EECS3311 – Echo fitness appSoftware Design Document

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| **Version** | **Date** | **Author(s)** | **Summary of Changes** |
| 1.0 | 13/10/23 | Khoa Tran | Document created, general structure outlined, project title pending. |
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# Introduction:

**Purpose:** The goal of the project is to create an application that tracks and calculates a user’s BMR level, BMI level, calorie intake, and nutrition goals.

**Overview:** The software must be able to handle the following use cases.

1. *As a user, I want to be able to create a profile in the application.*
2. *As a user, I want to be able to log my diet data in the application.*
3. *As a user, I want to be able to log my exercise in the application.*
4. *As a user, I want to be able to visualize my calory intake and my exercise over time.*
5. *As a user, I want to be able to visualize my daily nutrient intake.*
6. *As a user, I want to see how much weight in fat I will lose under my current diet and exercise pattern.*
7. *As a user, I want to know how well my diet aligns with the Canada Food Guide.*

**References:**

* BMR Calculator Formula: <https://www.calculator.io/bmr-calculator/#the-formula-of-katch-mcardle-3>
* BMI Calculator Formula: <https://www.calculator.io/bmi-calculator/>
* Total Daily Energy Expenditure: <https://www.verywellfit.com/what-is-energy-expenditure-3496103#toc-tdee-calculator>

# Major Design Decisions:

# Sequence Diagrams:

# Architecture:

# Class Diagrams and Initial Implementation:

# Design Patterns:

* Structural Patterns:
* Behavioral Patterns:
* Creational Patterns:

# Activities Plan, Product Backlog, and Sprint Backlog:

**Group Meeting Logs:**

# Test Driven Development: