

**Name : Aditya Gupta**

**Div:D15B**

**Roll no 17**

## **Experiment 3**

**Aim: To Implement Different types of Widgets in Flutter**

### **1. Structural Widgets**

- Scaffold
- SingleChildScrollView
- Column
- Padding
- Container
- SizedBox

### **2. AppBar & Navigation Widgets**

- AppBar
- IconButton
- Navigator

### **3. Text & Styling Widgets**

- Text
- TextStyle

### **4. Interactive & Input Widgets**

- InkWell
- Card
- GridView.builder
- List<Map<String, dynamic>> (used for dynamic data)

### **5. Layout & Decoration Widgets**

- BoxDecoration
- BorderRadius
- BoxShadow

- Positioned
- Stack

## 6. Custom Widget Function

- `_buildApplicationStatus` (returns a Column)

```
// home_page.dart
import 'package:flutter/material.dart';

class HomePage extends StatelessWidget {
  final List<Map<String, dynamic>> categories = [
    {
      'title': 'Internships',
      'subtitle': 'Explore internship opportunities',
      'icon': Icons.work_outline,
      'color': Colors.blue[600],
      'badge': '12 New',
    },
  ],

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        elevation: 0,
        title: Text('Placement Portal'),
        actions: [
          IconButton(
            icon: Icon(Icons.notifications_none),
            onPressed: () {},
          ),
          IconButton(
            icon: Icon(Icons.logout),
            onPressed: () {
              Navigator.pushNamedAndRemoveUntil(
                context,
                '/',
                (route) => false,
              );
            },
          ),
        ],
      ),
      body: SingleChildScrollView(
```

```

child: Column(
  crossAxisAlignment: CrossAxisAlignment.start,
  children: [
    Container(
      padding: EdgeInsets.all(24),
      decoration: BoxDecoration(
        color: Theme.of(context).primaryColor,
        borderRadius: BorderRadius.only(
          bottomLeft: Radius.circular(32),
          bottomRight: Radius.circular(32),
        ),
      ),
    ),
    child: Column(
      crossAxisAlignment: CrossAxisAlignment.start,
      children: [
        Text(
          'Hello, Student!',
          style: TextStyle(
            fontSize: 24,
            fontWeight: FontWeight.bold,
            color: Colors.white,
          ),
        ),
        SizedBox(height: 8),
        Text(
          'Find your dream opportunity today',
          style: TextStyle(
            fontSize: 16,
            color: Colors.white.withOpacity(0.9),
          ),
        ),
        SizedBox(height: 24),
        // Application Tracking Section
        Container(
          padding: EdgeInsets.all(16),
          decoration: BoxDecoration(
            color: Colors.white,
            borderRadius: BorderRadius.circular(16),
            boxShadow: [
              BoxShadow(
                color: Colors.black.withOpacity(0.1),
                blurRadius: 10,
                offset: Offset(0, 5),
              ),
            ],
          ),

```

```

    ],
    ),
    child: Column(
      crossAxisAlignment: CrossAxisAlignment.start,
      children: [
        Text(
          'Your Applications',
          style: TextStyle(
            fontSize: 18,
            fontWeight: FontWeight.bold,
          ),
        ),
        SizedBox(height: 16),
        Row(
          mainAxisAlignment: MainAxisAlignment.spaceAround,
          children: [
            _buildApplicationStatus('Applied', '3', Colors.blue),
            _buildApplicationStatus('Shortlisted', '2', Colors.orange),
            _buildApplicationStatus('Interview', '1', Colors.purple),
            _buildApplicationStatus('Selected', '1', Colors.green),
          ],
        ),
      ],
    ),
  ],
),
Padding(
  padding: EdgeInsets.all(24),
  child: Column(
    crossAxisAlignment: CrossAxisAlignment.start,
    children: [
      Text(
        'Quick Access',
        style: TextStyle(
          fontSize: 20,
          fontWeight: FontWeight.bold,
        ),
      ),
      SizedBox(height: 16),
      GridView.builder(
        shrinkWrap: true,
        physics: NeverScrollableScrollPhysics(),

```

```
gridDelegate: SliverGridDelegateWithFixedCrossAxisCount(
  crossAxisCount: 2,
  crossAxisSpacing: 16,
  mainAxisSpacing: 16,
  childAspectRatio: 1.1,
),
itemCount: categories,
),
if (categories[index]['badge'] != null)
  Positioned(
    top: 8,
    right: 8,
    child: Container(
      padding: EdgeInsets.symmetric(
        horizontal: 8,
        vertical: 4,
      ),
      decoration: BoxDecoration(
        color: categories[index]['color'],
        borderRadius: BorderRadius.circular(12),
      ),
      child: Text(
        categories[index]['badge'],
        style: TextStyle(
          color: Colors.white,
          fontSize: 12,
          fontWeight: FontWeight.bold,
        ),
      ),
    ),
  ),
)
```

Hello, Student!

Find your dream opportunity today

### Your Applications

3

Applied

2

Shortlisted

1

Interview

1

Selected

### Quick Access

12 New



#### Internships

Explore internship opportunities

8 New



#### Jobs

Browse full-time job openings



#### Placement Records

Company-wise placement insights

5 New



#### Discussion Board

Connect with peers