Aim: To design Flutter UI by including common widgets.

Theory: Widgets are the building blocks of a Flutter application. In Flutter, everything is a widget, from simple elements like text and images to complex structures like entire layouts and navigations. Flutter provides a rich set of predefined widgets to create various UI components, which can be combined to build a complex UI.

Common Flutter Widgets:

1. Text Widget
   a. Used to display text on the screen. You can customize its style, size, color, and alignment.

2. Container Widget :
   a. A box that can contain other widgets. It is used for styling, adding padding, margin, alignment, and background color to widgets.

3. Row and Column Widget
   a. Row: Arranges widgets horizontally.
   b. Column: Arranges widgets vertically.
   c. These widgets are fundamental for creating flexible layouts and positioning UI elements.

4. Image Widget
   a. Used to display images in the app, either from assets, network, or file system.

5. Button Widget
   a. Flutter offers several button widgets like RaisedButton, FlatButton, ElevatedButton, and IconButton that are used for interaction. These buttons are essential for handling user input and triggering actions.

6. TextField Widget
   a. Used for user input. It provides an editable field where the user can type text.

7. Scaffold Widget
   a. This is a top-level container that holds the structure of the UI. It includes the app bar, body, drawer, and bottom navigation bar. It provides a standard layout for the app.

8. ListView Widget
   a. A scrolling widget that allows the display of a long list of items. It is used for displaying dynamic content efficiently.

Layouts in Flutter:

- Padding: Adds space around a widget.
- Align: Aligns a widget within its parent.
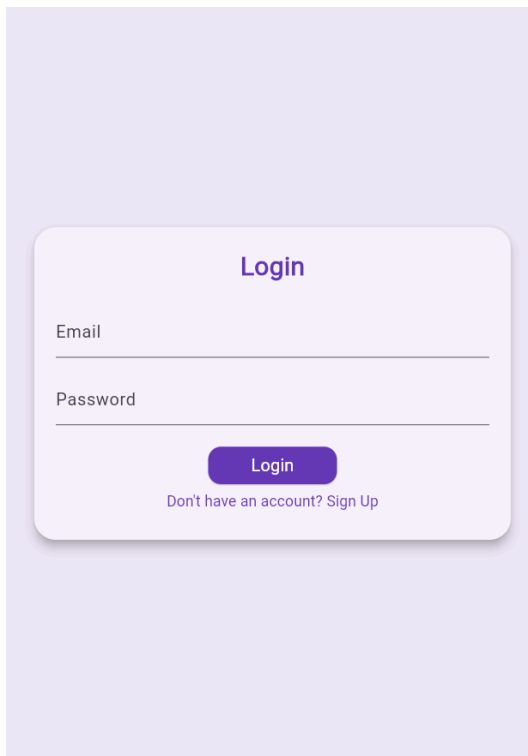- Expanded: Makes a widget expand to fill available space in a Row, Column, or Flex.

●   Stack: Used for placing widgets on top of one another.

Conclusion: We learned how to design a basic Flutter UI by utilizing common widgets such as Text, Container, Row, Column, Image, Button, TextField, ListView, and Scaffold. These widgets provide a flexible and powerful way to create UIs that are visually appealing and functional. By combining these widgets, you can build complex layouts that cater to your app's design needs.

●   Text and Container are fundamental for displaying text and styling.

●   Row and Column are essential for structuring layouts, either horizontally or vertically.

●   Buttons allow users to interact with the app.

●   Scaffold provides a basic structure for the app, including app bars, bodies, and drawers.

●   ListView is ideal for displaying lists of items, especially when the content is dynamic or long.

Mastering these common widgets enables developers to design clean and efficient UIs that cater to the needs of modern mobile applications.

Output :

Create Account

First Name

Last Name

Email

Password

Sign Up

Already have an account? Login