

Experiment No. 4

AIM:- To create an interactive Form using form widget

Theory:-

In this experiment, we have developed a BMI Calculator App using Flutter, a UI toolkit for building cross-platform applications. The app utilizes form widgets to collect input from the user, such as age, weight, and height. It then calculates the BMI using the standard formula:

$$\text{BMI} = \frac{\text{Weight (kg)}}{\left(\frac{\text{Height (cm)}}{100}\right)^2}$$

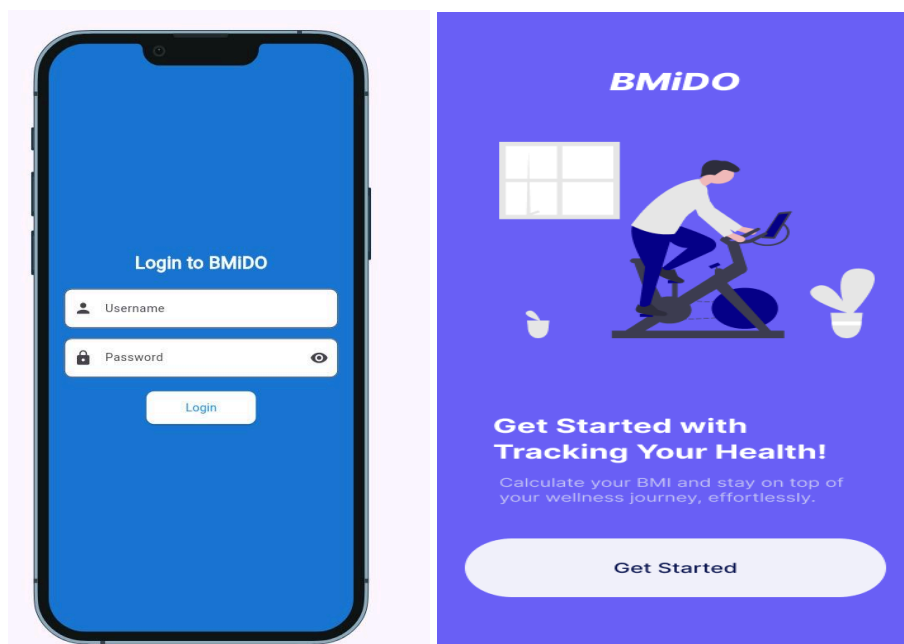
Once the user taps on "Calculate BMI", the result is displayed along with a health status (like underweight, normal, overweight). This app demonstrates the use of `TextFormField`, buttons, state management, and user input validation — key aspects when working with forms in Flutter.

Screenshots:-

Below are the screenshots showing different stages of the BMI Calculator app:

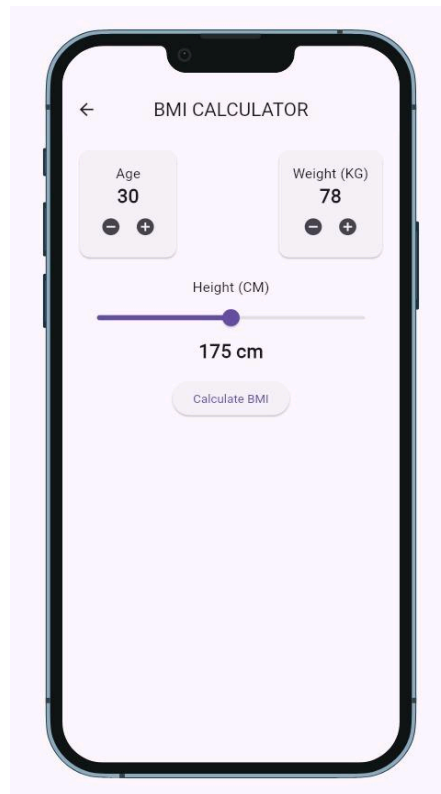
1. Login Screen

- The user is prompted to enter a username and password.
- Ensures access control to the app.



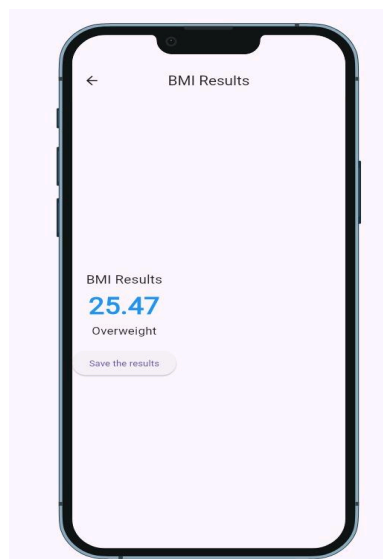
2. BMI Input Form

- Users can input their **Age**, **Weight (kg)**, and select **Height (cm)** using a slider.
- Buttons to increment/decrement values are provided for ease of use.



3. BMI Results

- The result is calculated and displayed with the BMI value and a message showing the weight category.
- Users also get the option to save the results.



Conclusion:- This experiment demonstrated the creation of an interactive BMI calculator using Flutter form widgets. It enhanced our understanding of user input handling and dynamic UI updates in mobile app development.