Capstone Final Project Idea Document

**Instructions: Answer the following questions as detailed as possible (think paragraphs…not words or sentences). It is important that I understand everything. If you think your answer to any question could be vague, then provide more detail. Remember, spelling and grammar count.**

Team Name: Team B

Student(s) Name: Jason Cope, Adam Broderick, Cole Whitaker

Project Name: FitItIn

**•** Provide a description of your project. Be as detailed as possible.

The application will allow a user to set and follow a dedicated plan to meet their fitness goals. They’ll be able to create their own workout plans, receive progress reports, track their dietary goals and log their workouts with detailed exercises and a responsive layout. Access to informational videos will be available to the user based on the exercises they want to incorporate within their workout.

**•** What problem or need does it solve? Technology should only be developed if it is a good investment. What tangible or intangible benefit can you foresee once this project is implemented?

This application aims to give users who want to analyze their fitness routines a simple place to keep track of everything and learn how they can improve their results. This would be beneficial to the mass amount of people who are interested in fitness and want to get the most out of their training. This project would provide people with the ability to stay consistent without having to think twice about what they are doing or why they are doing it as they could see their progress with use of the application and receive personal benefit.

**•** Provide a short explanation of how you see the finished application working. Note: it is expected that the project will incorporate the 4 aspects of crud.

A user signs up to use the service, they are then able to input their personal fitness information like height, weight, age, and then choose their goals. Their goals could be something like lose 10 lbs. or gain 10 lbs., maintain their weight, get stronger, etc. After they log their info and choose their goals they then have complete access to use the app how they see fit. They could schedule days to train and for each day they can set the exercises they want to do for that day and how much per exercise they need to do. When the user accesses the scheduled day during their training session they can log what they did and how they felt on each exercise, they can also access informational videos if they need to see how to do the exercise before beginning. When the user logs a scheduled workout as complete the application will store the information gathered and update their progress reports. A user can change their scheduled days and all information for that day anytime before logging the day as complete. The user will also have access to a calorie/macro tracker so they can log the food they’ve eaten in the day to reach their dietary goals. Once logged for the day, the system will update their progress reports with the gathered information.

**•** This project requires you to collect requirements from a user or a representative of users who will ultimately use the application. Who will you gather these requirements from and how?

Requirements would be gathered from people who spend time training in gyms or at home. The focus would be on what they want out of a fitness application for their personal benefit. We would gather these requirements through surveys and prototypes we could show to people that we could gain feedback from.

**•** What risks do you see in pursuing this project? Meaning, are there risks that could prevent you from completing this project successfully?

A large risk that could occur is improper calculations of gathered information that could lead to a user seeing incorrect data analysis in their progress reports. Tying into this risk, a normalized relational database is required to pull correct data and display that data correctly. Without proper database procedures and normalized tables this project would likely not succeed.

**•** What technologies do you plan to use to complete this project? That is, .NET, PHP, SQL/Server, etc???

MySQL for database management, Python for the backend, and React for frontend. We are all fairly comfortable with Python, we would have to learn how to use React.

**•** Is there any additional considerations that should be discussed about this project prior to approval?

Does this project provide enough to be feasible? Do we need to purchase a database hosting service to store data or can we use a locally stored database on one of our machines?