Aim : To design Flutter UI by including common widgets. To include icons, images, fonts in Flutter app

Theory:

● Flutter is Google's UI toolkit for crafting beautiful, natively compiled iOS and Android apps from a single code base. To build any application we start with widgets – The building block of flutter applications.
● Widgets describe what their view should look like given their current configuration and state. It includes a text widget, row widget, column widget, container widget, and many more.
● Widgets: Each element on a screen of the Flutter app is a widget. The view of the screen completely depends upon the choice and sequence of the widgets used to build the apps. And the structure of the code of an app is a tree of widgets.

Types of Widgets:

1. **StatelessWidget**: - Represents widgets that are immutable and don't change over time. - They don't store or manage any mutable state.
2. **StatefulWidget**: - Represents widgets that can change dynamically during the lifetime of the application. - They have mutable state, and changes in state trigger a rebuild of the widget tree. 3. **Container**: - A box model that can contain other widgets and provides features like padding, margin, and decoration. - Often used to group and style other widgets.
4. **Row and Column**: - Used to arrange child widgets horizontally (Row) or vertically (Column). - Flexibility in distributing space among child widgets.
5. **Stack**: - Allows widgets to be overlaid on top of each other. - Widgets are positioned relative to the edges or the center of the stack.
6. **ListView**: - A scrollable list of widgets. - Can display a large number of children, either in a vertical or horizontal direction.
7. **Text**: - Displays a styled text string. - Supports rich formatting and styling options.
8. **Image**: - Displays images from various sources, such as assets, the network, or memory. - Supports caching and different fit options.
9. **AppBar**: - A material design app bar that typically contains the app's title and various actions. - Positioned at the top of the screen.
10. **Scaffold**: - Represents the basic material design visual structure of a Flutter app. - Provides a framework for implementing the basic layout structure.

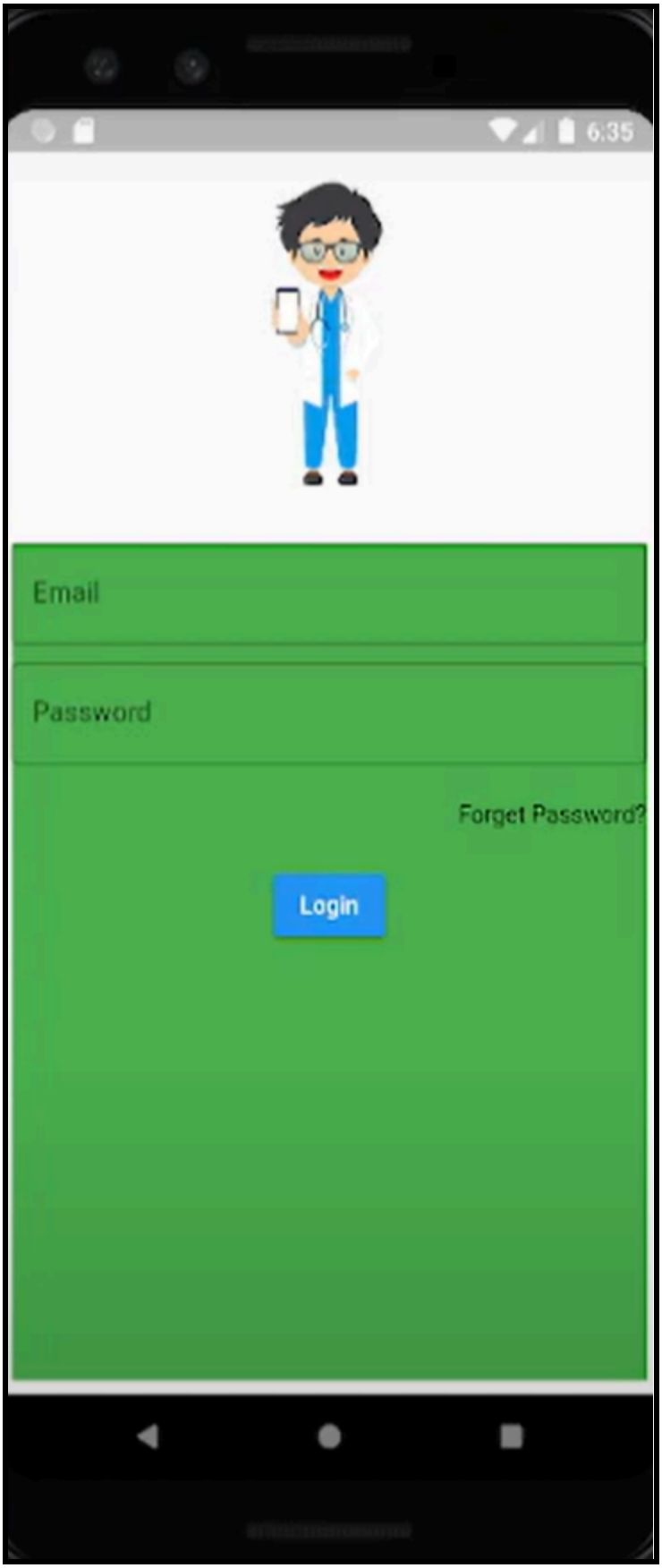
Code :

```
import 'package:doctorapp/consts/images.dart';
import 'package:flutter/material.dart';
import 'package:doctorapp/res/components/custom_textfield.dart'; // Assuming this import is correct

class LoginView extends StatelessWidget {
  const LoginView({Key key}) : super(key: key); // Corrected super syntax

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      body: Container(
        padding: EdgeInsets.all(8),
        child: Column(
          children: [
            Expanded(
              child: Image.asset(
                AppAssets.icLogin,
                width: 200,
              ),
            ),
            Expanded(
              flex: 2,
              child: Container(
                color: Colors.green, // Corrected color syntax
                child: Form(
                  child: Column(
                    children: [
                      CustomTextField(hint: AppStrings.email),
                      SizedBox(height: 10), // Corrected SizedBox syntax
                      CustomTextField(hint: AppStrings.password), // children syntax
                      SizedBox(height: 20), // SizedBox syntax
                      Align(
                        alignment: Alignment.centerRight,
                        child: Text(AppStrings.forgetPassword), // Text widget syntax
                      ), // Align
                      SizedBox(height: 20), // SizedBox syntax
```

```
                SizedBox(
                  width: MediaQuery.of(context).size.width, // context.screenWidth
                  child: ElevatedButton(
                    onPressed: () {}, // onPressed function
                    child: Text(AppStrings.login), // Corrected Text widget syntax
                  ), // ElevatedButton
                ), // SizedBox
              ], // children
            ), // Column
          ), // Form
        ), // Container
      ), // Expanded
    ], // children
  ), // Column
), // Container
); // Scaffold
} // build
} // LoginView
```


6:35
Email
Password
Forget Password?
Login

Conclusion : We've learned how to use various widgets like Scaffold, Container, ListView, Row, and Column in Flutter. These widgets helped us create a smooth and user-friendly interface for our apps.