

## Software Engineering – Group project work

### Idea paper

#### GROUP- 09

### **Fitness Management Application**

Type: Application for managing and preparing proper fitness plan

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### **IDEA DESCRIPTION**

The basic idea of the project is to develop a software application that can help the gym trainers to understand their customers well and help them to achieve their fitness goals fast. Data from the customers and their respective fitness bands are collected and analyzed in-order to understand their body and their responses to the training. The results will be used to formulate a perfect training plan that suits that specific customer.

### **FEATURES INCLUDED**

Feature 1- Basic authentication for the trainer

Feature 2 - Allows the trainer to ensure that every customer follows their training plan properly and it also allows him to evaluate every customers' training consistency.

Feature 3- Allows the trainer to evaluate the quality of various activities performed by all the customers by checking their respective sensor data. All these sensor data can be visualized in the form of graphs for better understanding.

Feature 4 - Allows the trainer to create a new training plan for all the customers based on their previous training activities and the training plans can also be saved for future reference. It also notifies the trainer to create a new training plan once the existing training plan expires.

### **Main objectives of the Application:**

- This application allows the trainer to ensure whether the customers follow their training plan properly. It also helps us to monitor the total number of hours the customer trains for any given week and ensure that the workouts are performed consistently.

- The quality of training performed by all the customers can be monitored carefully by analyzing the data from various sensors in their respective smart bands. In the case of “Cardio Training” the trainer can monitor the improvements made by all the customers by analyzing their heart rate over a period of time. The body impedance data of respective customers can also be visualized graphically for understanding the body’s responses for the training.
- The trainer can make use of all the available data of that particular customer to prepare a suitable training plan for him/ her. Various training plans of all the customers will be handled for future reference. When a training plan expires the trainer will be notified automatically for the preparation of a new one.