

FITNESS TRACKER USING JAVA

In recent years, the integration of technology with health and fitness has revolutionized the way individuals monitor and manage their wellness goals. Fitness trackers, in particular, have become indispensable tools for health enthusiasts, athletes, and everyday users striving to lead healthier lifestyles. These devices and accompanying applications offer real-time insights into various aspects of physical activity, and overall wellness metrics.

The development of fitness tracker applications involves leveraging programming languages and frameworks that enable robust and efficient data collection, analysis, and presentation. Java, with its versatility, performance, and widespread adoption, stands out as a powerful language for creating scalable and feature-rich fitness tracking software.

The application has the feature to calculate calories burned and provide us with the recommended calories and day to achieve the calories. The key features of a fitness tracker is its ability to monitor the calories you consume and burn throughout the day. By inputting your height , weight , age , activity level into the tracker, it can provide a comprehensive view of your daily calorie burned. This information is crucial for those looking to manage their weight effectively.

Body Mass Index (BMI) is a measure used to assess whether your weight is in a healthy range for your height. Fitness trackers often incorporate BMI calculations based on your height and weight input. This feature allows you to quickly gauge whether you are underweight,

normal weight, overweight, or obese according to standard BMI categories.

$$\text{BMI} = (\text{Weight in kilograms}) / (\text{Height in meters})^2$$

Your fitness tracker can provide insights into your BMI trends over time, helping you set realistic weight goals and track your progress towards achieving them.

Based on your unique profile (age, gender, weight, height, activity level), fitness trackers can generate personalized recommendations for your daily calorie intake. These recommendations take into account your fitness goals, whether you aim to lose weight, maintain weight, or build muscle.

SCREENSHOT OF THE RESULT

Providing calories burned by giving all the details and recommends daily calories.

The screenshot displays a web application titled "Health and Fitness Tracker". It features several input fields for user data: Age (20), Weight (kg) (55), Height (cm) (185), Activity Level (Lightly Active), Steps taken (1000), Distance (km) (12), and Goal Calories (1887). At the bottom, there are two buttons: "Track Activity" and "BMI Calculator". A modal window titled "Recommendation" is open, displaying an information icon and the text "Recommended Daily Calories: 2215.46875" with an "OK" button. Below the main form, the text "Calories Burned: 2256.66875" is visible.

Field	Value
Age	20
Weight (kg)	55
Height (cm)	185
Activity Level	Lightly Active
Steps taken	1000
Distance (km)	12
Goal Calories	1887

Recommended Daily Calories: 2215.46875

Calories Burned: 2256.66875

Giving days to achieve the goal.

Health and Fitness Tracker

Age: 20

Weight (kg): 55

Height (cm): 185

Activity Level: Lightly Active

Steps taken: 1000

Distance (km): 12

Goal Calories: 1887

Track Activity

BMI Calculator

Calories Burned: 2256.66875

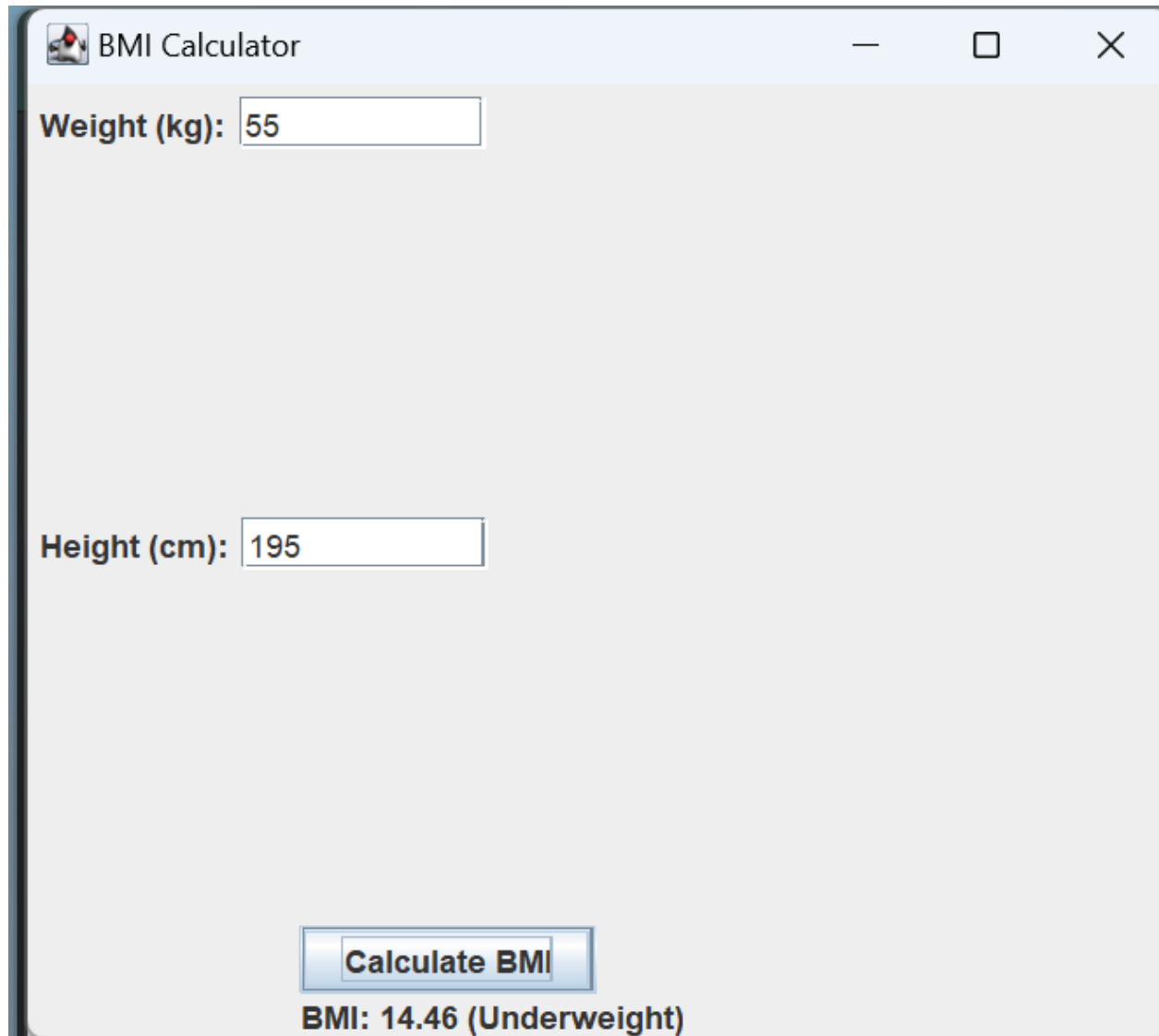
Goal Achievement

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Days to achieve goal: -6

OK

Body Mass Index Calculator



A screenshot of a web-based BMI calculator interface. The window has a title bar with the text "BMI Calculator" and standard window controls (minimize, maximize, close). The main area contains two input fields: "Weight (kg):" with the value "55" and "Height (cm):" with the value "195". Below these fields is a blue button labeled "Calculate BMI". At the bottom, the result is displayed as "BMI: 14.46 (Underweight)".

Weight (kg): 55

Height (cm): 195

Calculate BMI

BMI: 14.46 (Underweight)