Fitness and Diet Tracker

Group 14

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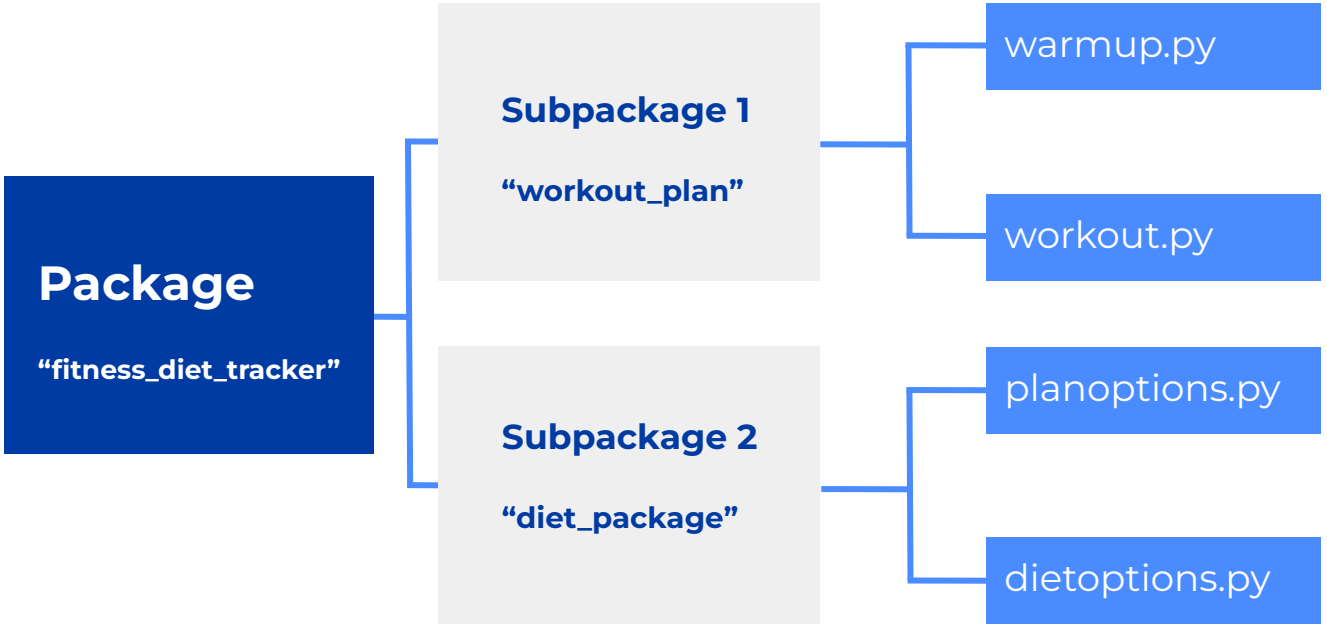
Introduction



Sub-Package 1 Module 1 (warmup.py)

- The WarmUp class is responsible for creating a personalized warm up routine based on the users preferred workout type
- Each method in this class returns a warmup routine that has to be performed before beginning the workout
- This module is important because warming up before working out decreases the risk of injury

Functions

“generate_athlete_warmup”	The athlete function returns warmups associated with athletes such as **jogging, jumping jacks, and stretches**.
“generate_strength_warmup”	The strength function returns warmups associated with strength training such as **light weight curls, light shoulder presses and body weight squats**
“generate_bodyweight_warmup”	The body weight function returns warmups associated with body weight exercises such as **incline push ups, body weight squats, and stretches**

Sub-Package 1 Module 2 (workout.py)

- The workout module is responsible for creating a full body workout routine according to the users preferred workout style
- The user has a choice of selecting for the amount of time they are going to spend working out (0-30 min, 30-45 min, 45-60 min)
- This module also provides the user with youtube video links as a guide so the exercise can be done correctly and safely

Functions

“generate_intensity_plan”	The athlete function returns workouts associated with **speed/intensity** such as plyometrics, conditioning, and push pressing
“generate_powerlifiting_plan”	The strength function returns workouts associated with **power lifting** such as bench press, barbell squats, and deadlifts
“generate_calisthenics_plan”	The body_weight function returns workouts associated with **calisthenics** such as push ups, pistol squats, and pull ups

Sub-Package 2 Module 1 (planoptions.py)

- "planoptions.py" serves as a module within the fitness_diet_tracker package with the primary purpose of aiding fitness planning.
- The included "PlanOptions" class offers functions to calculate Body Mass Index (BMI), determine Total Daily Energy Expenditure (TDEE), and adjust user’s caloric intake.
- This module plays a crucial role in providing foundational calculations for personalized fitness and diet plans.

Functions

“calculate_bmi”	Calculates the **Body Mass Index (BMI)** for both males and females.
“calculate_tdee”	Computes the **Total Daily Energy Expenditure (TDEE)** by multiplying the calculated BMI with the activity level multiplier.
“calculate_target_cal”	Adjusts caloric intake by **adding or subtracting** the necessary **calories** based on the user's chosen weight goal, whether it's gain or loss.

Sub-Package 2 Module 2 (dietoptions.py)

- "dietoptions.py" is a module within the fitness_diet_tracker package, featuring the "DietOptions" class inheriting from the "PlanOptions" superclass.
- Its core function is to generate personalized meal plans based on user dietary preferences.
- The module includes specific functions for generating meal plans tailored to vegan, vegetarian, or meat-based diets, offering users a comprehensive approach to fitness and nutrition.

Functions

“generate_vegan_meal”	**Generates** a personalized **meal plan** tailored for individuals following a **vegan** diet.
“generate_vegetarian_meal”	**Generates** a personalized **meal plan** tailored for individuals following a **vegetarian** diet.
“generate_meat_meal”	**Generates** a customized **meal plan** suitable for individuals with a preference for a **meat-based** diet.