A Recommendation System for Personalized Workout Routine and Caloric Intake Calculator based on Body Composition Readings

A dissertation by

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Abstract

For the past few decades the fitness industry has been booming. More people have embarked on a fitness journey to better themselves and to stay fit. However, with this comes the problem of information overload. With easy access to the internet, there are way too many resources out there with regards to fitness advice. This applies for finding a workout routine online as well. With the abundance of information available, it is hard for a person to make a decision and to find a workout routine that would do them well.

In addition to there being way too many routines online to choose from, almost all the routines that are freely available are generic. This leads to the workout routines available online being inefficient in making a person reach their fitness goals. A system is proposed that would generate a workout routine based on user specific data such as body composition readings and user preferences. The system also calculates the daily caloric intake requirement for the users to achieve their fitness goals.

Through expert evaluation it is made evident that the system does a great deal of personalization when generating the workout routine and also calculates the daily caloric intake value accurately as well.

Keywords:

Workout Recommendation, Calorie Calculator, Workout Personalization