BMI APP REPORT

1. App Design Description

The BMI application was designed to provide a simple, user-friendly interface for calculating Body Mass Index based on user input. The app follows a minimal and intuitive layout to ensure ease of use for first-time users.

The main screen consists of input fields where the user enters their **weight** (in kilograms) and **height** (in meters or centimeters, depending on implementation). A clearly labeled **"Calculate BMI"** button triggers the computation. The result is displayed dynamically on the same screen, showing both the BMI value and the corresponding health category (e.g., Underweight, Normal, Overweight, Obese).

The design emphasizes clarity, proper spacing, readable font sizes, and appropriate color contrast to enhance usability. Input validation is implemented to prevent invalid or empty values, ensuring accurate calculations and preventing application crashes.

2. BMI Logic Explanation

The BMI calculation logic is implemented using the standard Body Mass Index formula:

$$\text{BMI} = \frac{\text{Weight (kg)}}{\text{Height (m)}^2}$$

When the user enters their weight and height and presses the calculate button, the app:

1. Retrieves the input values from the user interface.
2. Converts the height to meters if necessary.
3. Applies the BMI formula to compute the BMI value.
4. Compares the calculated BMI against predefined ranges to determine the health category:
    - **Underweight:** BMI < 18.5
    - **Normal weight:** 18.5 ≤ BMI < 25
    - **Overweight:** 25 ≤ BMI < 30
    - **Obese:** BMI ≥ 30

5. Displays both the numeric BMI value and the corresponding category on the screen.

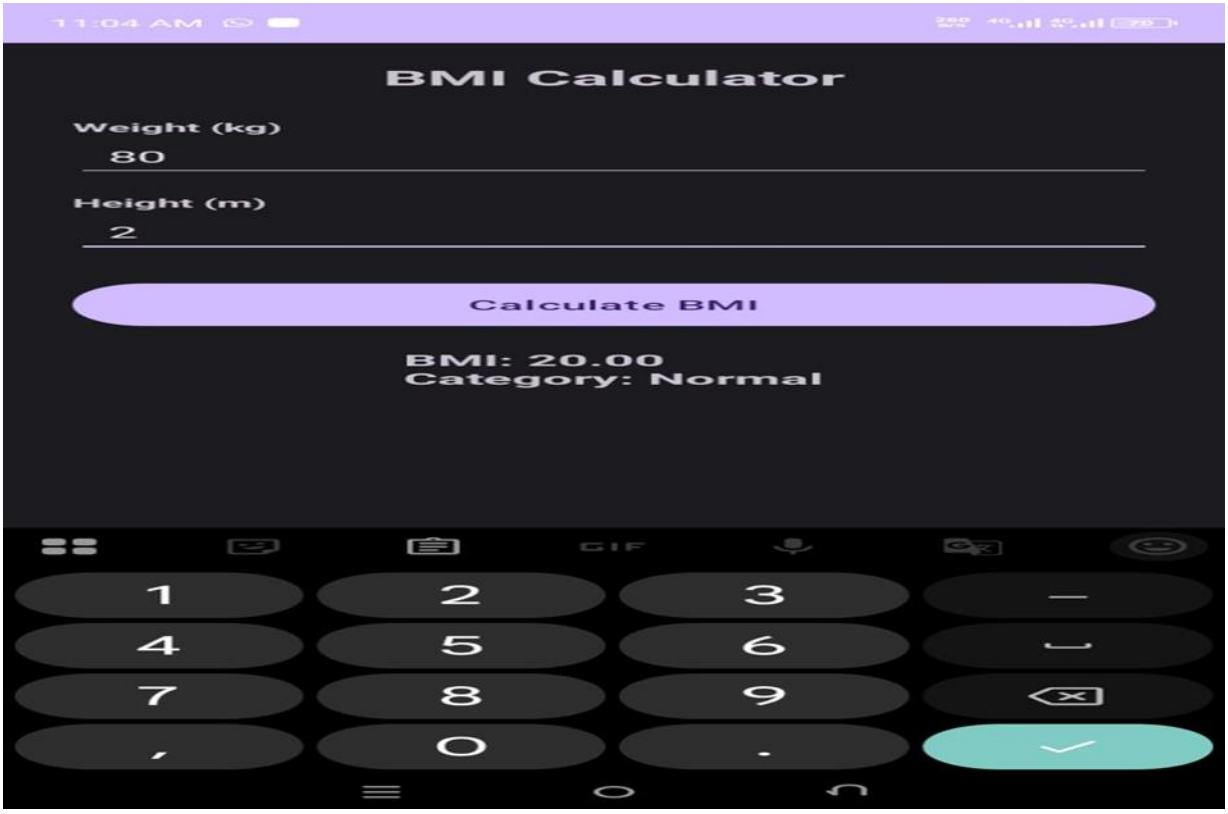
This logic ensures accurate results and aligns with globally accepted medical standards for BMI classification.

3. Emulator / Device Screenshots

The application was tested using an Android emulator (and/or physical device) to verify functionality and user experience. Screenshots were captured to demonstrate:

- The initial app interface
- User input for height and weight
- Display of calculated BMI and health category

These screenshots confirm that the app runs correctly, responds to user input as expected, and produces accurate results across different test cases. The emulator environment closely simulates real device behavior, ensuring reliability.




11:05 AM
BMI Calculator
Weight (kg)
80
Height (m)
1
Calculate BMI
BMI: 80.00
Category: Obese
GIF
1
2
3
4
5
6
7
8
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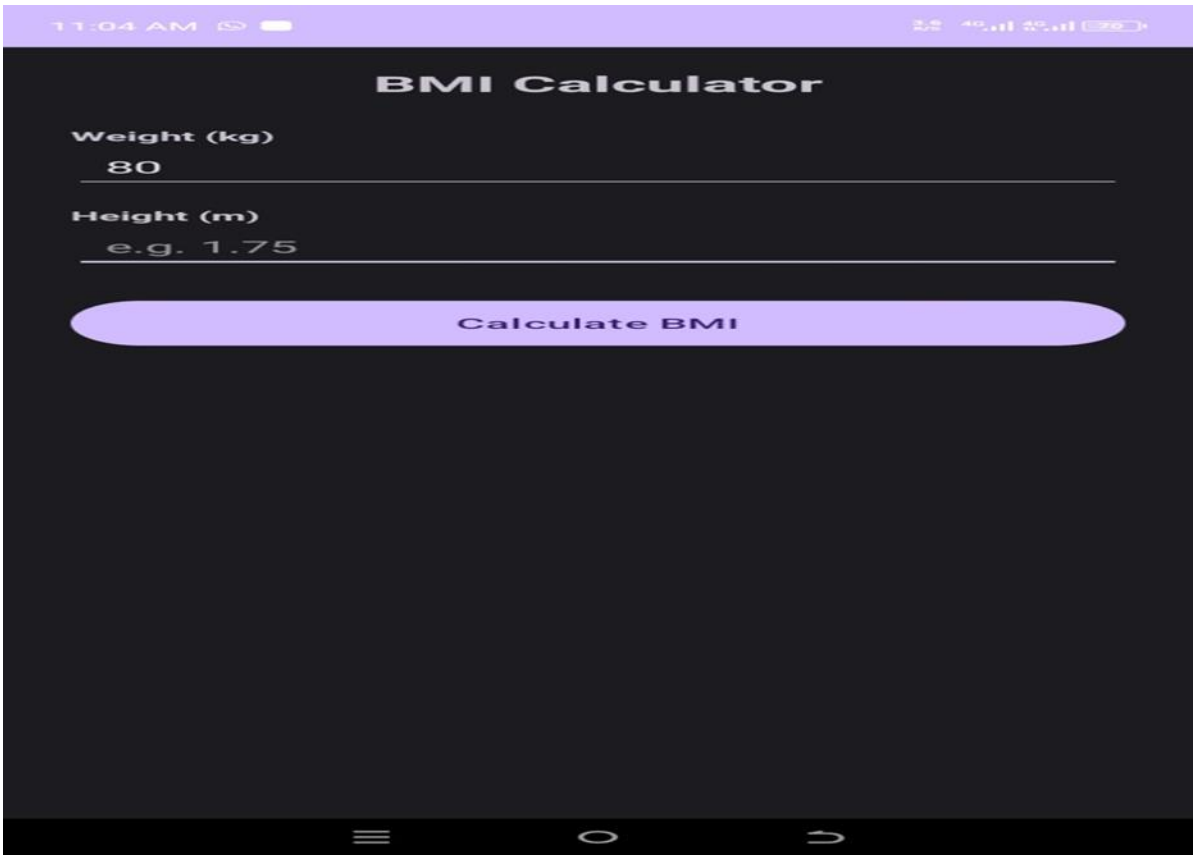

4. Example Commits

The following commit messages reflect the development progress and version control practices used during the project:

- **Added project documentation**
  Introduced a detailed README and in-code comments explaining the app structure, logic, and usage.
- **Included app screenshots in report**
  Added emulator/device screenshots to the project report to visually demonstrate app functionality and testing results.

These commits demonstrate proper use of version control to track changes, improve documentation, and enhance project clarity.