CSC 3380

Project Proposal Document

for the

Atlas Strength Shop Application

by

Matt Vicari

Jaden Hebert

Kobe Johnson

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Development Team

Project Manager	Matt Vicari
Front End Developer	Jaden Hebert
Back End Developer	Kobe Johnson

Client Background

Atlas Strength Shop is a 24 hour gym in Baton Rouge, La that specializes in the sport of Strongman. Cameron Ray is the owner and primary coach of Atlas. He is also the Louisiana State Representative for United States Strongman, one of the major governing bodies in the sport. He enjoys bringing new people into the sport and teaching them; however, because of his full-time position in the Louisiana National Guard he cannot be present to help new members at all times.

Executive Summary

Strongman is a rapidly growing strength sport that is comprised of many complex and dynamic exercises. This requires special equipment, such as logs and stones, and specialty gyms, such as our client Atlas Strength Shop. Learning these exercises can be a daunting task for new members of the gym. Performing any one of the exercises incorrectly can lead to permanent injury. Unfortunately, due to preconceived notions, new members are too afraid to ask experienced members for help. Sometimes, because our client is a 24 hour gym, there is no one around to offer help. This presents a massive barrier to the sport of Strongman. Thankfully, there are videos on Youtube that demonstrate these exercises; however, a new member would not be able

to tell if the demonstration is accurate. This causes the new member to spend too much time searching for reliable information instead of training and learning.

The Atlas Strength Shop App will solve these problems by providing quick access to accurate demonstration videos made by the gym owner himself.

There are currently no direct competitors to the Atlas Strength Shop App. This presents a major opportunity for the gym owner to stand out as the only Strongman gym with a digital encyclopedia of all the Strongman exercises.

The application will be developed using the core web development languages (HTML, CSS, and JavaScript) and the information will be stored on a remote server hosted by Amazon Web Services (AWS)

Gap in the Market

Currently there is no software that catalogs and demonstrates the exercises in the sport of Strongman. Youtube provides the only archive for demonstrations of these exercises. However, a gym member would have to find a video on their own phone on Youtube, and hope that the demonstration is accurate, if at all helpful.

Gym owners and coaches, such as our client, would greatly benefit from having an easy reference for gym members. The members would be able to access video demonstrations from the coach, along with text explaining cues to focus on during the exercise.

Meeting the Market's Needs

The Atlas Strength Shop App will provide our client with a powerful teaching tool to new members and existing members who are new to the sport of Strongman.

Implementation

Management

The Atlas Strength Shop App will be managed by its contributors Matt Vicari, Jaden Hebert, and Kobe Johnson

Development

The Atlas Strength Shop App will be developed using the following technologies:

- **Frontend (User Portal)**
HTML - The structure of the web application for the user portal
CSS - Provides graphic design for the user interface and experience
JavaScript - Provides interactivity by bridging the user portal with the exercise database in SQL.

● **Frontend (Admin Portal)**

HTML - The structure of the web application for the admin portal

CSS - Provides graphic design for the user interface and experience

JavaScript - Provides interactivity by bridging the admin portal with the   exercise database in SQL.

● **Backend (Exercise Database)**

SQL - Database language for inserting and retrieving exercise data

AWS - Amazon Web Services server where the exercise data is stored

Marketing and Distribution

The app will be free to the members of Atlas Strength Shop. It will be used as a selling point for the gym itself. Atlas Strength Shop will be the only non-commercial gym in Louisiana that has its own custom made application.

Monetization

The app will be free as long as it is exclusive to the members of Atlas Strength Shop.

The Problem and Our Solution

The problem with current fitness applications is that none of them cater to the sport of Strongman. New members are too afraid to ask for help, or feel like they are bothering someone when they want to learn a certain Strongman exercise.

The solution is the Atlas Strength Shop App which is an encyclopedia for Strongman exercises. It will provide quick access to highly detailed and accurate demonstrations made by the owner of the gym.

Industry Need for Our Technology

Strongman is a quickly growing strength sport, but the exercises can be very difficult to perform safely and efficiently. People who are new to the sport need a quick and accurate reference.

Market Analysis ⁄ Primary Market

There is currently no direct competition for this application. Youtube is currently the only application that can act as an archive for Strongman demonstrations; however, a new member will not be able to determine if the demonstration is accurate, if helpful.

This application is being developed specifically for our client.

Competition

Youtube is the largest video hosting service. While it is not directly competing against our application, it is currently the only viable archive for Strongman demonstration videos.

Development Strategy

The application will be developed one component at a time as to not overload the development team. This project is a learning experience for the development team. It is their first time developing a professional application from the ground up. The project manager is the only team member with experience in the languages needed to successfully deploy the application.

Research Stage
In this stage, the development team will primarily spend their time becoming familiar with the languages required, and how to have a web application interact with a remote database.

Component Stage
The individual components will be developed and tested. The components to be developed are the user portal, the admin portal, and the exercise database.

Integration Stage
The components will be integrated and tested. At this stage, both the user portal and admin portal should be able to interact with the exercise database.

Deployment Stage
The application will be given to our client for user testing and feedback.

Barriers

The challenge of successfully implementing the Atlas Strength Shop App will come from:

- Lack of knowledge of the programming languages required
- Lack of experience working as a development team
- Lack of time due to responsibilities in other classes

Critical Risks

The primary risk in creating the application is that the members of the gym may not find it helpful because it can only work on one designated device in the gym. Full scale Android and iOS app development is not feasible for the development team at this time.

This risk can be mitigated if our client can set up a device that is only used for the application, and this device is clearly visible in the gym.

Interview

The following interview was conducted in-person with Cameron Ray on 23 September 2021:

Why is it difficult for new members to learn Strongman?:

Strongman is a very dynamic strength sport. Powerlifting is simple to pick up because there are only three movements, and Olympic weightlifting has more of

an emphasis on athleticism than raw strength. Strongman events [exercises] are uncomfortable and awkward, making them very difficult to learn.

How often do you interact with new members?

Not as much as I would like! I am always available on Facebook Messenger to answer questions they may have, or to critique a video of them doing the exercise. But I can't always answer their questions immediately.

Would you be able to make video demonstrations for these exercises?

Yes! I've always wanted to, but never had a good way cataloging them so that people can instantly find them, besides just throwing them on the gym's Youtube page.

Is there any other type of information that you would like to have with the video for a particular exercise?

I would like to be able to have a small section below the video that lists the major body cues while doing the exercise, and also how to avoid injury.