BUSINESS CASE

Proposed Project	FitBro
Date Produced	September 25, 2024
Background	In today's busy environment where many people need more time, getting a good workout can be challenging. This, of course, provides many issues, with inconsistent workouts and suboptimal results to those looking to improve their health. Traditional workout tracking methods such as manual logging or memory don't alleviate the problem due to the amount of time needed, or users may simply forget their workouts. A workout tracker application would allow users to focus on the workout while assisting them in time management and gym retention.
Business Need/ Opportunity	FitBro the workout tracker application will reduce the time needed to log in a workout for its users, while also motivating and increasing retention for its users in the gym. The project will be successful if the application is easily operable by many different users and can work as intended. This app will further be successful if it can be used by current gym goers and anyone who is looking to get into the gym.
Options	A. Perform the Project with agile based development method and local hosting a. Development of the project is done through an agile SDLC B. Perform the project with a waterfall-based development method a. Development of the project is done through a waterfall-based SDLC C. Outsource project development to third-party a. Development of the project is outsourced D. Don't go forward with the project a. The project isn't taken forward

Cost-Benefit Analysis

A. Perform the project with agile based development method

Costs

- Less predictable for delivery timelines as it can have a change of requirements
- Communication overhead requires a lot of back/forth
- Increased risk of spending time in maintenance of the features

Benefits

- Flexibility as it can be changed per meeting with client as they are more frequent
- Customer-centric approach
- Reduced risk, with small changes/steps at a time mistakes can be caught quite

early on
- Quick feedback from reviews and customers due to incremental time boxes.

B. Perform the project with a waterfall-based development method

Costs
- Slower development time due to the waterfall method requiring each step to be complete before advancement
- Slower development due to a large focus on documentation, and overall documentation overhead
- Testing occurs much later in development, possibly leading to major issues and halts in the project
- If a stage is passed and an error is found, will have to wait to next iteration to fix the issue causing further delay in the project
- Rigid structure making changes harder to implement to previous phases

Benefits
- Proper documentation ensures that when developer turnover occurs, new developers can quickly adapt to issues and develop solutions
- A structured approach to development makes it easier to manage the project
- Less issues at end of project/deployment due to the structured approach to the project
- Easier to set delivery timelines

C. Outsource project development to third-party

Costs
- Indirect control over the project, not direct control over any changes
- Subject to mass communication and need to be in contact
- Can not confirm 100% what state/issues the project has
- High costs and not able to set prices based on salary but now on the third-party

Benefits
- Ability to focus on the marketing of the product rather than development
- Can set design team to work on a new project and not have manpower expended on this project, 2 projects in development as opposed to one
- All risk falls under the third party and cloud hosting and poses no liability

D. Don’t go forward with the project

Costs
- Revenue generated from the creation of the project

Benefits
- Ability to focus and create a different application/project

Recommendation

We recommend Option A (Perform the project with agile based development method) from our Cost-Benefit Analysis and after further investigation. This is because an application created with this approach will have features that have been adjusted and changed to perfection after many iterations. We also believe it is enough to satisfy our business needs without increasing development overhead, costs, and time spent on this application. We think applying the agile development model is the best fit, due to the project's size and our allocated time. As we

increment over each part in the project, we set the iterations to only last a couple weeks so it fits in the constrained time frame. Compared to the waterfall model, it is also easier to receive feedback due to the iterative nature of the agile model. Since we work with the customer representatives quite closely, it allows us to develop changes and adapt the project to the customers' liking.

As for considering the design constraints by utilizing the agile method we also hope to reduce development costs by creating a customer/stakeholder-approved project with the faster feedback cycle. For regulatory compliance, we are going to ensure that the user’s data and health information is safe behind a secure login/authentication system. We plan to make the app as reliable as possible by implementing aspects such as automated backups for saved workouts and running the application through multiple tests to ensure that commonly used features are running smoothly before it is released to the public. As for societal impacts, we want to promote wellness and health to make a workout more streamlined and manageable through the app's functionality.