IV INNOVATIONS PRIVATE LIMITED (Kundli – Sonipat)

Task Description: Develop an application with comprehensive user management and BMI tracking features, including Google login, account creation, user detail input, BMI calculations, graph plotting, and multi-user support.

Assignment Details

Create an app with the following functionalities:

1. **Login Screen**:

   o   A clean login screen that allows users to sign in using Google.

2. **User Account Management**:

   o   Account creation (email/password registration).

   o   Password reset functionality.

3. **User Details Form**:

   o   Collect basic user information, such as:

      ▪   **Weight** (KGS/LBS)

      ▪   **Height** (CM/Inches)

      ▪   **Gender** (Male/Female/Other)

   o   Validate the input data (e.g., check date formats and ensure numeric values for weight/height).

4. **BMI Calculation**:

   o   Implement BMI calculation using the formula:

      ▪   BMI = weight (kg) / (height (m) * height (m)), with conversions for lbs/inches.

   o   Display the BMI category (e.g., underweight, normal weight, overweight, obese) based on the calculated value.

5. **User Settings**:

   o   Include a section where users can update their height and weight at any time.

   o   Ensure that these changes update the BMI and associated data accordingly.

6. **Weight History Graph**:

   o   Create a graph showing the user's weight history over the past week.

      o   Plot data points and ensure the graph is easy to read and understand.

7. **Multi-User Support**:

      o   Implement functionality to add and manage multiple user profiles.

      o   Allow switching between users and display BMI data for each profile individually.

Requirements:

Technology Stack:

- Developer's choice

- Firebase Authentication or an alternative backend service for login and account management

- CoreData or another local storage method for user data

Development Environment:

- Android / Xcode (latest version)

- Target Android / iOS

Submission Requirements:

- Functionality 1-4 Is mandatory , Doing 5-7 will be an added advantage.

- **Video**: Prepare a 2-3 minute video demonstrating the app's features.

- **Supporting Documents**: Include any additional documents or files needed.

- A brief documentation on:

      o   App setup, libraries used, and any special configurations.

      o   Instructions to build and run the app.

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Deadline: 27**/01/2026, 11:59 PM**

Submission URL: [[Click here](#)]
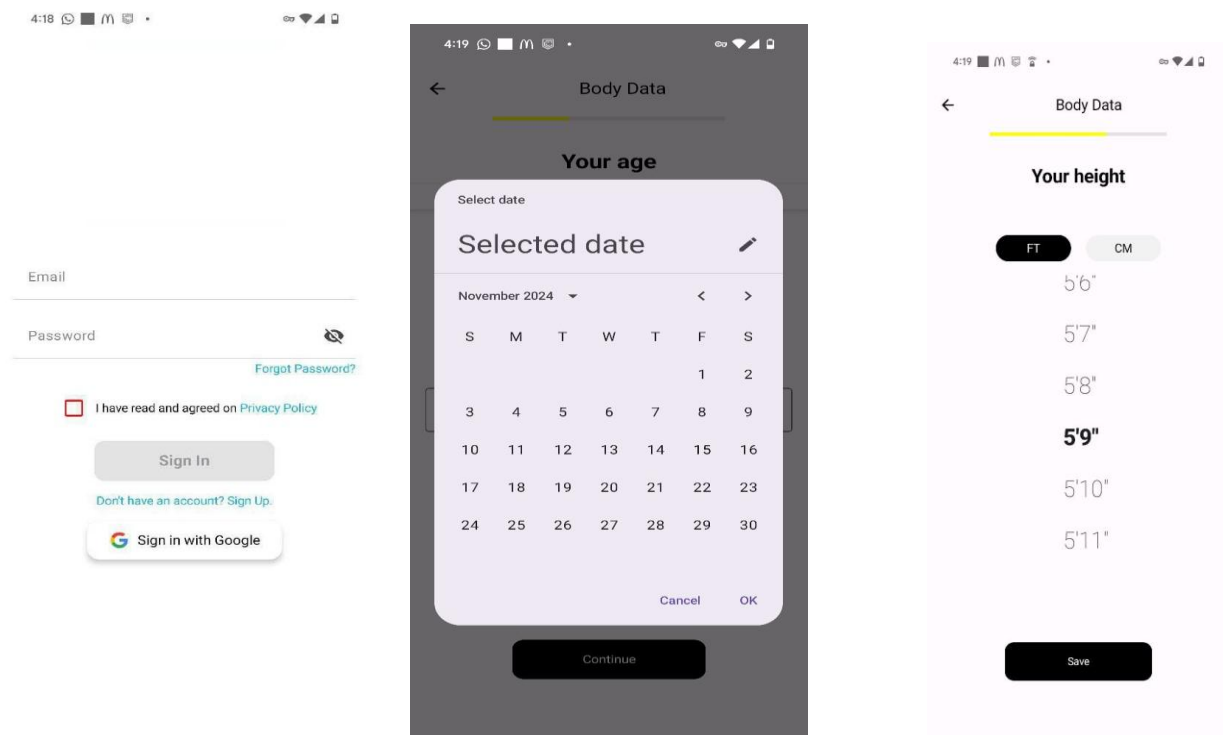

Evaluation Criteria:

- Code quality and adherence to best practices.

- User experience and interface design.

- Proper implementation of user input validation.

- Functionality of BMI calculation, display, and graph plotting.

- Multi-user management capability.

- Documentation clarity.

- Graph readability and ease of use.

Bonus:

- Implement user authentication state persistence.

- Customize charts for better visualization.

- Comprehensive error handling.

- Early submission Before 26 Oct

Some Screenshots FYR

Note: If you have any questions or doubts, you can assume and build it. If shortlisted, you will be asked to explain your work.

Good luck, and happy coding!