



# Faculty of Technology and Engineering

Chandubhai S. Patel Institute of Technology

Department of Computer Science & Engineering

Date:    /    /

## Laboratory Manual Performa

Academic Year	:	2024-25	Semester	:	5 <sup>TH</sup>
Course code	:	CSE309	Course name	:	Mobile Application and Development

### Practical - 2

Create an application that shows a List of 10 countries and Flag using List View Builder.

**Introduction of relevant concepts used:**

**Code (Screenshot)**

**Main.dart**

```

lib > main.dart > CountryListScreen > build
1  import 'package:flutter/material.dart';
2
3  Run | Debug | Profile
4  void main() {
5    runApp(const MyApp());
6  }
7
8  class MyApp extends StatelessWidget {
9    const MyApp({Key? key}) : super(key: key);
10
11   @override
12   Widget build(BuildContext context) {
13     return MaterialApp(
14       title: 'Country List',
15       theme: ThemeData(
16         primarySwatch: const Color.fromARGB(255, 0, 34, 62),
17       ), // ThemeData
18       home: const CountryListScreen(),
19     ); // MaterialApp
20   }
21 }
22
23 class CountryListScreen extends StatelessWidget {
24   const CountryListScreen({Key? key}) : super(key: key);
25
26   @override
27   Widget build(BuildContext context) {
28     // List of countries and their flags using flagcdn.com
29     final List<Map<String, String>> countries = [
30       {
31         'name': 'India',
32         'flagUrl': 'https://flagcdn.com/w320/in.png',
33       },
34       {
35         'name': 'United States',
36         'flagUrl': 'https://flagcdn.com/w320/us.png',
37       },
38       {
39         'name': 'Canada',
40         'flagUrl': 'https://flagcdn.com/w320/ca.png',
41       },
42       {
43         'name': 'Japan',
44         'flagUrl': 'https://flagcdn.com/w320/jp.png',
45       },
46     ];

```

```

43         'flagUrl': 'https://flagcdn.com/w320/jp.png',
44     },
45     {
46         'name': 'Germany',
47         'flagUrl': 'https://flagcdn.com/w320/de.png',
48     },
49     {
50         'name': 'Australia',
51         'flagUrl': 'https://flagcdn.com/w320/au.png',
52     },
53     {
54         'name': 'France',
55         'flagUrl': 'https://flagcdn.com/w320/fr.png',
56     },
57     {
58         'name': 'Brazil',
59         'flagUrl': 'https://flagcdn.com/w320/br.png',
60     },
61     {
62         'name': 'United Kingdom',
63         'flagUrl': 'https://flagcdn.com/w320/gb.png',
64     },
65     {
66         'name': 'South Korea',
67         'flagUrl': 'https://flagcdn.com/w320/kr.png',
68     },
69 ];
70
71 return Scaffold(
72   appBar: AppBar(
73     title: const Text('Countries and Flags'),
74   ), // AppBar
75   body: ListView.builder(
76     itemCount: countries.length,
77     itemBuilder: (context, index) {
78       final country = countries[index];

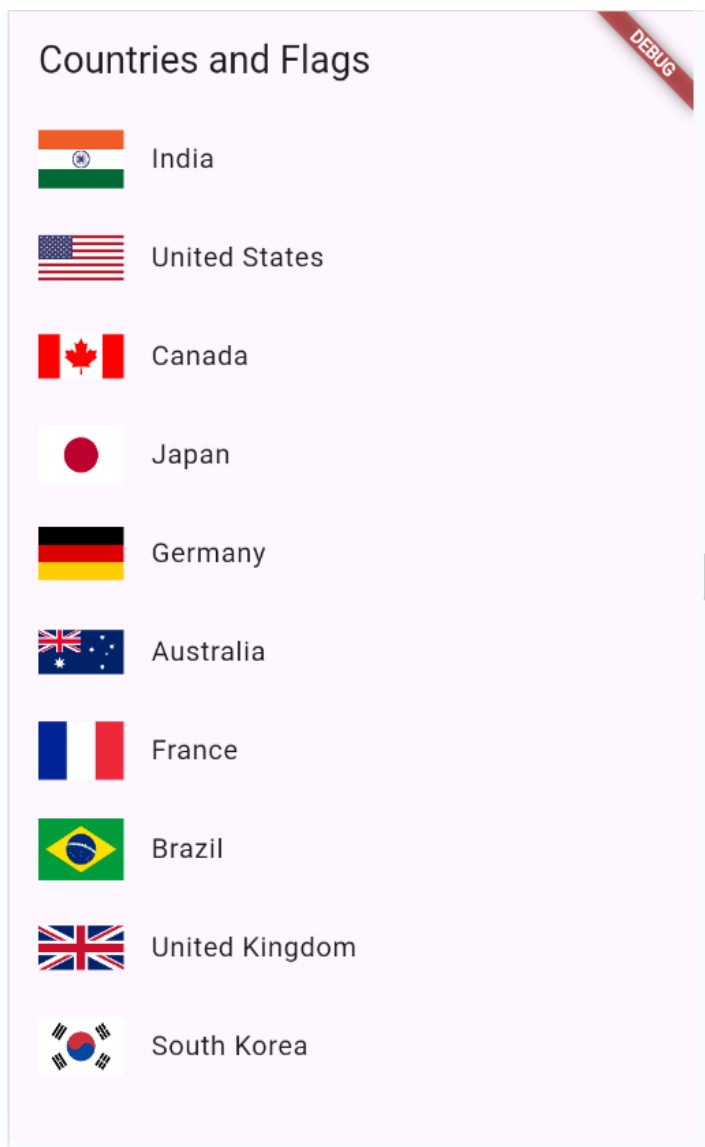
```

```

71 return Scaffold(
72   appBar: AppBar(
73     title: const Text('Countries and Flags'),
74   ), // AppBar
75   body: ListView.builder(
76     itemCount: countries.length,
77     itemBuilder: (context, index) {
78       final country = countries[index];
79       return ListTile(
80         leading: Image.network(
81           country['flagUrl']!,
82           width: 50,
83           height: 50,
84           errorBuilder: (context, error, stackTrace) {
85             return const Icon(Icons.error, color: Colors.red);
86           },
87         ), // Image.network
88         title: Text(country['name']!),
89       ); // ListTile
90     },
91   ), // ListView.builder
92   backgroundColor: Colors.white,
93 ); // Scaffold
94 }
95 }
96

```

## Output (Screenshot)



**Grade/Marks**  
(\_\_\_\_ / 10)

**Sign of Lab Teacher with Date**