Experiment:4

Aim: To design Flutter UI by including common widgets.

Theory:

- Forms are crucial UI components in Flutter used to collect user inputs like text, selections, and preferences. Flutter provides a powerful Form widget that acts as a container for form fields and allows easy validation and state management. Each field within the form—like TextFormField, DropdownButtonFormField, CheckboxListTile, and RadioListTile—can be individually customized and validated, allowing a seamless user experience.
- To manage form state, GlobalKey<FormState> is used, enabling access to the form's internal state methods like validate() and save(). TextEditingController can also be used to read and manipulate the input values directly. Validators (anonymous functions or custom logic) are applied to fields to ensure correctness, such as checking for empty input or specific formats like email or phone numbers.
- Flutter also supports responsive layouts for forms using widgets like Padding, Column, Row, SizedBox, and Container for structure and spacing. ElevatedButton or TextButton is often used for actions like submitting the form. Together, these elements help developers build highly interactive and user-friendly forms in apps like fitness trackers, login screens, profile pages, and feedback forms.

Output:

Name
sahil
Age
20
Height (cm)
170
Weight (kg)
62
Goal
Lose Weight
Activity
Intermediate
Activity Level Intermediate
Gender Male
Email msd123@gmail.com
Update

Name:Sahil Motiramani Div:D15C Roll No.:35

Conclusion:

The Form widget simplifies data entry, validation, and management in Flutter apps. It promotes a structured approach to building interactive forms. By combining input fields with validation logic and interactive buttons, developers can ensure a user-friendly and error-free data collection experience. In my app, it provides a clean and interactive UI for users to input details like profile data, health info, or workout preferences.