The **BMI Calculator App** is a simple, user-friendly application designed to calculate the Body Mass Index (BMI) based on a user's height, weight, and gender. The app helps users understand their BMI category, whether they are underweight, normal weight, overweight, or obese, based on standard health guidelines.

**Key Features:**

1. **Height and Weight Input**:
   * Users can input their height (in centimeters) and weight (in kilograms) through cleanly designed text fields.
   * The inputs are validated to ensure that only numeric values are accepted.
2. **Gender Selection**:
   * The user can select their gender from a dropdown menu (Male or Female).
   * Upon selection, a corresponding avatar (male or female) is displayed, providing a personalized touch to the user interface.
3. **BMI Calculation**:
   * Upon pressing the "Calculate" button, the app uses the entered height and weight to calculate the BMI.
   * The formula for BMI calculation is: BMI=Weight in kg(Height in meters)2\text{BMI} = \frac{\text{Weight in kg}}{\left(\text{Height in meters}\right)^2}BMI=(Height in meters)2Weight in kg​
   * Based on the BMI value, the app classifies the user into one of the following categories:
     + **Severe Thinness** (BMI < 16.0)
     + **Underweight** (BMI 16.0 - 18.5)
     + **Normal Weight** (BMI 18.5 - 24.9)
     + **Overweight** (BMI 25.0 - 29.9)
     + **Obese** (BMI >= 30.0)
4. **BMI Result Display**:
   * The calculated BMI and the corresponding category (e.g., Normal, Overweight) are displayed in a neatly formatted result container.
   * The result container dynamically updates to reflect the selected gender and the calculated BMI value.
5. **Reset Button**:
   * The app includes a reset button that clears all input fields and resets the avatar and result display, allowing users to start a new calculation.

**User Interface:**

The app features a minimalistic and intuitive design, making it easy for users to navigate and input their details. Key UI elements include:

* **Text Fields**: For height and weight input, with labels and placeholders for guidance.
* **Dropdown Menu**: For gender selection.
* **Circle Avatar**: Displays an avatar corresponding to the selected gender, adding a personalized touch.
* **Buttons**:
  + "Calculate" button to trigger BMI calculation.
  + "Reset" button to clear inputs and reset the app state.
* **BMI Result Container**: Displays the calculated BMI and status in a styled, easy-to-read format.

**Technologies Used:**

* **Flutter**: The app is built using the Flutter framework, enabling cross-platform development for both Android and iOS devices.
* **Dart**: The programming language used for app logic and UI design.
* **Modular Design**: The app is split into different components (e.g., the avatar, result container), making it easy to maintain and extend.

**Use Case:**

The BMI Calculator App is ideal for anyone looking to quickly assess their body mass index and understand their current health status based on height and weight. It provides instant feedback in an accessible and aesthetically pleasing way, making it a handy tool for daily use.