**Project summary**

**Overview:**

My project is based off a fitness software that helps the user understand there fitness goals. It generates the user a workout, diet, daily calorie intake plan completely customizable to the users specific details. This system lets them track their progress, plan, diet and workout history too.

**Goal:**

The goal of this project is to build a user friendly fitness management program that helps the user achieve their health goals based on the information about them provided. It will calculates there data scientifically to generate the perfect program fitted for them.

**Summary of Classes:**

**Abstract Classes:**

* Exercise
* FitnessPlan

**Interfaces**:

* FitnessService

**Superclasses**:

* User
* Meal

**Subclass**:

* CardioAndStrengthExercise
* WorkoutPlan
* DietPlan

**Final Classes**:

* ProgressTracker
* MealService

**Utility Class**:

* ActivityTracker

**Assignment brief**

I completed the project to the best of my ability and am pretty confident I outlined all criteria. All classes and interfaces are labelled above. I used constructors in many if not almost all classes. Properties and public and private visibility modifiers are used. Accessor methods such as getters and setters are set in the program. I used packages and added classes to them. Static and instances are used. Class hierarchies are used. Interfaces are used with WorkoutService class and DietService class to ensure both provide methods for generating workout and diet plans.

Enums not used.

**General Project assessment criteria:**

I feel my project outlines all the reasons stated in the brief for this section.

**Testing:**

The bmr and tdee methods were tested thoroughly with all types of user inputs. The program recognises the right number and word input of sections. The diet and workout plans were each sex were both tested to deliver the correct plan based on the users information.

**How my project works:**

I created a program to help users with their fitness goals. My program starts off my gaining information on the user, name, weight, height, sex, age, and activity level. It uses this info to calculate daily calories intake with the bmr and tdee formulas (references). Then based on the users weight, it generates a diet and workout plan for the user to use. It will then store this data into a progress report at the button.

**Summary:**

My program successfully implements all requirements and compiles how I planned. The user is able to easily use this program and it delivers the perfect fitness plan suited just for them.

**References:**

* https://www.diabetes.co.uk/bmr-calculator.html