

Experiment 02

Aim : To design Flutter UI by including common widgets.

Theory :

- In Flutter, widgets are the basic building blocks used to create user interfaces.
- Widgets in Flutter are immutable, meaning they cannot be changed once created. Widgets can be either **stateless** or **stateful**. Stateless widgets are static and do not change over time, while stateful widgets can change their state and appearance based on user interaction or other factors.
- Widgets are organized in a hierarchical structure, where each widget can have child widgets. This hierarchical structure defines the layout and appearance of the UI.
- Widgets are organized in a hierarchical structure, where each widget can have child widgets. This hierarchical structure defines the layout and appearance of the UI.

Some common widgets are listed below:

- **Container:**
A versatile widget used to contain and arrange other widgets. It can be styled with various properties like padding, margin, color, border, etc.
- **Text:**
Displays a string of text with customizable styles such as font size, color, alignment, etc. It's commonly used for displaying labels, titles, or paragraphs of text.
- **Image:**
Displays an image from various sources such as assets, network, or memory. It supports different image formats and provides options for resizing and fitting.
- **Row:**
Arranges its children widgets horizontally in a single row. It's useful for creating horizontally aligned layouts.
- **Column:**
Arranges its children widgets vertically in a single column. It's commonly used for creating vertically stacked layouts.
- **ListView:**
Displays a scrollable list of children widgets. It can be oriented vertically or horizontally and supports both fixed and dynamic lists.
- **Stack:**
Overlays its children widgets on top of each other. It's useful for creating complex layouts where widgets can overlap or be positioned relative to each other.
- **AppBar:**
A material design app bar that typically appears at the top of the screen. It's commonly used to display the title, actions, and navigation controls for the app.

- **TextField:**
Allows users to input text. It supports various features like hint text, validation, input formatting, and keyboard customization.
- **Button:**
Represents a clickable button widget that users can interact with. It can be styled and customized based on different states such as enabled, disabled, pressed, etc.
- **Icon:**
Displays a graphical icon from the Material Icons library or custom icon sets. It's commonly used for adding visual cues and navigation elements.
- **AlertDialog:**
Displays a dialog window with a title, content, and buttons. It's often used to present important information or prompt user actions.
- **Scaffold:**
Implements the basic material design layout structure for a screen, including app bars, drawers, and bottom sheets. It serves as the root of the widget hierarchy for a screen.
- **Padding:**
Adds padding space around its child widget. It's useful for controlling the spacing between widgets and the edges of the screen.
- **GestureDetector:**
Detects gestures such as taps, drags, and swipes on its child widget. It's used to make any widget interactive and responsive to user input.

Code:

```
import 'package:flutter/material.dart';
import 'package:font_awesome_flutter/font_awesome_flutter.dart';
import 'package:linkedin_mobile_ui/theme/styles.dart';

class CreatePage extends StatefulWidget {
  final VoidCallback? onCloneClickListener;
  const CreatePage({Key? key, required this.onCloneClickListener})
    : super(key: key);

  @override
  State<CreatePage> createState() => _CreatePageState();
}

class _CreatePageState extends State<CreatePage> {

  final TextEditingController _postBodyController = TextEditingController();

  bool _openTwoBottomModalSheetsOnce = false;
```

```
final FocusScopeNode _subPostBottomModalSheetFocusNode = FocusScopeNode();
final FocusScopeNode _superPostBottomModalSheetFocusNode = FocusScopeNode();
```

```
@override
void dispose() {
  _postBodyController.dispose();
  super.dispose();
}

@override
Widget build(BuildContext context) {
  if(_openTwoBottomModalSheetsOnce == false) {
    WidgetsBinding.instance.addPostFrameCallback((timeStamp) {
      _createSuperPostBottomModalSheet();
      _createSubPostBottomModalSheet();
      print("value before = $_openTwoBottomModalSheetsOnce");
      setState(() {
        _openTwoBottomModalSheetsOnce = true;
      });
      print("value after = $_openTwoBottomModalSheetsOnce");
    });
  }

  return const Scaffold();
}
```

```
_createSuperPostBottomModalSheet() {
  showModalBottomSheet(
    isScrollControlled: true,
    enableDrag: false,
    isDismissible: false,
    context: context,
    builder: (context) {
      return StatefulBuilder(
        builder: (context, void Function(void Function()) setState) {
          return FocusScope(
            node: _superPostBottomModalSheetFocusNode,
            child: Container(
              child: Column(
                crossAxisAlignment: CrossAxisAlignment.start,
                children: [
                  Container(
                    padding: const EdgeInsets.symmetric(horizontal: 10),
                    width: double.infinity,
```

```

height: 110,
decoration:
const BoxDecoration(color: linkedInWhiteFFFFFF, boxShadow: [
  BoxShadow(
    offset: Offset(0, 2),
    color: linkedInLightGreyCACCCCE,
    blurRadius: 5,
    spreadRadius: 0.1),
]),
child: Padding(
  padding: const EdgeInsets.only(bottom: 15.0),
  child: Row(
    crossAxisAlignment: CrossAxisAlignment.end,
    mainAxisAlignment: MainAxisAlignment.spaceBetween,
    children: [
      Row(
        children: [
          GestureDetector(
            onTap: widget.onCloneClickListener,
            child: const Icon(
              Icons.close_outlined,
              size: 30,
            )),
          const SizedBox(
            width: 15,
          ),
          const Text(
            "Share Post",
            style: TextStyle(
              fontSize: 25,
              fontWeight: FontWeight.bold,
              color: linkedInMediumGrey86888A),
          )
        ],
      ),
      Text(
        "Post",
        style: TextStyle(
          fontSize: 22,
          fontWeight: FontWeight.bold,
          color: _postBodyController.text.isEmpty? linkedInLightGreyCACCCCE :
linkedInBlue0077B5),
      )
    ],
  ),

```

```

    ),
    ),
  ),
  const SizedBox(
    height: 30,
  ),
  Expanded(
    child: Container(
      margin: const EdgeInsets.symmetric(horizontal: 20),
      child: Column(
        children: [
          Row(
            children: [
              Container(
                width: 60,
                height: 60,
                child: ClipRRect(
                  borderRadius: BorderRadius.circular(30),
                  child: Image.asset("assets/profile_1.jpeg"),
                ),
              ),
              const SizedBox(
                width: 10,
              ),
              Column(
                mainAxisAlignment: MainAxisAlignment.end,
                crossAxisAlignment: CrossAxisAlignment.start,
                children: [
                  _switchWidget(
                    title: "Nidhi Gawde",
                    prefixIcon: Icons.account_circle_rounded,
                    suffixIcon: Icons.arrow_drop_down_outlined),
                  const SizedBox(
                    height: 5,
                  ),
                  _switchWidget(
                    title: "Anyone",
                    prefixIcon: FontAwesomeIcons.earth,
                    suffixIcon: Icons.arrow_drop_down_outlined),
                ],
              ),
            ],
          ),
        ],
      ),
    ),
    const SizedBox(

```

```

        height: 20,
      ),
      TextFormField(
        controller: _postBodyController,
        onTap: () {
          _postBodyController.addListener(() {
            if(_postBodyController.text.length == 1) {
              setState(() {});
              print("call first IF setState");
            } else if (_postBodyController.text.length < 1) {
              setState(() {});
              print("2nd ELSE IF setState");
            }

            print("onTap called");
          });
        },
        style: const TextStyle(fontSize: 22),
        maxLines: 15,
        decoration: const InputDecoration(
          hintText: "What do you want to talk about?",
          border: InputBorder.none),
      ),
    ],
  ),
),
),
),
),
Container(
  margin: const EdgeInsets.symmetric(horizontal: 30),
  child: Row(
    mainAxisAlignment: MainAxisAlignment.spaceBetween,
    children: [
      Row(
        children: [
          const Icon(
            Icons.camera_alt,
            color: linkedInMediumGrey86888A,
          ),
          const SizedBox(
            width: 15,
          ),
          const Icon(
            Icons.video_call,
            color: linkedInMediumGrey86888A,

```

```

    ),
    const SizedBox(
      width: 15,
    ),
    const Icon(
      Icons.image,
      color: linkedInMediumGrey86888A,
    ),
    const SizedBox(
      width: 25,
    ),
    GestureDetector(
      onTap: () {
        _createSubPostBottomModalSheet();
      },
      child: const Icon(
        Icons.more_horiz,
        color: linkedInMediumGrey86888A,
      )),
  ],
),
const Row(
  children: [
    Icon(
      Icons.message_outlined,
      color: linkedInMediumGrey86888A,
    ),
    SizedBox(
      width: 10,
    ),
    Text(
      "Anyone",
      style: TextStyle(
        fontWeight: FontWeight.bold,
        color: linkedInMediumGrey86888A,
      )
    ),
  ],
),
const SizedBox(
  height: 30,
),

```

```

        ],
      ),
    ),
  );
}
);
},
).then((value) {
  _superPostBottomModalSheetFocusNode.unfocus();
});
}

```

```

_switchWidget({String? title, IconData? prefixIcon, IconData? suffixIcon}) {
  return Container(
    height: 30,
    padding: const EdgeInsets.symmetric(horizontal: 10),
    decoration: BoxDecoration(
      borderRadius: BorderRadius.circular(20),
      border: Border.all(width: 1, color: linkedInMediumGrey86888A)),
    child: Row(
      children: [
        Icon(
          prefixIcon,
          color: linkedInMediumGrey86888A,
          size: 18,
        ),
        const SizedBox(
          width: 5,
        ),
        Text(
          "$title",
          style: const TextStyle(fontWeight: FontWeight.bold, fontSize: 12),
        ),
        const SizedBox(
          width: 5,
        ),
        Icon(
          suffixIcon,
          size: 30,
        ),
      ],
    ),
  );
}

```



```

_createSubPostBottomModalSheet() {
  showModalBottomSheet(
    shape: RoundedRectangleBorder(
      borderRadius: BorderRadius.circular(20),
    ),
    barrierColor: Colors.transparent,
    context: context,
    builder: (context) {
      return FocusScope(
        node: _subPostBottomModalSheetFocusNode,
        child: Container(
          decoration: BoxDecoration(color: linkedInWhiteFFFFFF, boxShadow: [
            BoxShadow(
              offset: const Offset(5, 0),
              blurRadius: 1,
              color: linkedInLightGreyCACCCCE.withOpacity(.6),
              spreadRadius: 0.5)
          ]),
          child: Padding(
            padding: const EdgeInsets.symmetric(horizontal: 20.0, vertical: 20),
            child: SingleChildScrollView(
              child: Column(
                crossAxisAlignment: CrossAxisAlignment.start,
                children: [
                  Center(
                    child: Container(
                      width: 80,
                      height: 6,
                      decoration: BoxDecoration(
                        borderRadius: BorderRadius.circular(10),
                        color: linkedInMediumGrey86888A),
                    ),
                  ),
                  const SizedBox(height: 20,),
                  _createSubPostNavigationItem(title: "Add a photo", iconData: Icons.image),
                  const SizedBox(height: 25,),
                  _createSubPostNavigationItem(title: "Take a video", iconData: Icons.video_call),
                  const SizedBox(height: 25,),
                  _createSubPostNavigationItem(title: "Use a template", iconData:
Icons.temple_buddhist),
                  const SizedBox(height: 25,),
                  _createSubPostNavigationItem(title: "Celebrate an occasion", iconData:
Icons.celebration),

```

```

        const SizedBox(height: 25,),
        _createSubPostNavigationItem(title: "Add a document", iconData:
Icons.document_scanner),
        const SizedBox(height: 25,),
        _createSubPostNavigationItem(title: "Share that you're hiring", iconData:
Icons.work),
        const SizedBox(height: 25,),
        _createSubPostNavigationItem(title: "Find an expert", iconData:
Icons.account_circle_rounded),
        const SizedBox(height: 25,),
        _createSubPostNavigationItem(title: "Create a poll", iconData: Icons.bar_chart),
        const SizedBox(height: 25,),
        _createSubPostNavigationItem(title: "Create an event", iconData: Icons.event),
        const SizedBox(height: 25,),
    ],
  ),
),
),
),
);
},
).then((value) {
  _subPostBottomModalSheetFocusNode.unfocus();
});
}

_createSubPostNavigationItem({IconData? iconData, String? title}) {
  return Row(
    children: [
      Icon(iconData, size: 25,color: linkedInMediumGrey86888A,),
      const SizedBox(width: 10,),
      Text("$title", style: const TextStyle(fontSize: 16, color: linkedInMediumGrey86888A,
fontWeight: FontWeight.bold),)
    ],
  );
}
}

```

✕ Share Post

Post



👤 Nidhi Gawde ▼

🌐 Anyone ▼

What do you want to talk about?



Add a photo



Take a video



Use a template



Celebrate an occasion



Add a document



Share that you're hiring



Find an expert



Create a poll

