries of the week. From there, the user can request to input different types of logs, like workout, water, food, mood, or a generic journal entry. The program then responds by saving the input and then displaying the saved information. Therefore, because of this back and forth request and response communication, we found the Client-Server Architecture to be the best fit for our program.

