LiftX

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Software Engineering course project

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Preface

This is a proposal for the LiftX project for partial fulfillment of the requirements of a Software Engineering course (CSC431) project in the department of Computer Science at the University of Miami.

This proposal provides the scope and context of the project to be undertaken. It details the intended user group and the value that the system will have to them.

The intended audience of this document is the course professor and teaching assistants so that they can determine whether the project should be approved as proposed, approved with modifications, or not approved.

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1.0 Overview

1.1. Purpose, Scope and Objectives

- The purpose of this project is to provide users a simpler way in order to track their progress in their weightlifting routines. With LiftX's easy to use interface, users will be encouraged to continue their weightlifting routines rather than abandon them in frustration. LiftX would be useful to people who are weightlifting enthusiasts and appeal to people who are looking for a way to get into weightlifting itself.
- LiftX will be used through a web application and can be accessed through either a desktop or laptop and we will also be implementing a more mobile-friendly version of the website so users who wish to access the application through the phone can do so. The user will have plenty of freedom in terms of wherever they would like to use the application, be it at home or at the gym. With regards to hardware, the user will only need a computer or phone that can access the internet. With regards to software, LiftX will only be accessible through a web browser. Frontend wise, we plan to implement it using languages such as HTML,CSS and JavaScript. Backend wise, we plan to implement it using Java and C.

1.2. Project description

- LiftX is a platform that enables users to quickly track their progression on weightlifting equipment. Designed with beginners in mind, LiftX will provide the structure and motivation users need to stay on track with their exercise goals. The United States is in the midst of an obesity epidemic with over 40% of Americans being clinically

overweight, according to the CDC. To reclaim their health and confidence, many in the US turn to local gyms to meet their health needs. Unfortunately, many of these resolutioners fail to meet their health goals because of a lack of ongoing motivation and structure.

- LiftX will help solve this problem by offering users an easy to use interface that allows them to track their lifting progress. As a user goes to the gym, they are able to input the reps, sets, and weight of a particular movement. As the user continues to log their workouts, LiftX will provide them with a visual graph of their progression both holistically and by exercise. Data visualization will be a key point in our software engineering process to ensure results are easy to read without any technical graphing experience.
- LiftX will include graphs to help the user visualize their progression. We will be writing a program to take the input of the user and predict the next steps in their progression. We will be using already existing software for the graph visualization.